# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>UC San Diego Health – Who We Are</th>
</tr>
</thead>
<tbody>
<tr>
<td>UC San Diego Health Department of Pharmacy</td>
</tr>
<tr>
<td>UC San Diego Health Department of Pharmacy Residency Programs</td>
</tr>
<tr>
<td>Residency Programs and Key Staff</td>
</tr>
<tr>
<td>Scope of the Pharmacy Residency Program</td>
</tr>
<tr>
<td>Orientation to the Pharmacy Residency Program</td>
</tr>
<tr>
<td>Residency Program Structure</td>
</tr>
<tr>
<td>Purpose</td>
</tr>
<tr>
<td>Description, Competency Areas (or Outcomes), Goals and Objectives</td>
</tr>
<tr>
<td>Learning Experiences/Rotations</td>
</tr>
<tr>
<td>Successful Completion of the Learning Experience</td>
</tr>
<tr>
<td>Learning Experience/Rotation Evaluations</td>
</tr>
<tr>
<td>Research and Problem Solving</td>
</tr>
<tr>
<td>Residency Project</td>
</tr>
<tr>
<td>Pharmacy Resident Presentations</td>
</tr>
<tr>
<td>Grand Rounds</td>
</tr>
<tr>
<td>Journal Clubs</td>
</tr>
<tr>
<td>Morbidity and Mortality Conference</td>
</tr>
<tr>
<td>Clinical Forum</td>
</tr>
<tr>
<td>Outreach Presentation</td>
</tr>
<tr>
<td>In-services</td>
</tr>
<tr>
<td>Plagiarism</td>
</tr>
<tr>
<td>Teaching</td>
</tr>
<tr>
<td>UC San Diego Skaggs School of Pharmacy and Pharmaceutical Sciences</td>
</tr>
<tr>
<td>San Diego Pharmacy Residency Leadership Teaching Certificate Program</td>
</tr>
<tr>
<td>Meetings</td>
</tr>
<tr>
<td>Residency Program Director (RPD) Meetings</td>
</tr>
<tr>
<td>Resident Advisory Council (RAC)</td>
</tr>
<tr>
<td>SDPRL</td>
</tr>
<tr>
<td>Teaching Certificate Program</td>
</tr>
<tr>
<td>Professional Meetings</td>
</tr>
<tr>
<td>Leadership Roles for PGY1 Residents</td>
</tr>
<tr>
<td>Chief Resident</td>
</tr>
<tr>
<td>Assistant Chief Pharmacy Resident(s)</td>
</tr>
<tr>
<td>Resident Research Council Liaison(s)</td>
</tr>
<tr>
<td>Digital Communications Liaison</td>
</tr>
<tr>
<td>Education Council Liaison</td>
</tr>
<tr>
<td>Schedules</td>
</tr>
<tr>
<td>Forms</td>
</tr>
<tr>
<td>Professionalism</td>
</tr>
<tr>
<td>Signature Page</td>
</tr>
<tr>
<td>Appendices</td>
</tr>
<tr>
<td>Appendix A PGY1 Pharmacy Residency-Acute Care Focus</td>
</tr>
<tr>
<td>Appendix B PGY1 Pharmacy Residency-Ambulatory Care Focus</td>
</tr>
<tr>
<td>Appendix C PGY2 Infectious Diseases Pharmacy</td>
</tr>
<tr>
<td>Appendix D PGY2 Critical Care Pharmacy</td>
</tr>
<tr>
<td>Appendix E PGY2 Oncology Pharmacy</td>
</tr>
<tr>
<td>Appendix F PGY2 Solid Organ Transplant Pharmacy</td>
</tr>
<tr>
<td>Appendix G PGY2 Internal Medicine Pharmacy</td>
</tr>
<tr>
<td>Appendix H PGY2 Psychiatric Pharmacy Residency</td>
</tr>
<tr>
<td>Appendix I PGY2 Health System Pharmacy Administration and Leadership</td>
</tr>
<tr>
<td>Appendix J PGY2 Informatics</td>
</tr>
<tr>
<td>Appendix K Pharmacy Resident Presentations</td>
</tr>
<tr>
<td>Appendix L</td>
</tr>
<tr>
<td>------------</td>
</tr>
<tr>
<td>Appendix M</td>
</tr>
<tr>
<td>Appendix N</td>
</tr>
<tr>
<td>Appendix O</td>
</tr>
</tbody>
</table>
UC San Diego’s mission is to deliver outstanding patient care through commitment to the community, groundbreaking research, and inspired teaching. Our vision is to create a healthier world – one life at a time – through science, new medicine, and new cures.

To fulfill our mission, UC San Diego Health currently maintains a regional strategy, integrating research, teaching and clinical care at locations in Hillcrest and La Jolla. Each medical complex supports acute in-patient care and a spectrum of outpatient primary and specialty medical and surgical services, including emergency patient care. Ambulatory clinics located throughout the county further help us to deliver care to the entire region.

Our three hospitals operate under one license with a current combined capacity of 808 beds: UC San Diego Medical Center in Hillcrest (390 beds), Jacobs Medical Center (364 beds) and Sulpizio Cardiovascular Center (54 beds).

UC San Diego Medical Center in Hillcrest, established in 1966, currently serves as a core clinical teaching site for UC San Diego School of Medicine and the focal point for community service programs. It houses several specialty care centers that allow the urban campus to serve as a major tertiary and quaternary referral center for San Diego, Riverside and Imperial counties. These care centers include the area’s only Regional Burn Center, and one of only two adult Level I Trauma Centers in the county. The campus is also home to the Owen Clinic, among the nation’s top HIV care programs.

The La Jolla campus is home to Jacobs Medical Center, which opened in 2016, and Moores Cancer Center, the primary site for outpatient oncology care and the region’s only National Cancer Institute-designated Comprehensive Cancer Care Center, with nearly 350 medical and radiation oncologists, surgeons and researchers. The La Jolla campus also includes Shiley Eye Institute, a multi-specialty vision center with the region’s only facility dedicated to children, as well as Sulpizio Cardiovascular Center, the region’s first comprehensive cardiovascular center and the global leader in pulmonary thromboendarterectomy (PTE). The PTE operation was first performed at UC San Diego Health and is now systematically employed at select health care centers around the world. In April 2018, the Koman Family Outpatient Pavilion opened to patient care, expanding our services in orthopedics, urology, breast health, advanced imaging, rehab and outpatient surgeries.

UC San Diego Health offers primary, specialty, urgent and express care at clinics conveniently located throughout the region. Our physicians also provide care to patients at Rady Children’s Hospital San Diego and Veteran Affairs San Diego Healthcare System and we maintain partnerships with other medical providers to offer to services as diverse as advanced radiation therapy to at-home hospice care. These combined sites and partnerships enable UC San Diego Health offer highly specialized services and a continuum of care that can heal and comfort our patients.
The UCSDH Department of Pharmacy is responsible for service to its three hospitals, and the Moore’s Cancer Center (in La Jolla), as well as several ambulatory care pharmacies; in addition, a pharmacy home infusion service (PHIS) provides IV compounding support for the hospitals and UCSD ambulatory patients. The Department is staffed by approximately 245 FTE’s, including pharmacists, pharmacy technicians, and administrative personnel. Currently, we have 24 residents, including 15 PGY1 Pharmacy Practice residents and nine PGY2 residents in a variety of specialty areas. UC San Diego Health is also a primary teaching site for UC San Diego SSPPS fourth-year pharmacy students who participate directly in the provision of patient care.

Pharmacists and pharmacy residents serve as members of interdisciplinary patient care teams on most inpatient medical, surgical and intensive care units, with special emphasis in transitions of care, oncology, HIV, transplant, trauma, surgery, medicine, neonatology, and infectious diseases. In our ambulatory care areas, we have special emphasis on family practice, anticoagulation, psychiatry, transplantation, gastroenterology, multiple sclerosis, rheumatology, cystic fibrosis, heart failure, HIV and HCV. Responsibility for patient care is shared by the staff, full and part time faculty, residents, fellows and students. Our residents also have the opportunity to participate in the UCSD Student-run free clinics operated primarily by Medical and Pharmacy students. Our pharmacy home infusion service staff, which includes pharmacists, pharmacy technicians and nurses, provides care for a wide range of patients. The Department also has formal programs in the areas of Informatics, antimicrobial stewardship and monitoring as well as a system-wide investigational drug service.

In support of our decentralized clinical pharmacy and emergency department services, the Department operates a 24-hour centralized drug distribution area in both, Hillcrest and La Jolla. Drug distribution is provided through a house wide, point-of-use unit dose system, which uses computer-actuated dispensing equipment (automated dispensing cabinets, or ADC’s; Pyxis Medstations). UCSDH utilizes Epic as its system-wide computerized physician order entry system (CPOE) is utilized in which physicians in the patient care and emergency department settings enter medication orders which are then validated by the pharmacist. Computer terminals are available in all patient care locations as well as wirelessly. Pharmacists review and validate orders prior to dispensing. A barcode driven medication administration system is utilized.
UC San Diego Health Pharmacy Residency

UC San Diego Health (UCSDH) Department of Pharmacy offers post-graduate residency programs in the following: PGY1 Acute Care focus, PGY1 Ambulatory Care focus, PGY2 Infectious Diseases, PGY2 Critical Care, PGY2 Oncology, PGY2 Solid Organ Transplant, PGY2 Internal Medicine, PGY2 Psychiatry, PGY2 Health-System Pharmacy Administration and Leadership, and PGY2 Informatics. These residency programs are accredited by the American Society of Health-System Pharmacists (Informatics pending). The goal of each residency program is to develop clinical expertise in providing pharmacy care in the acute, ambulatory, and transitional care settings, to provide rotation and longitudinal experiences in acute care and ambulatory care clinics and to develop teaching, communication, and project management skills. Residents completing the residency program will have training opportunities in a multitude of required and elective areas. Residents also gain knowledge regarding medication use system and healthcare practices that support the safe and effective use of medications.

<table>
<thead>
<tr>
<th>UC San Diego Health Pharmacy Residency Programs</th>
<th>Match Number (NMS)</th>
<th>Appointment*</th>
</tr>
</thead>
<tbody>
<tr>
<td>PGY1 Pharmacy-Acute Care focus</td>
<td>176413</td>
<td>July 1 - June 30</td>
</tr>
<tr>
<td>PGY1 Pharmacy-Ambulatory Care focus</td>
<td>162113</td>
<td>July 1 - June 30</td>
</tr>
<tr>
<td>PGY2 Infectious Diseases Pharmacy</td>
<td>509655</td>
<td>August 1 – July 31</td>
</tr>
<tr>
<td>PGY2 Critical Care Pharmacy</td>
<td>509952</td>
<td>August 1 – July 31</td>
</tr>
<tr>
<td>PGY2 Oncology Pharmacy</td>
<td>619860</td>
<td>August 1 – July 31</td>
</tr>
<tr>
<td>PGY2 Solid Organ Transplant Pharmacy</td>
<td>635476</td>
<td>August 1 – July 31</td>
</tr>
<tr>
<td>PGY2 Internal Medicine Pharmacy</td>
<td>772256</td>
<td>August 1 – July 31</td>
</tr>
<tr>
<td>PGY2 Psychiatric Pharmacy</td>
<td>669066</td>
<td>August 1 – July 31</td>
</tr>
<tr>
<td>PGY2 Health-System Pharmacy Administration and Leadership</td>
<td>758463</td>
<td>August 1 – July 31</td>
</tr>
<tr>
<td>PGY2 Informatics</td>
<td>632774</td>
<td>August 1 – July 31</td>
</tr>
</tbody>
</table>

* The residency is expected to begin on the last Monday of June/July, or first Monday of July/August, depending on the Human Resources orientation schedule for PGY1/PGY2 respectively.
# Residency Programs and Key Staff (including Residency Program Directors)

<table>
<thead>
<tr>
<th>Program Directors</th>
<th></th>
</tr>
</thead>
</table>
| **Chief Pharmacy Officer** | Charles Daniels, BS Pharm, PhD  
  Chief Pharmacy Officer  
  cdaniels@health.ucsd.edu |
| **PGY1 Acute Care** | Marcie Lepkowsky, PharmD, BCACP  
  Director, PGY1 Pharmacy Residency- Acute Care Focus  
  marciel@health.ucsd.edu |
| **PGY1 Ambulatory Care** | Justin W. Bouw, PharmD, BCACP, CDE  
  Director, PGY1 Pharmacy Residency- Ambulatory Care Focus  
  Ambulatory Care Clinical Pharmacy Manager  
  jbouw@health.ucsd.edu |
| **PGY2 Infectious Diseases** | Nina Haste, PharmD, PhD, BCPS-AQ ID, BCIDP  
  Director, PGY2 Infectious Diseases Pharmacy  
  Pharmacy Specialist, Infectious Diseases and Antimicrobial Stewardship  
  nhaste@health.ucsd.edu |
| **PGY2 Critical Care** | Wan-Ting Huang, PharmD, BCCCP  
  Director, PGY2 Critical Care Pharmacy  
  Clinical Staff Pharmacist, Critical Care  
  wath007@health.ucsd.edu |
| **PGY2 Oncology** | Shanna Block, PharmD, BCOP  
  Director, PGY2 Oncology Pharmacy  
  Pharmacy Specialist, Outpatient Oncology  
  sblock@health.ucsd.edu |
| **PGY2 Solid Organ Transplant** | Mark Mariski, PharmD, BCPS  
  Director, PGY2 Organ Transplantation Pharmacy  
  Pharmacy Specialist, Solid Organ Transplant  
  mmariski@health.ucsd.edu |
| **PGY2 Internal Medicine** | Trina Huynh, PharmD, BCPS  
  Director, PGY2 Internal Medicine Pharmacy  
  Pharmacy Specialist, Transitions of Care Coordinator  
  trhuynh@health.ucsd.edu |
| **PGY2 Psychiatry** | Kelly C. Lee, PharmD, MAS, BCPP, FCCP  
  Director, PGY2 Psychiatric Pharmacy  
  Professor of Clinical Pharmacy  
  Associate Dean for Assessment and Accreditation  
  kellylee@health.ucsd.edu |
| **PGY2 Health System Pharmacy Administration and Leadership** | Nancy T. Yam, PharmD, MHA, BCPS  
  Director, PGY2 Health System Pharmacy Administration and Leadership  
  Associate Director of Pharmacy  
  ntyam@health.ucsd.edu |
| **PGY2 Informatics** | Thomas Hatch, PharmD  
  Director, PGY2 Pharmacy Informatics  
  Pharmacy Informatics Architect  
  thatch@health.ucsd.edu |
| **Administrative Support for Pharmacy Residency Programs** | Christopher Smith  
  Residency Administrative Coordinator  
  Office: 619-543-2460  
  cjs002@health.ucsd.edu |
Scope of the Pharmacy Residency Program

The pharmacy residency programs, within the Department of Pharmacy, provide clinical pharmacy services to all areas of UC San Diego Health (UCSDH), including inpatient areas, infusion centers, associated outpatient clinics and ambulatory care pharmacies. The health system is affiliated with the UCSD School of Medicine and UCSD Skaggs School of Pharmacy. Clinical pharmacists may interact with providers from many settings, including internal/hospital medicine, intensive care units, neonatal ICU, cardiothoracic transplant, bone marrow transplant, cardiology, heart failure, oncology, infectious diseases, and HIV/AIDS.

Residency programs are tailored to the individual and strive to balance direct patient care, research, and teaching or precepting. Pharmacy residents will provide patient care via direct patient interaction or in coordination with medical teams (i.e. inpatient rounding). Emphasis will be placed on designing, recommending, implementing, monitoring, and evaluating patient-specific, patient-centered therapeutic regimens that incorporate the principles of evidence-based medicine and transitions of care. In addition, pharmacists are expected to address all pharmacokinetically monitored medications, be an active member of the Code team (Code Blue, Brain Code, STEMI Code, Stroke Code, Code Sepsis), when appropriate, and actively use their Pharmacy and Therapeutics (P&T) Committee approved authority to make renal dose adjustments, intravenous to oral switches, and more. Resident teaching activities include facilitating conferences for student pharmacists and preceptorship of students during their pharmacy practice experiential rotations. The ability to work independently and to supervise pharmacy residents (PGY2 residents), and students (PGY1 and PGY2 residents) will be emphasized. Residents will be involved in a residency project, which will include evaluation of biomedical literature and evidence-based medicine, coordination with IRB services, and scientific writing.

Orientation to the Pharmacy Residency Program

The purpose of the Orientation learning experience is to introduce the new resident to aspects of UCSDH and the Department of Pharmacy. The resident will attend a Graduate Medical Education (GME) orientation to learn about the benefits that they receive during their appointment. Following the GME orientation, the resident will review the Residency Program Manual with the Residency Program Director (RPD). The resident will be introduced to their individual program structure and requirements. During orientation, residents will complete competencies, as required by the Department of Pharmacy Policies and Procedures (please access using Internet Explorer™ and click on paperclip icon Attachment 14.01.01) and receive electronic medical record training. Competencies are assigned by role (Pharmacist or Pharmacy Technician), as well as by practice (outpatient or inpatient). Residents will also be introduced to program-specific requirements. The RPD will review the Resident Policy and Procedure document (Appendix R) which apply to the resident during their UCSDH appointment. The goal of this orientation learning experience is to familiarize the resident with UCSDH, the residency program, and requirements for graduation. Training checklists for various staffing areas (i.e. inpatient staffing, outpatient staffing, infusion center staffing, and TOC) should be completed prior to the end of the training block, per individual program requirements. Completed checklists should be returned to the RPD for inclusion in the resident’s personnel file. Training checklists can be found on iShare in the Residency Orientation and Training folder on the Residency tab. Residents should refer to the appropriate program appendix for specific program requirements. All residents are expected to evaluate the Orientation learning experience in PharmAcademic.
Residency Program Structure

Purpose:
The purpose of the UC San Diego PGY1 Residency program is to build on Doctor of Pharmacy (Pharm.D.) education and outcomes to contribute to the development of clinical pharmacists responsible for medication-related care of patients with a wide range of conditions, eligible for board certification, and eligible for postgraduate year two (PGY2) pharmacy residency training.

The purpose of all UC San Diego Health PGY2 residency programs are to build on Doctor of Pharmacy (Pharm.D.) education and PGY1 pharmacy residency programs to contribute to the development of clinical pharmacists in specialized areas of practice. PGY2 residencies provide residents with opportunities to function independently as practitioners by conceptualizing and integrating accumulated experience and knowledge and incorporating both into the provision of patient care or other advanced practice settings. Residents who successfully complete an accredited PGY2 pharmacy residency are prepared for advanced patient care, academic, or other specialized positions, along with board certification, if available.

Description, Competency Areas (or Outcomes), Goals, and Objectives:
The description, competency areas (or outcomes), goals and objectives of each program will vary depending on the focus of the individual program. Residents are encouraged to refer to the appropriate program appendix for specific programs to learn more about these areas.

PGY1 Pharmacy Residency—Acute Care Focus: Please see Appendix A
PGY1 Pharmacy Residency—Ambulatory Care Focus: Please see Appendix B
PGY2 Infectious Diseases Pharmacy Residency: Please see Appendix C
PGY2 Critical Care Pharmacy Residency: Please see Appendix D
PGY2 Oncology Pharmacy Residency: Please see Appendix E
PGY2 Solid Organ Transplantation Disease Pharmacy Residency: Please see Appendix F
PGY2 Internal Medicine Pharmacy Residency: Please see Appendix G
PGY2 Psychiatric Pharmacy Residency: Please see Appendix H
PGY2 Health Systems Pharmacy Administration and Leadership Residency: Please see Appendix I
PGY2 Pharmacy Informatics Residency: Please see Appendix J

Learning Experiences (aka Rotations)
Each PGY1 and PGY2 program has a variety of required and supplemental (elective) learning experiences. Required learning experiences in each program will include, but are not limited to, orientation, operations/staffing, and resident project/research. For more information about required and supplemental (elective) experiences, please visit the appropriate appendix, as listed throughout this document. Descriptions of each programs’ learning experiences can be found in PharmAcademic.

Successful Completion of Learning Experiences
One component of successful graduation from UC San Diego Health Residency Programs is completion of all Learning Experiences by the conclusion of the program timeline. Successful completion of a learning experience is defined as all learning experience objectives marked satisfactory progress (SP), achieved (ACH) or achieved for residency (ACHR) by the final evaluation of the learning experience. Any expectations of the residents (as described in learning experience description or resident progression) that are not met or learning objectives with needs improvement (N/I) from an on-demand or scheduled evaluation will result in a meeting between the learning experience preceptor, RPD, and resident and a plan of correction will be formulated. Failure to complete the plan of correction may result in disciplinary action. The Learning Experience Description (found on PharmAcademic) will indicate the expectations for resident’s successful completion which will include the relevant required and/or elective goals and objectives; it may also include other tasks and projects based on the preceptor’s design of the Learning Experience such as topic discussions, in-service presentations, journal clubs, and medication-use evaluations. It is the preceptor’s responsibility to orient the resident to the Learning Experience. It is the resident’s responsibility to ensure that they clearly understand these expectations during orientation to the Learning Experience. During the Learning Experience, the preceptor will continually assess the resident’s progress toward completing the required elements. If a deficiency or significant concern is identified that may compromise the resident’s ability to complete the Learning Experience, the preceptor will immediately notify the RPD (via on-demand PharmAcademic evaluation or email) and resident verbally and in writing, and an action plan will be developed with specific timelines to address the concerns. If a resident is unable to successfully complete the requirements of the Learning Experience despite the action plan within the specified timeline, the preceptor will work with the Residency Program Director to develop an action plan to address completing the Learning Experience within the residency year or appropriate timeframe. Continued inability to successfully complete a rotation will result in disciplinary
Learning Experience (aka Rotation) Evaluations

UCSDH Residency Programs use the ASHP on-line evaluation tool, PharmAcademic. This system, which was built, and is technologically supported by the McCreadie Group, supports the ASHP residency standards while providing documentation of a systems-based approach to training for ASHP-accredited residencies.

Residents who are matched at UCSDH are entered into the PharmAcademic system prior to their arrival. Incoming residents will complete two pre-residency questionnaires, the ASHP Entering Interests and the Entering Objective-Based Self-Evaluation that help the RPD design a residency year that is tailored to the specific needs and interests of each resident.

PharmAcademic evaluations are used for all Learning Experiences, unless otherwise noted by the residency program. For each Learning Experience the following assessments are completed:

- Preceptor Assessment of Resident
  - Summative
  - On-Demand (PharmAcademic: frequent, immediate, specific and constructive), optional
- Resident Self-Assessment
  - Summative-self (assigned learning experiences only)
- Resident Assessment of the Learning Experience
  - Resident assessment of Preceptor
  - Resident assessment of Learning Experience

UC San Diego Health preceptors and residents are expected to evaluate the resident’s work in PharmAcademic in a consistent manner to achieve resident goals and objectives. The resident’s achievement is described as needs improvement (NI), satisfactory progress (SP), achieved (ACH), and achieved for residency (ACHR). Definitions for the resident’s achievement are listed below and should be used consistently among all preceptors.

- **NI**: Resident is not performing at an expected level at this particular time; significant improvement is needed
- **S/P**: Resident is performing and progressing at a level that should eventually lead to mastery of the goal/objective
- **ACH**: Resident can perform associated activities independently for this learning experience
- **ACHR**: Resident can perform associated activities independently across the scope of pharmacy practice

Preceptors and residents are encouraged to exchange in on-going, daily verbal feedback throughout each learning experience. Additional evaluations may be added, as needed, or upon request.

Longitudinal Learning Experiences have quarterly Summative (preceptor-initiated) and end of the experience Summative and Preceptor/Learning Experience evaluations (resident-initiated).

Residents and preceptors are trained and reminded throughout the year to complete evaluations in a thorough (quantitatively and qualitatively) and timely manner. To this end, evaluations may be used, not only as assessment tools, but as tools that Preceptors may turn to for understanding the resident’s progress and for help in guiding residents to improve, grow and achieve the residency programs and the residents’ goals and objectives for the residency year. The RPD reviews all evaluations and solicits feedback from preceptors and residents to provide guidance to help the resident maximize the residency experience.

Residents discuss their program goals and interests (Development Plan) during the orientation period and quarterly with the RPD, and as needed as their interests and career goals change throughout the year. The resident may request schedule modifications throughout the residency year and the RPD will make all efforts to accommodate these requests. Assessment tools will be adjusted as changes are made.

Residents complete the ASHP PharmAcademic exit evaluation, the Objective-Based Residency-Self Evaluation. Residents also are requested to complete an evaluation of their residency program, at the end of the year, as administered by the specific program.

The results of this end of the year, program evaluation are shared with the Residency Advisory Committee (RAC) and may be the basis for action plans in an effort to achieve continuous quality improvement.
Research and problem-solving

1. Residency Project:
   Each resident is expected to design and complete one major project under the guidance of a project preceptor during the residency year. To assist the resident in learning how to conduct quality research projects, the Research Council will provide the Research Primer Course. Each meeting of the Research Primer Course is either modeled after the ASHP Foundation Research Fundamentals series or is derived from resident feedback on items felt to be important to completing a Research Project (i.e. Excel tips, How to use statistical programs). The resident project should be completed in addition to a quality improvement project or medication-use evaluation (as delineated in the required competency areas, goals, and objectives per program). Projects are presented at the UC Collaborative Annual Pharmacy Leadership Forum (or at a program-specific specialty conference of the RPD’s choice). The project will be written in manuscript format and those suitable for publication will be submitted. Problem-solving skills are also developed through day-to-day activities and a variety of other projects.

   Details of the resident project/research can be found in Appendix Q.

2. Medication Use Evaluation (MUE)
   During the administration learning experience the resident will learn to evaluate and improve the formulary and/or medication use processes for patients, as applicable to the organization (and patient population). PGY1 residents will begin their MUE assignment while on their administration rotation. To allow time for follow through items identified in the MUE review, extra time is allowed for PGY1 residents to complete their MUE.

   PGY2 residents will coordinate the topics and expectations of the MUE with their RPD and MUE coordinator, if required by the goals and objectives set forth by ASHP. PGY2 residents will typically complete a MUE longitudinally, per the program structure.
Pharmacy Resident Presentations

Residents are required to give educational presentations to a variety of health care professionals throughout their residency year. Details of most presentation are listed below. On-demand learning opportunities, which are not described below, may arise throughout the year and the preceptor or RPD will explain each opportunity to the resident. At minimum, each presentation should identify the name of the resident and preceptor or RPD, as appropriate; date of the presentation; email contact information for the resident and preceptor/RPD; and two to three keywords for the presentation. Whenever possible, residents should avoid trade names and abbreviations in their presentations. Each resident is expected to complete the Education Calendar located on iShare and upload presentations in the Research and Education Log on Pharmacy iShare and in PharmAcademic, as instructed by the RPD. File names for all presentations should include the following items: Title, Type of Presentation, Name, Date.

For example: Impact of Moderate Hyperchloremia Outcomes in ICH Patients Treated with CI Hypertonic Saline _Journal Club_Benny Yau_2017.12.12

Grand Rounds
Residents deliver a 1-hour continuing education lecture to the Pharmacy staff and students based on a current or controversial drug-related topic, new drug or new drug application in which there is current literature for evaluation and discussion. Allied health professionals are welcome to attend. Presentations are accredited for continuing education through California Accreditation for Pharmacy Education (CAPE). The Continuing Education committee, will assist the resident with CE requirements.

Grand Rounds typically occur on Thursday at 2:00 PM in Hillcrest; Tuesday at 2:00 PM in La Jolla. Attendance for residents is mandatory, unless patient care activities prohibit.

Please refer to Appendix K for more detailed information about Grand Rounds.

Journal Club
Journal club conferences are intended to present a relevant article on a current or controversial drug therapy topic. Residents should provide a focused critique of the article and its place in therapy at UCSDH, while also discussing other relevant literature related to the subject. Attendance for residents is mandatory unless patient care activities prohibit.

Please refer to Appendix K for more information and evaluation forms for this experience.

Morbidity & Mortality Conferences
Morbidity and Mortality (M&M) Conferences provide a forum for open discussion of patient safety issues. The intent of the M&M conference is to inform frontline providers about adverse events that occur at the hospital and to engage their input in root cause analysis and potential solutions, thereby encouraging reporting and promoting systems-based thinking. Preparing an M&M conference provides an opportunity to discuss many of the most interesting and challenging cases. A well-organized M&M conference creates a lasting impression for the attendees. Most importantly, these conferences can ultimately improve the care of the patients who entrust us with their care. Pharmacy residents should work with the Medication Safety Pharmacist on this project. Attendance is mandatory unless patient care activities prohibit.

Please refer to Appendix K for more information and evaluation forms for this experience.

Clinical Forum
Clinical forum is meant for pharmacists to present focused, interesting and pertinent patient cases or medication-related topics. Residents may be asked (or required, as designated by their program) by their preceptors to present in this forum. Attendance is for residents is mandatory unless patient care activities prohibit.

Please refer to Appendix K for more information and evaluation forms for this experience.

Outreach Presentation
Each PGY1 resident participates in a community outreach teaching program addressing the public regarding an area of disease prevention and wellness promotion.

Please refer to the PGY1 RPDs for more information.
In-services
Residents may be required to provide medication and/or disease state in-services to medical teams, nurses, students, pharmacy preceptors and/or pharmacy staff. Topics will be based on requests by the nursing or medical staff, recommendations from the resident or assigned by the preceptor if a part of a learning experience description.

Please refer to Appendix K - Nursing In-services

Leadership/Wellness project presentation

Please refer to the Leadership/Wellness project instructions
Plagiarism

During the course of the resident project/research and/or resident presentations, the resident will be expected create original work or give appropriate credit when using ideas, concepts or words of another person(s). This will include items such as IRB backgrounds, learning experience (a.k.a. rotation) topic discussion handouts, journal clubs, clinical forums, grand rounds, and more. Each resident will be expected to create their own work or appropriately cite others works. Failure to do so may result in disciplinary action.

Donald A. Sears (Harbrace Guide to the Library, 2nd ed. (New York, 1960), pp. 38-39), wrote a useful tool on how to 'Understand Plagiarism and Avoid It'. Below is an excerpt from his book:

It will be well to ask yourself if you fully understand what constitutes PLAGIARISM, for the range of meaning of the word is wide. At one extreme is the gross offense of trying to pass off as one's own the exact words of another; at the other extreme is the subtle manner of “borrowing a fine phrase to dress up one’s own writing”. In between are varying degrees of plagiarism that often puzzle a student. Through ignorance a student may in all honesty misuse his sources in such a way that he is guilty of plagiarism; but he is nonetheless guilty, for ignorance cannot be an acceptable excuse for wrongdoing.

An analogy to other kinds of dishonesty may help. To use another’s words or ideas is roughly the intellectual equivalent of stealing the funds of a dormitory, fraternity, cooperative house, or sorority for one’s own use. However, funds are made up of concrete money; words and ideas are abstract, and consequently the line between honest and dishonest use may be harder to define. There are, of course, correct and honorable ways of using sources just as there are correct and honorable ways of borrowing money. Forms of acknowledgment have to be included with your use of source material in the same way that legal forms have to filled out before a bank will let you use its money.

1. WORD-FOR-WORD PLAGIARISM

This includes (a) the submission of another student’s work as one’s own; (b) the submission of work from any sources whatever that is not properly acknowledge by footnote, bibliography, or reference in the paper itself; (c) the submission of any part of another’s work without proper use of quotation marks.

2. PATCHWORK-QUILT PLAGIARISM

As our grandmothers used to put together large quilts out of scraps of cloth, a student may make the mistake of passing off as an original paper one that is stitched together with phrases and sentences taken from his sources. If he does not include quotation marks around all such borrowings he is committing plagiarism. Here rearrangement of phrases into a new pattern does not confer originality.

3. UNACKNOWLEDGED PARAPHRASE

An author’s discovery of fact or original interpretation of fact is as much his property as his exact words are. Restatement by means of paraphrase does not remove the necessity of giving credit to the original sources.

The development of intellectual honesty is a primary goal of college education. Plagiarism, besides being dishonest in itself, defeats this purpose of college. When detected it is always severely punished, usually by expulsion. When undetected, punishment is nevertheless certain in the intellectual corruption of the plagiarizer.
Teaching

UC San Diego Health is a primary site for Introductory and Advanced Pharmacy Practice Experience (IPPE and APPE) Pharm.D. Candidate students from the Skaggs School of Pharmacy and Pharmaceutical Sciences. Our residents and clinical faculty serve as preceptors for the pharmacy students during these experiences. Residents, under the guidance of the pharmacist preceptor, will provide preceptorship for SSPPS students on rotation. Residents are encouraged to develop skills in the four preceptor roles employed in practice-based teaching (direct instruction, modeling, coaching, and facilitation).

Residents, as assigned by their program, will participate in various teaching opportunities at SSPPS. One of the main opportunities is in the Therapeutics Course sequence; residents serve as facilitators in the case conferences. Cases and case keys are written and facilitated by the residents. The facilitators are responsible for encouraging discussion, enhancing learning and assuring that the students provide an effective analysis of the case focusing on the areas of clinical importance. One of the primary functions of the case conferences is to enhance the ability of the student to apply the information learned in the basic and applied sciences to patient care.

San Diego Pharmacy Residency Leadership Teaching Certificate Program
Detailed information about SDPRL Teaching Certificate program can be found in Appendix L.

Residents participate in the San Diego Pharmacy Residency Leadership (SDPRL; PGY1: required; PGY2: optional), a county-wide program with residents from other San Diego residency programs. Seminar topics will focus on teaching, preceptor, and leadership development and will support the SDPRL Teaching Certificate Program. Seminar attendance is mandatory for PGY1 residents and may include weekend programs. One excused absence is allowed provided the make-up assignment is completed within one week of being received.
Meetings

Residency Program Director (RPD) meetings
PGY1 residents and their RPD meet monthly to discuss various topics. Additional meetings will be called at either the discretion of the RPD or at the request of the residents. The Assistant Chief resident(s) prepare the agenda with the RPD and the agenda is e-mailed to the residents before the meeting. The chief resident takes minutes for the meeting and e-mails them to the residents following the meeting. Upcoming events, evaluations, projects, rotation pearls, travel arrangements and schedules are examples of the topics discussed; PGY2 residents meet with their RPD at regularly scheduled times throughout the year.

Resident Advisory Committee (RAC)
Required attendance for Assistant Chief resident(s) (PGY1) and for all applicable residents for PGY2 programs, who also take minutes; optional for other residents; opportunity to participate in residency development and improvement activities.

Professional meetings
PGY1 residents are required to attend, at minimum, one board meeting of the San Diego Society of Health System Pharmacists or other professional pharmacy organization over the course of the residency year; leadership, networking and political/legislative involvement opportunities are available. PGY2 residents are encouraged to join a professional organization and become active through committee work or other activities.

Additionally, residents are required to attend various professional meetings throughout the year, including one meeting where the resident will present the results of their residency project. Residents are required to attend CSHP (California Society of Health System Pharmacists) Seminar and/or ASHP (American Society of Health-System Pharmacists) Midyear Clinical meeting to assist in recruitment efforts. PGY1 residents must attend either CSHP or ASHP but may attend both. Assignments at the meetings will be based on interest and assigned by the RPD. If attending CSHP Seminar, PGY1 residents are required to volunteer for a minimum of one, four-hour volunteer shift and must attend a minimum of one half of the recruitment residency showcase, as long as a minimum of half of the acute care residents are present at each recruitment shift. Travel costs and registration fees to all meetings are supported by a $1000 stipend. Travel costs and fees in excess of this stipend are the responsibility of the resident.

Other professional meetings residents may attend include:
- American Society for Microbiology (ASM) Microbe (formerly ICAAC)
- Society of Critical Care Medicine (SCCM)
- Hematology/Oncology Pharmacy Association (HOPA)
- American Association of Psychiatric Pharmacist (AAPP)
- International Society of Heart & Lung Transplant (ISHLT)
- UC Collaborative Annual Pharmacy Leadership Forum
Leadership Roles for Residents

Purpose
To establish leadership roles and assign responsibilities within the pharmacy residency programs at UC San Diego Health for the Chief Pharmacy Resident and Assistant Chief Pharmacy Resident leadership positions.

Description of Positions

1. **Chief Pharmacy Resident**: The PGY2 Health-System Pharmacy Administration and Leadership (HSPAL) resident at UC San Diego Health is assigned to assume the role of the Chief Pharmacy Resident, as determined by their residency program director. This person will manage and coordinate activities pertinent to residency programs and co-residents at UC San Diego Health as defined in this document. If there is no PGY2 HSPA resident, an alternative PGY2 resident will be assigned to fulfill this position as determined by their residency program director(s). In the case that there is no PGY2 resident to assume the position, the PGY1 pharmacy resident(s) will be eligible to fulfill this position as determined by their residency program director(s). If this position is filled by PGY1 residents, there will be no Assistant Chief Pharmacy Resident(s) for that year.

2. **Assistant Chief Resident(s)**: A position fulfilled by PGY1 pharmacy resident(s). The PGY1 residents will decide amongst the residency class who will volunteer for this responsibility. One or two residents may hold this position each six months or for an entire residency year. The Assistant Chief Resident(s) will manage and coordinate activities pertinent to residency programs at UC San Diego Health as defined in this document.

3. **Research Council Liaison(s)**: Position intended to help coordinate resident research/project activities with the Research Council and project preceptors.

4. **Digital Communications Liaison**: The position is intended to maintain the pharmacy residency website for pictures and bios of residents, preceptors, RPD, and more.

5. **Education Council Liaison**: Position intended to help coordinate resident educational activities (i.e. Grand Rounds, Journal Clubs, Morbidity and Mortality Conferences, Clinical Forums, etc) for the residency class.

Roles and Responsibilities

1. **Chief Pharmacy Resident**
   - Resident assumes title and begins to fulfill duties upon starting residency and for the duration of their residency appointment
   - The Chief Pharmacy Resident will:
     - Oversee the activities of the Assistant Chief Resident(s) and coordinate the activities of residents
     - Communicate the dates of various meetings (e.g. CSHP Seminar, Vizient UHC Pharmacy Network Meeting, ASHP Midyear Meeting, and UC Collaborative Annual Pharmacy Leadership Forum) to residents, residency program directors, and applicable managers to ensure that residents will not be scheduled to staff during these periods
     - Provide a calendar of approximate dates for conferences and poster/presentation submission deadlines to all residents
     - Participate in PGY1 application and interview processes
     - Contribute agenda items and attend monthly RPD meeting
     - Assist with other activities as assigned (e.g. National Pharmacy Week (Oct), PGY2 Aloha Party
     - Assist with onboarding of new PGY1 residents in July

2. **Assistant Chief Pharmacy Resident(s)**
   - PGY1 residents determine who will volunteer to be Assistant Chief(s) and the length of the Assistant Chief appointment (six months or one year)
   - Resident(s) assumes the title and begins to fulfill all duties of the Assistant Chief Resident(s) as defined by this document for the designated time period
   - The Assistant Chief(s) will:
     - Work with the PGY1 Residency Program Directors, prepare an agenda for the monthly RPD meeting of the PGY1 Residency Program Directors and PGY1 Pharmacy Residents
     - Chair RPD meetings, take, and distribute minutes
     - Attend the monthly Residency Advisory Committee (RAC) and take minutes
     - Coordinate application review assignments for PGY1 resident review of applicants
     - Coordinate the schedules of residents for residency candidate site visits, tours, if scheduled, and interviews
- Coordinate transportation of showcase materials to and from conferences, as well as shift assignments for residents to be at showcase
- Coordinate planning of an end of year celebration for current residents finishing their year and new residents starting the new year (PGY1 Aloha Party)
- Assume the role and fulfill all duties of the Chief Resident should that position become vacant

**Events Schedule for Assistant Chief Resident(s)**

<table>
<thead>
<tr>
<th>Period</th>
<th>Event Description</th>
</tr>
</thead>
</table>
| July - June  | **Residency Advisory Committee meetings (monthly)**  
  - Attend  
  - Take minutes  
**Residency Program Director meetings (monthly)**  
  - Confirm recurrent date/time/location  
  - Create agenda  
  - Work with Residency Program Coordinator to arrange remote access  
  - Attend  
  - Take minutes |
| Aug – Sept   | **Advisor Social:** Working with PGY1 Am Care Director (or their designee), Coordinate Advisor selection and social, if desired by class  
  Coordinate individual and group photos for current residents  
  Update Preceptor bios/email addresses on Residency webpage |
| October-November | **Pharmacy Week:** Work with Residency Program Coordinator to create Pharmacy Week Committee and serve as a member; help coordinate Pharmacy Week  
**CSHP Seminar Meeting**  
  - **General:** Working with the RPD, serve as the seminar coordinator and assist residents in preparation for CSHP Seminar Meeting, including group photo, volunteer requirements, travel spreadsheets, group dinner  
  - **Residency Showcase:** Help plan recruitment activities at the CSHP Seminar Meeting by scheduling residents for the resident showcase; responsibilities include arranging transportation of showcase materials, set up of the showcase, resident coverage throughout the day, and re-packing the showcase materials for return back to the hospital |
| December     | **Vizient UHC Meeting** (in conjunction with ASHP Midyear)  
  - Working with RPD and research liaison, assist residents in preparation for poster session, including travel and lodging, group photo, handling of posters  
**ASHP Midyear Meeting**  
  - **General:** Working with the RPD, serve as the Midyear coordinator and assist residents in preparation including travel, lodging, travel spreadsheet, group photo and group dinner (if needed)  
  - Residency Showcase: Help plan recruitment activities at the ASHP Midyear Clinical Meeting by scheduling residents for the resident showcase; responsibilities include arranging set up of the showcase, resident coverage throughout the day, and re-packing the showcase for shipment home and return to the hospital, coordinate contacting interested candidates and thanking them for attending (if sign-in list utilized)  
**Holiday Card**  
  - Organize creation of resident holiday card and mailing to staff and faculty |
| December – February | **Recruitment:**  
  - Coordinate candidate ranking meeting with Residency Program Coordinator, Interview team and PGY1 Directors  
  - Coordinate interview assignments’ schedule for residents |
3. Research Council Liaison(s)

Responsibilities:
- Update the residents on upcoming residency project deadlines
- Keep track of the project timeline and any changes to listed deadlines
- Send out periodic emails with important reminders, coordinating with the Chief Residents as much as possible to minimize the number of reminder emails sent out
- Lead residency project discussions at RPD meetings
- Help resolve residency project-related issues for the residents
- Serve as the “first call” for research-related questions from residents to minimize frequent/repeated questions to the Chair of the Pharmacy Research Council
- Answer questions about IRB submission, seeking the help of Research Council members
- Provide templates/examples for various components of the residency project (e.g. poster, abstracts, manuscript outline, presentation, etc.)
- Serve as the resident representative to the Pharmacy Research Council and attend meetings
- Communicate resident concerns/issues to the Research Council and Directors
- Help Research Council Chair coordinate research practice presentations (April)

4. Digital Communications Liaison

The resident serving in this role will be responsible for taking photographs of major pharmacy residency events, such as conferences, national pharmacy week, and social gatherings. The resident will also update the residency website and maintain consistency among the residents about the use of social media. The resident will create and/or maintain resident-related social media as a social, communications and recruitment tool.

5. Education Council Liaison

This position may be asked to help account for educational activities on the pharmacy iShare calendar and provide feedback to the residency class at an appropriate meeting (i.e. RPD meeting). The resident will be asked to present any findings of education calendar audits at monthly Education Council meeting.
Schedules
Schedules pertaining to resident learning experiences/rotations will be loaded onto iShare. Examples of these schedule include:

- Year-long learning experience schedule
- Monthly pharmacist schedule
- Weekend staffing assignments
- Presentation schedules
- Ambulatory care longitudinal assignments
- Transitions of care assignments
- Therapeutics Conference assignments

Forms
At times, forms will need to be completed. These forms can be found on iShare in the Residency tab. They include:

- Elective rankings form (Acute Care)
- Ambulatory Care Ranking Form (longitudinal clinics and block rotations for PGY1 Acute Care residents) (Acute Care)
- Operations Check List
- Vacation days request form (Leave Form)
- Weekend off request form
Professionalism

Residents are expected to demonstrate adequate professional and personal attributes both within and outside the boundaries of UC San Diego Health. A preceptor who is concerned about a resident's behavior will give feedback to the resident and make suggestions for improvement. If the behavior is repeated (or is sufficiently serious at the outset) the preceptor will notify the RPD. The RPD may choose to discipline residents for issues related to professionalism, consistent with the policies outlined in Appendix R Resident Policy and Procedure Document.

The following are examples of the kinds of behaviors that would warrant a report to the RPD

- Abuse of power in interactions with patients, students, or colleagues
- Bias and/or sexual harassment
- Failure to respect patient autonomy and/or confidentiality
- Any HIPAA violation
- Failure to attend required lectures, group sessions
- Failure to complete required rotation presentations, projects and assignments
- Failure to show up for a rotation or patient-related activity; failure to notify or make appropriate contact with the preceptor; unexcused tardiness; tardiness without notifying the preceptor; repeated tardiness
- Unprofessional attire and/or hygiene
- When attempts to provide the resident with verbal feedback about an issue have been unsuccessful
- Plagiarism or inappropriately citing other's work

Examples of behaviors that are unprofessional include but are not limited to:

- Consistent tardiness
- Taking vacation or leave before fully (including RPD signature) completing a Leave Form
- Engages in abuse of power in interactions with patients or colleagues
- Engages in bias and/or sexual harassment
- Does not respect patient autonomy and/or confidentiality
- Does not attend required lectures/group sessions
- Does not respond in a reasonable manner to residency-related communications (patient/clinical or administrative)
- Does not attend a patient-related activity, clinics, or other similar activity, and neglects to make appropriate contact with the preceptor
- Demonstrates difficulty fulfilling academic and professional responsibilities or tasks in a reliable and timely manner
- Cannot be relied upon to complete required tasks
- Misrepresents or falsifies actions and/or information
- Is not punctual for professional obligations
- Is resistant or defensive in accepting constructive feedback and/or criticism
- Has difficulty incorporating feedback in order to make changes in behavior
- Is unaware of his/her inadequacies and limitations
- Does not accept blame for failure or responsibility for errors
- Is abusive or excessively critical during times of stress
- Is arrogant
- Inadequately establishes rapport with patients, peers, faculty, staff and others
- Is not sensitive to the needs of others
- Cannot establish and maintain appropriate boundaries in work and learning situations
- Lacks empathy and demonstrates insensitivity to the needs of peers, patients, and/or others
- Does not function well within the health care team concept
- Does not demonstrate honesty
- Does not contribute to an atmosphere conducive to learning
- Does not respect diversity of race, gender, religion, sexual orientation, age, disability or socioeconomic status
- Does not resolve conflicts in a manner that respects the dignity of every person involved
- Does not use professional language
- Does not use appropriate names and titles when addressing faculty and preceptor
- Does not maintain adequate hygiene
- Does not protect patient confidentiality
- Does not dress in an appropriate and professional manner
Appendix A Acute Care

PGY1 Acute Care Pharmacy Residency Program Overview

National Matching Service Number: 176413
https://health.ucsd.edu/specialties/pharmacy/residency/Pages/pharmacypractice.aspx

The UC San Diego Health, Department of Pharmacy (UCSDH) offers a one-year pharmacy practice residency with a focus in Acute Care beginning with the pay period closest to July 1st of the residency year.

Scope:
UC San Diego Health consists of three acute care hospitals (UC San Diego Medical Center in Hillcrest, Sulpizio Cardiovascular Center, and Jacobs Medical Center which includes Thornton Hospital) and associated outpatient clinics. UC San Diego Health (UCSDH) is also affiliated with Rady Children’s Hospital-San Diego, the Veterans Affairs San Diego Healthcare System, and the Sharp Memorial Hospital Joint Blood and Marrow Transplant Program. The Health System is affiliated with the UC San Diego School of Medicine and the UCSD Skaggs School of Pharmacy and Pharmaceutical Sciences (SSPPS). The Department of Pharmacy provides clinical services in the inpatient and outpatient settings to a broad spectrum of patient populations including, but not limited to, internal medicine, family medicine, surgery, cardiology, oncology, solid organ transplant, bone marrow transplant, infectious diseases, HIV/AIDS and ICU services in the surgical, medical, burn, neonatal, cardiovascular and neuro critical care specialty areas.

This pharmacy practice residency focuses on direct, multidisciplinary patient care in the acute care setting with elective opportunities available in the inpatient and outpatient settings. Residents receive training in research and teaching/precepting and the program is tailored to the individual’s needs and interests. Residents gain experience in the therapeutic management of patients with an emphasis in providing excellent pharmaceutical care in conjunction with the multidisciplinary team.

Purpose
The purpose of the UC San Diego Health PGY1 Residency Program is to build on Doctor of Pharmacy (PharmD) education and outcomes to contribute to the development of clinical pharmacists responsible for medication-related care of patients with a wide range of conditions, eligible for board certification, and eligible for postgraduate year two (PGY2) pharmacy residency training.

Program Description
The UCSDH is a university-affiliated teaching hospital which provides the unique capability to engage each of our residents in direct patient care activities, research, administration and project management, and teaching. Our PGY1 Acute Care Residency Program provides trainees with an extensive experience in the art and science of pharmacy and in all aspects of the medication use process so they can achieve excellence in research, teaching, and the medication-related care and treatment of their patients. Residents will be encouraged, trained and required to take ownership of the outcomes of their patients as they provide evidence-based contributions and recommendations in a multidisciplinary team acute care and transitional care environment.

Residents completing the UCSDH PGY1 Acute Care Pharmacy Residency will be competent in the management of medication therapy for various disease states in a variety of health care settings and for diverse patient populations, primarily in the acute care environment. Residents will benefit from block and longitudinal learning experiences in the inpatient and ambulatory care settings with the majority of their training in the acute care setting, including medicine, critical care and several elective opportunities. The integration of staffing and clinical services prepares residents for practice in their future jobs by emphasizing the development of essential skills required for an acute care practitioner: independent practice skills, multi-tasking and prioritization.

Resident pharmacists will have been trained and educated in teaching modalities and will have participated in a Teaching Certificate Program. Residents will have demonstrated proficiency in communication and in educating other health care professionals, patients, students and the community on medication-related topics. Residents will have opportunities in precepting students on rotation and during Therapeutics Conferences at the SSPPS. The resident will also be involved in a research project. Scientific writing is strongly emphasized and the preparation of a manuscript suitable for publication will be required.

Residents, also called Trainees, will have demonstrated professional maturity by evaluating and monitoring their own performance. They will have been trained in research methodologies and leadership skills. Graduates of this program will be prepared for adjunct faculty positions, direct patient care opportunities in acute care settings, advanced PGY2 residency

Appendix A PGY1 Acute Care, page 1
programs and will be eligible to sit for board certification as a pharmacotherapy specialist. Pharmacy residents completing this program will be proficient in the areas of:

1. Patient care
2. Advancing practice and improving patient care
3. Understanding leadership and management skills
4. Teaching, education, and dissemination of knowledge

Number of residency positions available: 12

Stipend and Benefits:
The annual stipend is currently $55,854, ($2140 bi-weekly). Benefits include medical, dental, and vision insurance. In addition, vacation, sick and professional leave are provided. For more information, please visit employment.ucsd.edu/benefits.

Candidate Eligibility Requirements:
The UC San Diego Health PGY1 Pharmacy residency program participates in the PhORCAS online application process. Eligible candidates must apply through PhORCAS, completing all sections and must meet the following requirements:

1. Graduate or candidate for graduation of an Accreditation Council for Pharmacy Education (ACPE) accredited PharmD degree program (or one in the candidate process), or have a Foreign Pharmacy Graduate Equivalency Committee (FPGEC) certificate from the National Association of Boards of Pharmacy (NABP); if a Foreign Pharmacy Graduate, candidate must be a US (United States) citizen, or hold a valid Visa that does not require sponsorship of any kind for the duration of the residency appointment or a “green card” and must be licensed as a pharmacist in the State of California prior to receiving an invitation to interview
2. Licensed or eligible for licensure as a pharmacist in the state of California (notwithstanding the above for foreign graduates)
3. Have ≥ B or “pass” average in combined Therapeutics (or equivalent) courses and ≥ C in any given Therapeutics course

The UCSDH PGY1 Acute Care residency program participates in the ASHP Resident Matching Program. All applicants must be enrolled in the Resident Matching Program. To facilitate this enrollment process and for further information, please visit the following website: www.natmatch.com/ashprmp

Application:
Applications for the next incoming resident class will be accepted upon activation of the PhORCAS system, typically in November. Deadline for application is December 31st. Applications must be submitted through PhORCAS and include, in addition to completing all PhORCAS components, the following:

1. Current Curriculum Vitae with all completed and anticipated experiential rotations as well as pharmacy work experience
2. Three electronic references, two of which must be from patient care rotation preceptors who can directly comment on your clinical practice skills; all reference writers must comment on 10 of the 13 candidate characteristics
3. Official pharmacy school transcript
4. Supplemental application (Qualtrics survey)
5. All applicants will be evaluated and ranked according to specific criteria using established rubrics and video interviews (via Zoom or other online program) may be utilized; offers for an on-site or virtual final interview with the RPD and interview team may be made. Final interviews will be held during late January through February

If matched with the UC San Diego Health Residency Program, matched residents must:
1. Have successfully graduated from an ACPE accredited school of pharmacy with a Doctor of Pharmacy degree (International students: see above)
2. Obtain California pharmacy intern license prior to beginning of the residency appointment; offer may be rescinded if the resident does not have a California pharmacy intern license prior to start of the appointment year
3. Obtain California pharmacist license within 90 days of the start of the residency program; failure to be a licensed pharmacist in California within 90 days of the start date of the residency will result in automatic resignation or implementation of a corrective action plan at the discretion of the RPD and upon advice from the Residency Advisory Council and Chief Pharmacy Officer; the Corrective Action Plan is written by the Resident’s Residency Program Director
Program Structure

- Orientation: 2 weeks
- Central Pharmacy, CPOE and PK Training: 5 weeks
- Medicine (5 weeks each at Hillcrest and La Jolla Hospitals): 10 weeks
- Adult ICU: (Resident ranks their choice of adult ICU experience): 5 weeks
- Administration: 5 weeks
- Ambulatory Care: block rotation: 5 weeks
  Longitudinal ½ day/week: six months
- Elective experiences (three): 5 weeks each
- Transitions of Care: longitudinally ½ day/week: 10 weeks
- Operations: longitudinal over the course of the residency year: 20 weekends
  (Includes three minor and one major holiday)
- Therapeutic Conference Facilitator: ½ day per week: 10 weeks
- Residency Project (all documents uploaded as directed to iShare or Teams longitudinal over the residency year
- Leadership or Wellness project (1): during or before Admin rotation
- MUE (1)
- Monograph (2)
- Teaching Certificate Program: longitudinal over the residency year

Minimum requirements need to complete to receive Certificate of Completion
1. Patient Directed Group Teaching/Outreach/Wellness (1; may be waived due to COVID-19)
2. Small Group Teaching (5; at least one must include physicians)
3. Clinical forums (as assigned; may count as small group teaching)
4. Practice-based Small Group Facilitation (10 weeks of Therapeutics Conference)
5. Journal Club (min 1 and as assigned)
6. Tech Talk (1; may be assigned to repeat)
7. Nursing in-service (1 and as assigned)
8. Large Group Formal Presentation (Grand Rounds; presented once and recorded at a separate time/location)
9. M&M (1)
10. UCSD SSPPS Objective Structured Clinical Examination (OSCE; 1)
11. Teaching Philosophy (initial and final)
12. Updated CV (at end of residency year)
13. Teaching activities’ log created and maintained on iShare
14. Teaching portfolio maintained on iShare

Selection:
The PGY1 Acute Care residency program selects for interview from among eligible applicants based on their preparedness and ability to benefit and be successful in the program. Aptitude, academic credentials, personal characteristics, ability to communicate and uphold the mission of UCSDH. The Department of Pharmacy and the Residency Program are considered in the selection. In selecting from among qualified applicants, the residency program must participate in the PhORCAS electronic application process, participate in an organized interview process, and participate in the ASHP Resident Matching Program. PGY2 programs may elect to participate in the Early Commitment Process whereby a position in a PGY2 program may be committed to a current PGY1 resident in advance of the matching process, under the conditions as outlined by the ASHP Resident Matching Program.
All documents uploaded to iShare and PharmAcademic must include residents’ name and date of presentation

Required Learning Experiences
PGY1 Acute Care residents will gain the skills necessary to function as the primary pharmacist during their required core learning experiences. During direct patient-care learning experiences the resident will be expected to handle all aspects of the pharmacotherapeutic management of patients in the patient populations being covered. The resident will be expected to build relationships with interdisciplinary teams in a variety of settings and work proactively with the nurses, physicians, and physician extenders to help address all aspects of patient care related to medications. Daily activities may include: working up patients, interpreting all pertinent laboratory test and procedural results, interviewing patients/caregivers regarding chief complaints and medication histories, admission medication reconciliation, reviewing primary literature, recommending changes to patients’ medication regimens, ordering and pharmacokinetically evaluating drug levels, attending daily multidisciplinary rounds, collaborating with physicians and other health care providers to discuss optimal pharmacotherapy to achieve therapeutic goals, participating in patient education/consultation, transitions of care activities, discharge medication reconciliation, and overseeing and directing P4 APPE (Advanced Pharmacy Practice Experience) pharmacy student activities. Residents will also gain experience in operational processes. Longitudinal experiences are integrated to supplement block learning experiences and provide experience in continuity of patient care.

Descriptions of each learning experience can be found in PharmAcademic.

Elective Learning Experiences
There are a variety of elective experiences from which the resident can choose. The electives can be selected from the list below and any of the core learning experiences listed above may be repeated. This will allow the resident the flexibility to tailor their experience to their areas of interest. There are also opportunities to develop new elective rotations or modify existing elective rotations in the inpatient or outpatient environment to meet the resident’s needs and interests.

Residents may choose three elective experiences, of which two must be direct patient care. We offer elective training in a wide range of medical and surgical specialty areas, in inpatient, transitional and ambulatory care settings. Elective choices include:

- Abdominal Transplant
- Academia
- Administration Acute Care
- Administration Am Care
- Anticoagulation Management Clinic
- Antiretroviral/HIV Clinic (Owen Clinic)
- Bone Marrow Transplant
- Burn ICU, Hillcrest
- Cardiology
- Cardiovascular ICU (CVC ICU; Anesthesia Critical Care Medicine: ACCM)
- Chronic Kidney Disease Clinics
- CT Transplant/Mechanical Assist Devices
- Diabetes Clinics
- Emergency Department
- Infectious Diseases
- Informatics
- Investigational drug services
- Jacobs Medical Center ICU (JMC MICU; Pulmonary Critical Care Medicine; PCCM)
- Medical ICU, Hillcrest (MICU)
- Medicine, Hillcrest
- Medicine, La Jolla
- Moore’s Cancer Center Clinics (prerequisite: BMT or ONC)
- Neonatal ICU
- Neuro critical care
- Oncology Acute care
- Oncology Encinitas Cancer Center (Oncology Infusion Center)
- Pediatrics (General, ICU, ID and/or Onc at Rady Children’s Hospital)
- Pharmacy Home Infusion Service
Appendix A PGY1 Acute Care, page 5

- Psychiatry (Inpatient)
- Solid Organ Transplant Clinics – abdominal
- Solid Organ Transplant Clinics - CT
- Student-run free clinics
- Surgical ICU, Hillcrest
- Transitions of Care Heart failure
- Transitions of Care HIV

Descriptions of each learning experience can be found in PharmAcademic

### Resident Learning Experiences and Rotation Schedule (Example)

<table>
<thead>
<tr>
<th>Rotation</th>
<th>Duration</th>
<th>Rotation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2 weeks</td>
<td>Orientation</td>
</tr>
<tr>
<td>2</td>
<td>5 weeks</td>
<td>Training</td>
</tr>
<tr>
<td>3</td>
<td>5 weeks</td>
<td>Medicine HC</td>
</tr>
<tr>
<td>4</td>
<td>5 weeks</td>
<td>Elective 1</td>
</tr>
<tr>
<td>5</td>
<td>5 weeks</td>
<td>Ambulatory Care</td>
</tr>
<tr>
<td>6</td>
<td>5 weeks</td>
<td>Elective 2</td>
</tr>
<tr>
<td>7</td>
<td>5 weeks</td>
<td>Medicine LJ</td>
</tr>
<tr>
<td>8</td>
<td>5 weeks</td>
<td>Administration</td>
</tr>
<tr>
<td>9</td>
<td>5 weeks</td>
<td>ICU</td>
</tr>
<tr>
<td>10</td>
<td>5 weeks</td>
<td>Elective 3</td>
</tr>
</tbody>
</table>

### Staffing/Vacation/Educational leave:
Staffing will be incorporated into the residency experience with weekend shifts that provide the opportunity for PGY1 residents to experience operations and patient care in a variety of areas/shifts under the supervision and with the support of preceptors and experienced staff pharmacists. PGY1 residents will staff 20 weekends (which includes 3 minor holiday weekends (Cesar Chavez Day plus 2 as assigned), PLUS 1 major holiday weekend [Thanksgiving, Christmas, or New Year’s]).

The resident will work on five holidays and get 9 paid holidays off, up to 12 sick days, and up to 15 vacation days accrued longitudinally over the course of the residency year, in accordance with UCSDH HR pharmacy resident job description and benefits. The resident is also eligible to receive 10 days for professional educational leave to attend meetings or conferences as assigned and to assist with recruitment efforts. Ten days of project and research time will be provided to work on assigned projects (during research time, the resident is expected to be onsite for at least 8 hours daily when the Health System is in the Green tier for COVID; 8 hours of remote work is permitted when in the Yellow or Red tier);

Holidays:

- Independence Day
- Labor Day
- Veterans Day
- Thanksgiving Day
Friday after Thanksgiving
Winter Break (2 days; 12/25 and one more day, calendar depended)
New Year’s Eve (or equivalent)
New Year’s Day
Martin Luther King Jr Day (3rd Monday in January)
Presidents’ Day (3rd Monday in February)
Cesar Chavez Day (4th Friday in March; all residents work)
Memorial Day (last Monday in May)
Juneteenth National Independence Day

Living Quarters:
There are no permanent living quarters at UCSDH for residents; residents are responsible for their own living arrangements as well as transportation to and from work/assignments.

Resident Project:
The resident will be responsible for conducting a project throughout the academic year that will be completed and presented as a poster at the Vizient UHC conference and as a platform presentation at the UC Collaborative Conference. If time allows, the resident will be involved with the initiation of a second project. This initiation phase will involve defining the study design, writing up the protocol and beginning the IRB approval process. The purpose of starting a second project is to facilitate subsequent residents who can then finish the projects that were started the previous year. A list of project ideas will be generated from preceptors and the resident is expected to select a project during the first month of the residency year. The resident will participate in a Research Primer Course which has been developed by the UCSDH Research Council to support residents through the various aspects of the research process. Attendance, participation and completion of the Research Primer Course is mandatory.

Assessment Strategy – PharmAcademic
The PGY1 Acute Care Residency Program uses the ASHP on-line evaluation tool called PharmAcademic, which is required for all ASHP-accredited pharmacy residency programs. This system supports the ASHP Residency Standards, Competency Areas with corresponding Goals and Objectives.

Residents who are matched with this PGY1 program are entered into PharmAcademic prior to their arrival. The incoming resident completes two pre-residency questionnaires that help the Residency Program Director (RPD) develop their Customized Development Plan and design a residency year that is tailored to the specific needs and interests of the resident:
- ASHP Standard Entering Interests Form
- Goal-Based Entering Interests Form

Residents’ schedules and assigned Goals and Objectives are entered into PharmAcademic. For each Learning experience, the following Assessments are assigned and timely completion is required:
- Preceptor Assessment of Resident: Summative (for each Learning experience)
- Resident Self-Assessment: Summative self (as assigned)
- Resident Assessment of the Learning Experience
- Resident assessment of Preceptor

Preceptors and residents are encouraged to exchange in on-going, daily verbal feedback throughout each rotation experience. Feedback may also be provided using the PharmAcademic Feedback option. The Resident and Preceptors are trained and reminded throughout the year to complete evaluations in a thorough (quantitatively and qualitatively) and timely manner; feedback and constructive comments/suggestions are required. To this end, evaluations may be used, not only as assessment tools, but as tools that Preceptors may turn to for help in guiding Residents to improve, grow and achieve the residency program and the residents’ goals and objectives for the residency year. Constructive feedback regarding preceptors and the learning experience submitted by the resident provides the bases for discussion at Residency Advisory Committee (RAC) meetings and drives program improvement. The RPD reviews all evaluations and may solicit verbal feedback from preceptors and residents to provide guidance to help the resident maximize the residency experience. Additional evaluations may be assigned.

The Residents discuss their Program goals and interests quarterly (Quarterly Development Plan Update) with the RPD to evaluate where they are in meeting the residency and resident’s goals and to set or modify goals for the remaining months of the residency program based on the resident’s needs and developing interests. Residents may choose to meet more often and as needed as their interests change throughout the year. The resident may request schedule.
modifications throughout the residency year and the RPD will make all efforts to accommodate these requests. Assessment tools will be adjusted as changes are made.

To help provide more formative feedback, residents are expected to seek feedback from at least one staff member each weekend they staff. The feedback will be solicited via an online survey; during the first half of the residency year feedback will be requested from pharmacists; during the second half of the year feedback may be requested from pharmacists, PGY2 residents and/or pharmacy technicians.

The Resident completes the ASHP PharmAcademic exit evaluation. Residents also are required to complete an evaluation of the Residency Program during the 4th quarter of the residency year. Recommendations for improvement will be discussed during a RAC meeting and action plans for incorporation of accepted recommendations and those with potential merit will be generated as part of ongoing quality improvement measures.

All evaluations must be completed within seven days of the assigned due date.

Assessment Overview (PGY1 Acute Care)

It is the resident’s responsibility to ensure the timely completion of all evaluations (within seven days of the end of the learning experience or the evaluation due date).

<table>
<thead>
<tr>
<th>Type of Assessment</th>
<th>Timing</th>
<th>Summative</th>
<th>Summative-Self</th>
<th>Resident assessment of Preceptor</th>
<th>Resident assessment of Learning Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration</td>
<td>Final</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Am Care longitudinal clinic</td>
<td>Quarterly</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>(Midpoint and final)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Am Care rotation</td>
<td>Final</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Electives</td>
<td>Final</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>ICU</td>
<td>Final</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Med Hillcrest</td>
<td>Final</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Med La Jolla</td>
<td>Final</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Operations/staffing</td>
<td>Quarterly</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>(Quarterly)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orientation</td>
<td>Final</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Professional Development</td>
<td>Quarterly</td>
<td>X</td>
<td></td>
<td>X (50% and end)</td>
<td>X</td>
</tr>
<tr>
<td>(Quarterly)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project</td>
<td>Quarterly</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Teaching Certificate Program</td>
<td>Quarterly</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Therapeutics Conference</td>
<td>Final</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>TOC</td>
<td>Final</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Training</td>
<td>Final</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

PGY1 Standards, Competency Areas, Goals and Objectives (scheduled update for the 2023-24 residency year)

Competency Areas of the Residency Program are based on Standards of PGY1 residency programs outlined by the American Society of Health-System Pharmacy (ASHP). The following is the list of standards as stated by ASHP:
• **Standard 1: Requirements and Selection of Residents**
  o This Standard is intended to help ensure success of residents and that exemplary pharmacists are identified for further development for the benefit of the profession and contributions to patient care. Therefore, residents must be pharmacists committed to attaining professional competence beyond entry-level practice, committed to attaining the program’s educational goals and objectives, and supportive of the organization’s mission and values.

• **Standard 2: Responsibilities of the Program to the Resident**
  o It is important that pharmacy residency programs provide an exemplary environment for residents’ learning. This area indicates policies that must be in place to help protect residents and organizations during unusual situations that may arise with residency programs (e.g., extended leaves, dismissal, duty hours).

• **Standard 3: Design and Conduct of the Residency Program**
  o It is important that residents’ training enables them to achieve the purpose, goals, and objectives of the residency program and become more mature, clinically competent practitioners, enabling them to address patients’ needs. Proper design and implementation of programs helps ensure successful residency programs.

• **Standard 4: Requirements of the Residency Program Director and Preceptors**
  o The residency program director (RPD) and preceptors are critical to the residency program’s success and effectiveness. Their qualifications and skills are crucial. Therefore, the residency program director and preceptors will be professionally and educationally qualified pharmacists who are committed to providing effective training of residents and being exemplary role models for residents.

• **Standard 5: Requirements of the Site Conducting the Residency Program**
  o It is important that residents learn to help institute best practices in their future roles; therefore, the organization conducting the residency must meet accreditation standards, regulatory requirements, and other nationally applicable standards, and will have sufficient resources to achieve the purposes of the residency program.

• **Standard 6: Pharmacy Services**
  o When pharmacy facilities and services provide the learning environment where residents are trained, it is important that they train in exemplary environments. Residents’ expectations as they leave residency programs should be to strive for exemplary pharmacy services to improve patient care outcomes. Pharmacy’s role in providing effective leadership, quality improvement efforts, appropriate organization, staffing, automation, and collaboration with others to provide safe and effective medication-use systems are reviewed in this section. This section encourages sites to continue to improve and advance pharmacy services and should motivate the profession to continually improve patient care outcomes.

**ASHP Definitions**

• Competency Area: Categories of the residency graduates’ capabilities; Competency areas fall into one of three categories:
  o Required: Four competency areas are required (all programs must include them and all their associated goals and objectives)
    ▪ Competency Area R1: Patient Care
    ▪ Competency Area R2: Advancing Practice and Improving Patient Care
    ▪ Competency Area R3: Leadership and Management
    ▪ Competency Area R4: Teaching, Education, and Dissemination of Knowledge
  o Additional: Competency area(s) other than the four areas required above that are required for all residents
  o Elective: Competency area(s) selected optionally for specific resident(s)

• Educational Goals (Goal): Broad statement of abilities
  o Please visit the ASHP website to find specific goals and objectives for PGY1 residencies. Click on the link for ‘Required Competency Areas, Goals, and Objectives’ or click the link here [https://www.ashp.org/-/media/assets/professional-development/residencies/docs/required-competency-areas-goals-objectives](https://www.ashp.org/-/media/assets/professional-development/residencies/docs/required-competency-areas-goals-objectives)

• Educational Objective: Observable, measurable statement describing what residents will be able to do because of participating in the residency program.

• Criteria: Examples intended to help preceptors and residents identify successful skill development or needed improvement in resident

The competency areas of the Residency Program are based on the standards above and are specified by ASHP. Residents must have documentation that the required AND additional competency areas were achieved by the end of the Residency Program. **Failure to complete required and additional competency areas will result in failure to obtain the residency certificate.** The following is a list of required and additional Competency Areas to be completed throughout the year:

• **Competency Area R1: Patient Care**
Goal R1.1: In collaboration with the health care team, provide safe and effective patient care to a diverse range of patients, including those with multiple co-morbidities, high-risk medication regimens, and multiple medications following a consistent patient care process.

Goal R1.2: Ensure continuity of care during patient transitions between care settings.

Goal R1.3: Prepare, dispense, and manage medications to support safe and effective drug therapy for patients.

Competency Area R2: Advancing Practice and Improving Patient Care

Goal R2.1: Demonstrate ability to manage formulary and medication-use processes, as applicable to the organization.

Goal R2.2: Demonstrate ability to evaluate and investigate practice, review data, and assimilate scientific evidence to improve patient care and/or the medication use system.

Competency Area R3: Leadership and Management

Goal R3.1: Demonstrate leadership skills.

Goal R3.2: Demonstrate management skills.

Competency Area R4: Teaching, Education, and Dissemination of Knowledge

Goal R4.1: Provide effective medication and practice-related education to patients, caregivers, health care professionals, students, and the public (individuals and groups).

Goal R4.2: Effectively employ appropriate preceptors’ roles when engaged in teaching (e.g., students, pharmacy technicians, or other health care professionals).

Competency Area E6: Teaching and Learning

Goal E6.1: Demonstrate foundational knowledge of teaching, learning, and assessment in healthcare education.

Goal E6.2: Develops and practices a philosophy of teaching.

For information about Goals and Objectives Taught/Taught and Evaluated in Learning Experiences, please visit PharmAcademic, go the ‘Reports’ tab, and click on ‘Goals and Objectives Taught/Taught and Evaluated in Learning Experiences.’

PGY1 Pharmacy Residency Requirements for Completion/Graduation:

- Candidates must meet eligibility requirements before interviewing and being matched
- California Board of Pharmacy Intern License must be obtained prior to the start of the Residency Program
- Successfully licensed as a pharmacist by the California Board of Pharmacy within 90 days of the start of the appointment year; see above
- Completion of all evaluations in PharmAcademic
- Completion of residency project
  - Attend all Research Primer sessions and successfully complete activities as assigned
  - Vizient UHC Abstract
  - Vizient UHC Poster Presentation
  - UC Collaborative Abstract
  - UC Collaborative platform presentation
  - Preparation of the residency project in manuscript format suitable for publication with final approval by resident’s research preceptor and the Research Council Chair or designee
- Completion of Leadership/Wellness project/presentation
- Completion of Teaching Certificate Program and all presentations/teaching activities required within
- Attendance at all SDPRL required meetings and completion of all SDPRL activities
- Successful completion of all learning experiences (learning objectives marked as SP, ACH or ACHR; no NI)

NI: Resident is not performing at an expected level at that particular time; significant improvement is needed
S/P: Resident is performing and progressing at a level that should eventually lead to mastery of the goal/objective
ACH: Resident can perform associated activities independently for this learning experience
ACHR: Resident can perform associated activities independently across the scope of pharmacy practice

- All R.1.1.X objectives ACHR by the final evaluation
- ≥ 90% ASHP objectives marked as ACHR (as evaluated by individual rotation preceptors or by the RPD upon final review of the resident’s progress)
- Completion of all required competencies and check-off lists
- Completion of all assigned staffing
- Maintain professional standards throughout residency
- Teaching/precepting as assigned
- If a required rotation must be repeated then elective time shall be used, if possible, or an extension may be necessary at the discretion of the RPD and in consultation with the CPO

**Policy On Effect of Leave on Completion of The Training Program**
- Twelve months minimum is required to complete the residency appointment. Various approved leaves may necessitate changes in residents’ schedule and/or an extension of the program to meet the educational objectives and certification requirements of the residency program. Three months maximum post the end of the residency appointment is allowed to successfully complete the residency graduation requirements to have the Certificate of Completion conferred; exceptions and continuation beyond three months is at the discretion of the Residency Program Director and Pharmacist-in-Chief and is reviewed on a case-by-case basis.

**Consequences of Failure to Meet Licensing Requirements**
- The UC San Diego Health Pharmacy Residency PGY1 Programs require all Residents to have obtained their California Intern Pharmacist License prior to the Appointment Residency Year; additionally, PGY1 Pharmacy Residents must obtain their Pharmacist License in California within 90 days of the start of the appointment year to maximize their learning opportunities; failure to be a licensed pharmacist in the State of California within 90 days of the start of the residency program will result in automatic voluntary resignation or implementation of a corrective action plan at the discretion of the RPD (and upon advice from the RAC and CPO); the Corrective Action Plan is written by the Resident’s Residency Program Director and must be adhered to by the Resident; the Corrective Action Plan may include, but is not limited to, changes in rotation and staffing schedules, and a paid or unpaid extension of the residency year (to ensure that a minimum of 2/3 of residency is completed as a pharmacist licensed to practice in the state of California, as required by ASHP-accredited residency programs).
- Once licensed, Residents must maintain a full and unrestricted license to continue their appointment; should a Resident’s license be placed on probation, his/her continuation in training will be at the discretion of the Program Director and the Pharmacist in Chief; appointments will not be made for Candidates/Residents who are on probation or who have had their pharmacist licensed suspended or revoked by the California Board of Pharmacy.
Appendix B Ambulatory Care

**PGY1 Ambulatory Care Pharmacy Residency Program Overview**

NMS Program Match Number: 162113

https://health.ucsd.edu/specialties/pharmacy/residency/Pages/amcare.aspx

The University of California, San Diego (UCSD) Health Department of Pharmacy offers a one-year pharmacy practice residency in Ambulatory Care pharmacy practice beginning on the last Monday in June or the first Monday in July each year.

**Scope:**
UC San Diego Health consists of three acute care hospitals (UC San Diego Medical Center in Hillcrest, Sulpizio Cardiovascular Center, and Jacobs Medical Center which includes Thornton Hospital) and associated outpatient clinics. UC San Diego Health is also affiliated with Rady Children’s Hospital-San Diego, the Veterans Affairs San Diego Healthcare System, and the Sharp Memorial Hospital Joint Blood and Marrow Transplant Program. The Medical Center is affiliated with the UCSD School of Medicine and the UCSD Skaggs School of Pharmacy and Pharmaceutical Sciences. The Department of Pharmacy provides clinical services in both the inpatient and outpatient setting to a broad spectrum of patient populations including but not limited to internal medicine, family medicine, surgery, cardiology, oncology, solid organ transplant, bone marrow transplant, infectious diseases, nephrology and HIV/AIDS.

This pharmacy practice residency focuses on direct patient care in the ambulatory care and transitional care environment, with elective opportunities available in both the inpatient and outpatient setting. Additionally, the residents will receive training in research and teaching opportunities and is tailored to the individual. Emphasis will be placed in providing excellent pharmaceutical care in conjunction with the multidisciplinary team. The resident will gain experience in the therapeutic management of patients in both the primary care and specialty care setting, addressing chronic diseases including but not limited to diabetes, hypertension, and dyslipidemia, as well as transplant, hepatitis C, and HIV.

**Program Purpose:**
The purpose of the UC San Diego PGY1 Ambulatory Care Residency program is to build on Doctor of Pharmacy (PharmD) education and outcomes to contribute to the development of clinical pharmacists responsible for medication-related care of patients with a wide range of conditions. Residents completing the program will be eligible for postgraduate year two (PGY2) pharmacy residency training, and following one year of additional practice in ambulatory care after completion of PGY1 training, will be eligible to sit for the Board Certification in Ambulatory Care Pharmacy (BCACP). The ultimate goal of the program is to develop pharmacist practitioners who are compassionate healthcare team members and competent drug therapy experts in the ambulatory setting.

Pharmacy residents completing the UC San Diego Postgraduate Year One (PGY1) Pharmacy Practice Ambulatory Care Residency will be competent in the management of medication therapy for a wide variety of disease states in the ambulatory care and transitional care environment as part of an interdisciplinary team. These pharmacists will have demonstrated proficiency in communication and in educating other health care professionals, patients, students and the community on drug related topics. Residents will have opportunities in classroom teaching, facilitating educational conferences and precepting students on rotation from the UCSD Skaggs School of Pharmacy and Pharmaceutical Sciences. Residents will have demonstrated professional maturity by evaluating and monitoring their own performance. They will be trained in research methodologies and leadership skills and will have completed a Teaching Certificate Program. Graduates of this program will be prepared for adjunct faculty positions, direct patient care opportunities, and advanced PGY2 programs.

Pharmacy residents completing this program will be proficient in the areas of:
1) Providing patient-specific medication management services to promote ethical, compassionate, trusted patient care and positive patient outcomes in all settings (which will be focused on ambulatory and clinic-based patient care)
2) Advancing practice and improving patient care; mastering marketable job skills, including organizational and time management skills
3) Understanding leadership and management skills, representing personal organizational, prioritization and time management skills
4) Teaching, educating, and disseminating knowledge, including effectively educating health care professionals, patients, students, and the community on medication-related topics.
Number of residency positions available: 3 new residents are accepted each year.

Resident Pay and Benefits: Refer to the UC San Diego Health Pharmacy Residency website for details on salary and benefits: https://health.ucsd.edu/specialties/pharmacy/residency/Pages/Salary-and-Benefits.aspx

Requirements:
All applicants will be evaluated for an offer to an on-site interview with the RPD and program staff. On-site interviews will be held in early February. This residency program participates in the ASHP Resident Matching Program. All applicants must be enrolled in the Resident Matching Program. To facilitate this enrollment process and for further information, please visit the following website: www.natmatch.com/ashprmp

If applying for the UC San Diego PGY1 Ambulatory Care Residency Program, candidates must have all the following:
1. Graduate or candidate for graduation of an Accreditation Council for Pharmacy Education (ACPE) accredited degree program (or one in the candidate process), or have a Foreign Pharmacy Graduate Equivalency Committee (FPGEC) certificate from the National Association of Boards of Pharmacy (NABP); if a Foreign Pharmacy Graduate, candidate must be a United States Citizen or must hold a valid Visa that does not require sponsorship of any kind for the duration of the residency appointment or a “green card”
2. Licensed or eligible for licensure as a pharmacist in the state of California (notwithstanding the above for Foreign graduates)
3. Pharmacy School: ≥ C or “Pass” in all Therapeutics courses

Application:
Applications for the next incoming resident class will be accepted upon activation of the PhORCAS system. Deadline for application is December 31st. Applications should be submitted through PhORCAS and include the following:
1. Letter of intent addressing the following cues:
   a. Describe how your experiences have shaped your career goals and how they fit within the framework of the UCSD PGY1 Am Care Residency Program.
   b. Describe how your strengths, skills, and personality traits will help make you a successful resident in the UCSD PGY1 Am Care Residency Program.
2. Current Curriculum Vitae
3. Three electronic letters of recommendation
4. Official pharmacy school transcript

Pharmacist Intern License:
Matched residents must be licensed Pharmacist Interns in the State of California prior to July 1.

Start Date and Term:
The residency is expected to begin on the last Monday of June, or first Monday of July, depending on the Human Resources orientation schedule. The term will be for a period of 12 months per the offer letter.

Pharmacist License:
Matched residents must be successfully licensed as a pharmacist by the California Board of Pharmacy within 90 days of the start date of the residency; failure may result in automatic resignation or implementation of a corrective action plan at the discretion of the RPD and upon advice from the Residency Advisory Council; the Corrective Action Plan is written by the Resident’s RPD and must be adhered to by the Resident; the Corrective Action Plan may include, but is not limited to, changes in rotation and staffing schedules, and a paid or unpaid extension of the residency year.
Program Structure:

<table>
<thead>
<tr>
<th>Rotations:</th>
<th>Duration:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orientation / Training</td>
<td>3 weeks</td>
</tr>
<tr>
<td>Heart Failure Transitions of Care</td>
<td>5 weeks</td>
</tr>
<tr>
<td>Ambulatory Care Administration</td>
<td>5 weeks</td>
</tr>
<tr>
<td>Primary Care I</td>
<td>5 weeks</td>
</tr>
<tr>
<td>Solid Organ Transplant</td>
<td>5 weeks</td>
</tr>
<tr>
<td>Anticoagulation Clinic</td>
<td>5 weeks</td>
</tr>
<tr>
<td>Owen Clinic</td>
<td>5 weeks</td>
</tr>
<tr>
<td>Ambulatory Care Student Case Conferences</td>
<td>3-month longitudinal</td>
</tr>
<tr>
<td>Student-Run Free Clinic</td>
<td>3-month longitudinal</td>
</tr>
<tr>
<td>Operations</td>
<td>12-month longitudinal (20 total weekends)</td>
</tr>
<tr>
<td>Block Electives (2)</td>
<td>4-6 weeks each</td>
</tr>
<tr>
<td>Longitudinal Electives (1-2)</td>
<td>3-6 months</td>
</tr>
</tbody>
</table>

Core Rotations
PGY1 Ambulatory Care residents will gain the skills necessary to function as the primary Ambulatory Care Pharmacist during their required core rotations noted above. During direct patient care rotations the pharmacist will be expected to handle all aspects of the pharmacotherapeutic management of patients in the patient populations being covered. The resident will be expected to build relationships with each interdisciplinary team in a variety of settings and work proactively with the nurses, case managers, social workers, transition coaches, physicians and physician extenders to help address all aspects of patient care. Daily activities may include: working up patients prior to clinic activities, individually interviewing patients regarding chief complaints and medication adherence, staffing with clinic preceptors, making changes to patient’s medication regimens, ordering and interpreting labs, making specialty referrals, etc, as needed to achieve therapeutic goals, attending daily multidisciplinary rounds (e.g. TOC rotation), managing patients across the continuum of care, collaborating with physicians and other health care providers to discuss optimal pharmacotherapy, participating in patient education/consultation, and overseeing and directing P4 APPE pharmacy student activities. Residents will also gain experience in operational activities including discharge pharmacy and global transitional care staffing responsibilities. Longitudinal core rotations are integrated into the schedule to supplement block rotations and provide experience in continuity of patient care.

Elective Rotations
There are a variety of elective rotations from which the resident can choose. The electives can be selected from the list below and any of the core rotations listed above may be repeated. This will allow the resident the flexibility to tailor their experience to an area of interest. There are also opportunities to develop new elective rotations or modify existing elective rotations in the inpatient or outpatient environment as desired by the resident. Elective rotations will generally be scheduled in the second half of the residency year (after the majority of the core rotations are completed).

- Inpatient Transplant
- Academia
- Inpatient Pharmacy Administration
- Bone Marrow Transplant
- Inpatient Cardiology
- Cystic Fibrosis
- Dialysis/ CKD Clinic
- Emergency Department
- Primary Care II
- Hepatitis C Clinic
- Senior Medicine Clinic
- Infectious Diseases
- Inflammatory Bowel Disease
- Informatics
- Investigational Drug Service
- ICU (various)
- Internal Medicine (Family Medicine Team)
- Memory Disorders Clinic
- Neurology Clinic (Multiple Sclerosis)
- Palliative Care/ Oncology
- Pharmacy Medication Access Clinic (PMAC)
- Population Health
- Primary Care MTM
- Pulmonary Hypertension
- Transitions of Care- HIV

Longitudinal Clinic Experience
The resident will have four (4) 3-month longitudinal learning experiences in which to participate throughout the year. Participation in the Student-run Free Clinic and Ambulatory Care Conferences are required; therefore, 1-2 elective longitudinal experiences are permitted and a variety of options are available.

Operations (Staffing)
Staffing will be incorporated into the residency experience with weekend shifts that provide the opportunity for PGY1 residents to cover patients followed by the transitions of care program, as well as learning the roles and responsibilities of pharmacists in the discharge pharmacy. The PGY1 residents will be required to staff 20 weekends, which includes 1 minor holiday weekend AND 1 major holiday (Thanksgiving, Christmas, or New Year’s). Ten (10) of the weekends will cover the Discharge Pharmacy and ten (10) will cover the TOC program. The schedule will be designed during the Orientation experience and in general should not be changed throughout the year; switching weekends is discouraged but may be considered under extenuating circumstances.

**Research Project**
The resident will be responsible for conducting one (1) research project throughout the academic year that will be completed and presented at the UC Collaborative Residency Conference. If time allows, the resident will be involved with the initiation of a second project. This initiation phase will involve defining the study design, writing up the protocol and beginning the IRB approval phase. The purpose of starting a second project is to facilitate subsequent residents who can then finish the projects that were started the previous year. A list of project ideas will be generated from the preceptors and the resident is expected to select a project during the first month of the residency year.

**Publication**
The resident will be required to write a manuscript suitable for publication by the end of their residency year. The purpose of this requirement will be the development of scientific writing and communication skills. The types of publishable literature can include any of the following types of manuscripts:
- Case reports with a review of the literature
- Primary research /original research
- Medication Use Evaluation
- Meta-analysis of a disease state or therapy
- Review article

**Teaching Certificate Program**
Residents participate in the San Diego Pharmacy Residency Leadership (SDPRL) Teaching Certificate Program which includes a seminar series attended with residents from other county-wide residency programs. Seminar topics will focus on teaching and preceptor development skills. Seminar attendance is mandatory and may include weekend programs. No absences will be allowed for seminar sessions unless pre-approved by the RPD and only under rare extenuating circumstances. See Appendix N for further description of requirements.

**Skagg’s School of Pharmacy and Pharmaceutical Sciences**

**UCSD P4 Am Care Student Conferences**
Residents will facilitate case presentations and/or topic discussions, enhancing learning and assuring that the student provides an effective analysis of the case or topic focusing on the areas of clinical importance.

**Preceptors for UCSD SSSPS APPE Students**
Residents, under the guidance of the pharmacist preceptor, will provide preceptorship for SSSPS students on rotation. Residents, are trained, through the SDPRL Teaching Certificate Program and by their pharmacist preceptors, and are encouraged to develop skills in the four preceptor roles employed in practice-based teaching (direct instruction, modeling, coaching, and facilitation).

**Preceptors for UCSD SSSPS IPPE Students**
Residents may be assigned SSSPS IPPE students during their acute care and/or ambulatory care rotations. Students on their IPPE rotation may shadow residents to learn about the role of the resident and pharmacist in the clinical setting.

**Assessment Strategy – PharmAcademic:**
The PGY1 Ambulatory Care Residency Program uses the ASHP on-line evaluation tool called PharmAcademic, which is available for all ASHP-accredited pharmacy residency programs. This system, which is technologically supported by the McCreadie Group, supports the ASHP Residency Learning System (RLS).

Residents who are matched with this PGY1 program are entered into PharmAcademic prior to their arrival in July. The incoming resident completes two pre-residency questionnaires that help the Residency Program Director (RPD) design a residency year that is tailored to the specific needs and interests of the resident:
- ASHP Standard Entering Interests Form
• Goal-Based Entering Interests Form

Residents’ schedules and assigned RLS Goals are entered into PharmAcademic. We have chosen to use the PharmAcademic evaluation tools for our Learning Experiences. For each Learning experience, the following Assessments are completed:

• Preceptor Assessment of Resident: Summative (for each Learning experience)
• Resident Self-Assessment: Summative-self (for each Learning experience)
• Resident Assessment of the Learning Experience
  • Resident assessment of Preceptor
  • Resident assessment of Learning Experience

Preceptors and residents are encouraged to exchange in on-going, daily verbal feedback throughout each rotation experience. The Resident and Preceptors are trained and reminded throughout the year to complete evaluations in a thorough (quantitatively and qualitatively) and timely manner. To this end, evaluations may be used, not only as assessment tools, but as tools that Preceptors may turn to for help in guiding Residents to improve, grow and achieve the residency programs and the residents’ goals and objectives for the residency year. The RPD reviews all evaluations and solicits verbal feedback from preceptors and residents to provide guidance to help the resident maximize the residency experience.

The Residents discuss their Program goals and interests quarterly (Quarterly Update and Customized Training Plan) with the RPD Form to evaluate where they are in meeting the residency goals and to set or modify goals for the remaining six months of the residency program. Residents may meet as needed as their interests change throughout the year. The resident may request schedule modifications throughout the residency year and the RPD will make all efforts to accommodate these requests. Assessment tools will be adjusted as changes are made.

The Resident complete the ASHP PharmAcademic exit evaluation. Residents also are requested to complete a year-long evaluation of the Residency Program.

The results of these year-end Program evaluations are reviewed by the RPD for potential merit and potential action plans are developed in an effort to achieve continuous quality improvement.

Assessment Overview (PGY1 Ambulatory Care)

It is the resident’s responsibility to ensure the timely completion of all evaluations

<table>
<thead>
<tr>
<th>Learning Experience</th>
<th>Frequency</th>
<th>Summative</th>
<th>Feedback</th>
<th>Resident Assessment of Preceptor and Learning Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration</td>
<td>Final</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Anticoagulation</td>
<td>Final</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Diabetes Clinic</td>
<td>Final</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Family Medicine</td>
<td>Final</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Grand Rounds</td>
<td>Final</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Heart Failure TOC</td>
<td>Final</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Operations (Staffing)</td>
<td>Quarterly</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Orientation /Training</td>
<td>Final</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>P4 Am Care Conference</td>
<td>Quarterly</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Refill Clinic</td>
<td>Quarterly</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Residency Project</td>
<td>Quarterly</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>------------------------------------</td>
<td>-----------</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Solid Organ Transplant</td>
<td>Final</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Student-Run Free Clinic</td>
<td>Quarterly</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Teaching Certificate Program</td>
<td>Quarterly</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>
PGY1 Ambulatory Care Competency Areas, Goals and Objectives:

Competency Areas of the Residency Program are based on Standards of PGY1 residency programs outlined by the American Society of Health-System Pharmacy (ASHP). The following is the list of standards as stated by ASHP:

- **Standard 1: Requirements and Selection of Residents**
  - This Standard is intended to help ensure success of residents and that exemplary pharmacists are identified for further development for the benefit of the profession and contributions to patient care. Therefore, residents must be pharmacists committed to attaining professional competence beyond entry-level practice, committed to attaining the program’s educational goals and objectives, and supportive of the organization’s mission and values.

- **Standard 2: Responsibilities of the Program to the Resident**
  - It is important that pharmacy residency programs provide an exemplary environment for residents’ learning. This area indicates policies that must be in place to help protect residents and organizations during unusual situations that may arise with residency programs (e.g. extended leaves, dismissal, duty hours).

- **Standard 3: Design and Conduct of the Residency Program**
  - It is important that residents’ training enables them to achieve the purpose, goals, and objectives of the residency program and become more mature, clinically competent practitioners, enabling them to address patients’ needs. Proper design and implementation of programs helps ensure successful residency programs.

- **Standard 4: Requirements of the Residency Program Director and Preceptors**
  - The residency program director (RPD) and preceptors are critical to the residency program’s success and effectiveness. Their qualifications and skills are crucial. Therefore, the residency program director and preceptors will be professionally and educationally qualified pharmacists who are committed to providing effective training of residents and being exemplary role models for residents.

- **Standard 5: Requirements of the Site Conducting the Residency Program**
  - It is important that residents learn to help institute best practices in their future roles; therefore, the organization conducting the residency must meet accreditation standards, regulatory requirements, and other nationally applicable standards, and will have sufficient resources to achieve the purposes of the residency program.

- **Standard 6: Pharmacy Services**
  - When pharmacy facilities and services provide the learning environment where residents are trained, it is important that they train in exemplary environments. Residents’ expectations as they leave residency programs should be to strive for exemplary pharmacy services to improve patient care outcomes. Pharmacy’s role in providing effective leadership, quality improvement efforts, appropriate organization, staffing, automation, and collaboration with others to provide safe and effective medication-use systems are reviewed in this section. This section encourages sites to continue to improve and advance pharmacy services and should motivate the profession to continually improve patient care outcomes.

The competency areas of the Residency Program are based on the standards above and are specified by ASHP. Residents must have documentation that the required AND elective competency areas were achieved by the end of the Residency Program. **Failure to complete required and elective competency areas will result in failure to obtain the residency certificate.** The following is a list of required (R) and elective (E) Competency Areas to be completed throughout the year:

- **Competency Area R1: Patient Care**
  - Goal R1.1: In collaboration with the health care team, provide safe and effective patient care to a diverse range of patients, including those with multiple co-morbidities, high-risk medication regimens, and multiple medications following a consistent patient care process.
  - Goal R1.2: Ensure continuity of care during patient transitions between care settings.
  - Goal R1.3: Prepare, dispense, and manage medications to support safe and effective drug therapy for patients.

- **Competency Area R2: Advancing Practice and Improving Patient Care**
  - Goal R2.1: Demonstrate ability to manage formulary and medication-use processes, as applicable to the organization.
Goal R2.2: Demonstrate ability to evaluate and investigate practice, review data, and assimilate scientific evidence to improve patient care and/or the medication use system.

- **Competency Area R3: Leadership and Management**
  - Goal R3.1: Demonstrate leadership skills.
  - Goal R3.2: Demonstrate management skills.

- **Competency Area R4: Teaching, Education, and Dissemination of Knowledge**
  - Goal R4.1: Provide effective medication and practice-related education to patients, caregivers, health care professionals, students, and the public (individuals and groups).
  - Goal R4.2: Effectively employ appropriate preceptors’ roles when engaged in teaching (e.g., students, pharmacy technicians, or other health care professionals).

- **Competency Area E6: Teaching and Learning**
  - Goal E6.1: Demonstrate foundational knowledge of teaching, learning, and assessment in healthcare education.
  - Goal E6.2: Develops and practices a philosophy of teaching.

Other elective and custom competency areas can be added to the residents’ individualized residency plan throughout the year.

For information about Goals and Objectives Taught/Taught and Evaluated in Learning Experiences, please visit PharmAcademic, go to the ’Reports’ tab, and click on ’Goals and Objectives Taught/Taught and Evaluated in Learning Experiences’.

**PGY1 Ambulatory Care Residency Requirements for Completion/Graduation:**

- Successfully licensed as a pharmacist in the State of California within 90 days of the start date of the residency (see Licensure notes above)
- Completion of all evaluations by the resident in PharmAcademic
- Successful completion of all rotations:
  - All learning experience objectives marked satisfactory progress (SP), ACH or achieved for residency (ACHR) by the final evaluation, of all learning experiences. Any expectations of the residents that are not met or learning objectives with needs improvement (N/I) from an on-demand or scheduled evaluation will result in a meeting between the learning experience preceptor, RPD, and resident and a plan of correction will be formulated. Failure to complete the plan of correction, may result in disciplinary action, up to and including dismissal.
- Completion of 20 staffing weekends per year (see description above)
- Successful completion of Research Primer Course Series
- > 90% ASHP goals and objectives marked as ACHR
  - All R.1 objectives must have ACHR status by the final evaluation
- Completion of residency project requirements including:
  - Preparation of the residency project in manuscript format with final approval by resident’s research preceptor and members of the Research Council
  - Preparation and presentation of an Abstract and Poster Presentation at the Vizient Annual Meeting or suitable alternate professional meeting
  - Platform presentation at the UC Collaborative Residency Conference
- Completion of the SDPRL Teaching Certificate Program, including the following components:
  - One (1) Grand Rounds Presentation
  - Development of Initial and Final Teaching Philosophy
  - One (1) Morbidity and Mortality Presentation
  - One (1) Journal Club
  - One (1) Family Medicine Resident Physician Didactic Lecture
  - One (1) Tech Talk
  - Five (5) Small Group Teachings
  - One (1) OSCE Facilitation
  - One (1) Community Outreach Presentation
- Membership in the CSHP and ASHP professional organizations

**Additional Notes:**

- Twelve months maximum is allotted to successfully complete the core requirements, unless a delay in pharmacy
licensure or Leave of Absence requires extension of the program. Exceptions and continuation beyond twelve months is at the discretion of the Residency Program Director and Pharmacist-in-Chief and is reviewed on a case by case basis

- If a required rotation must be extended, elective time shall be used
- If the above requirements are not met in full, the residency certificate may be withheld at the discretion of the Residency Program Director
- All Program requirements of the resident must be completed within 12-months post-residency to have the Certificate of Completion conferred
The UC San Diego Health Department of Pharmacy offers a one-year specialty residency in infectious disease pharmacy practice beginning August 1st or upon licensure in California (see below).

**Scope:**
UC San Diego Health (UCSDH) consists of three acute care hospitals (UC San Diego Medical Center in Hillcrest, Sulpizio Cardiovascular Center and Jacobs Medical Center which includes former Thornton Hospital) and associated outpatient clinics. UCSDH is also affiliated with Rady Children’s Hospital-San Diego, the Veterans Affairs San Diego Healthcare System and the Sharp Memorial Hospital Joint Bone and Marrow Transplant Program. In addition, UCSDH is affiliated with the UCSD School of Medicine and the UCSD Skaggs School of Pharmacy and Pharmaceutical Sciences. The Department of Pharmacy provides clinical services at all three hospitals and assorted other clinical services. Clinical services include surgical, trauma, medical, burn, neurocritical, neonatal and cardiovascular ICUs, in addition to internal medicine, surgery, cardiology, oncology, solid organ transplantation and bone marrow transplantation, and HIV/AIDS and others.

The Infectious Diseases (ID) service at UCSDH provides broad inpatient coverages, including: two General Inpatient ID services (one at Hillcrest and one in La Jolla), a Hematology and Oncology ID Service which includes coverage of Bone Marrow Transplant patients in La Jolla, a Solid Organ Transplant ID Service in La Jolla and an HIV/AIDS ID Service in Hillcrest. This specialty residency balances direct patient care, research, and teaching opportunities and is tailored to the individual’s interest within the infectious diseases and antimicrobial stewardship discipline. Emphasis will be placed on antimicrobial stewardship, acting as an active and essential member of the Infectious Diseases Consultation Service and the Antimicrobial Stewardship Program, active participation in microbiology laboratory rounds, and excellent collaborations with the multidisciplinary team.

**Purpose:**
PGY2 pharmacy residency programs build on Doctor of Pharmacy (Pharm.D.) education and PGY1 pharmacy residency programs to contribute to the development of clinical pharmacists in specialized areas of practice. PGY2 residencies provide residents with opportunities to function independently as practitioners by conceptualizing and integrating accumulated experience and knowledge and incorporating both into the provision of patient care or other advanced practice settings. Residents who successfully complete an accredited PGY2 pharmacy residency are prepared for advanced patient care, academic, or other specialized positions, along with board certification, if available.

**Program Description:**
UCSDH is a university-affiliated teaching hospital system which provides the unique capability to engage each of our residents in direct patient care activities, research, administration and project management and teaching. A primary goal of the UCSDH PGY2 Infectious Diseases Pharmacy Residency is to train and educate pharmacists in the delivery of exemplary pharmaceutical care to patients with infectious diseases. This residency embraces the concept that infectious diseases pharmacy practitioners share in the responsibility and accountability for optimal drug therapy outcomes. Infectious diseases pharmacy residents must function independently as practitioners through conceptualizing, integrating, and transforming accumulated experience and knowledge into improved drug therapy for patients and overall antimicrobial stewardship. The resident(s) will engage in various learning experiences with depth, allowing them to understand and appreciate the implications of medication therapy used in various disease states commonly encountered in this volatile patient population. These advanced practitioners will demonstrate leadership and practice management skills, and will develop proficiency in communication through educating other health care professionals, patients, and students on infectious diseases issues. The practitioners will develop the skills necessary to conduct an infectious diseases research project as well as demonstrate professional maturity by strengthening their personal philosophy of practice, monitoring their own performance, and exhibiting commitment to the profession. Graduates of this specialized program will create working career plans and possess intense, focused marketable job skills that should prepare them for career opportunities in Infectious Diseases and Antimicrobial Stewardship in addition to any advanced pharmacy practitioner: independent practice skills, multi-tasking and prioritization.

This specialty residency balances service, research, and teaching opportunities and is tailored to the individual. Primary service responsibilities include antimicrobial stewardship, attending microbiology laboratory rounds, and
participation with the Infectious Diseases Consultation Service. A broad range of electives are available for the resident to select from in addition to a variety of longitudinal clinical practice sites. Teaching activities include regular didactic presentations, leading ID-related therapeutics conferences in the UC San Diego Skaggs School of Pharmacy and Pharmaceutical Sciences, and, as warranted, clerkship preceptorship of first-year pharmacy practice residents and fourth-year UC-San Diego pharmacy students in their clinical infectious diseases learning experience. The ability to work independently and to supervise pharmacy students and residents will be emphasized. The resident will also be involved in a research project where scientific writing is strongly emphasized and the preparation of a manuscript suitable for publication will be expected. Residents will be required to staff 16 weekends covering inpatient medicine patients or operational shifts.

**Number of residency positions available:** 1 resident is accepted each year.

**Resident Pay and Benefits:** Refer to UC San Diego Health Pharmacy Residency website (https://health.ucsd.edu/specialties/pharmacy/residency/Pages/Salary-and-Benefits.aspx) for details on salary and benefits

**Requirements of Residents Prior to Starting the Program:**
If matched with the UC San Diego Residency Program, matched candidates must have all of the following:

1. Graduated from an ACPE-accredited school of pharmacy with a Doctor of Pharmacy degree
2. Successfully completed an ASHP-accredited PGY1 pharmacy residency.
   a. Upon receipt of application to the program, the RPD will reach out to the PGY1 program director to assess good standing in the program
   b. A signed residency certificate will be required prior to beginning residency.
3. Obtained California pharmacy licensure prior to beginning residency.
   a. The residency is expected to begin on the last Monday of July, or first Monday of August, depending on the Human Resources orientation schedule. However, the resident must have obtained their California pharmacist license prior to beginning residency (absolute deadline to start = November 1st).
   b. If the resident is not licensed by November 1st, they will be dismissed from the residency. The residency offer may be rescinded if the resident does not take the California Board of Pharmacy law exam prior to August 1st or does not pass the California Board of Pharmacy law exam on the first attempt.

**Potential Residency Early Commitment:**
We may invite internal PGY1 UCSDH residents to apply for Early Commitment to the PGY2 Infectious Diseases Residency.
An application requires parts 1 and 2 below.

**The 2022 - 2023 resident will be identified via the match as described in the process below.**

**Residency Application:**
All applicants must be enrolled in the Resident Matching Program. To facilitate this enrollment process and for further information, please visit the following website: www.natmatch.com/ashprmp. Applications will be accepted when PhORCAS opens and due by December 31st. Applications should be submitted through PhORCAS and include the following:

1. Letter of intent. Please address the following items in your letter of intent and how you will play a role in these items. Your letter of intent should be no more than 2 pages in length.
   - Address where you feel infectious diseases pharmacy will be in 5 years.
   - Address your vision of an infectious diseases pharmacist practicing at the top of their license.
2. Current Curriculum Vitae with all experiential completed and anticipated rotations as well as pharmacy work experience.
3. Three (3) electronic references are required. At least two (2) of the letters should be from preceptors or supervisors who can directly comment on your clinical and practice skills.
   **Note:** Please have recommendation writers complete the electronic reference form within PhORCAS with detailed characteristic and narrative comments. One to two areas of improvement or constructive feedback that the recommender feels the candidate should continue to work on as a PGY2 resident should be identified. No separate letter of recommendation is required.

**Interviews** (virtual during COVID-19) will be held late January through February.
Planned Program Structure (2022– 2023)

- 2-4 weeks of orientation/training/research (duration determined by the resident’s previous experience, may be split into blocks)
- Core (required) learning experiences (Block, 2 – 6 weeks in length):
  - General Infectious Diseases (ID) (4 – 5 weeks, determined by resident previous experience and goals)
  - Antimicrobial Stewardship 1 (2 - 4 weeks, determined by resident goals)
  - Antimicrobial Stewardship 2 (advanced) (3 – 4 weeks, determined by resident goals)
  - HIV (3 – 6 weeks, determined by resident goals)
  - Hematology/Oncology/BMT ID (BMT ID) (3 – 6 weeks, determined by resident goals)
  - Solid Organ Transplant (SOT) / Ventricular Assist Device (VAD) ID (3 – 6 weeks, determined by resident goals)
  - Foundations in microbiology laboratory (4 – 5 weeks, determined by laboratory availability and resident goals)
  - Advanced Infectious Diseases (4 – 5 weeks, determined by resident goals)
- Longitudinal Clinic (required) Learning Experience(s) (one half-day per week, duration variable as below):
  - See information below
- Elective learning experiences: (Block, 3 – 4 weeks each)
  - See list below
- Resident project/research (Longitudinal, 12 months)
  - Includes participation in Research Primer Series
- Staffing (16 weekends annually, includes one minor and one major holiday) (Longitudinal, 12 months)
- Practice Management (Longitudinal, 12 months)
  - Committee Participation and Involvement: Antimicrobial Stewardship Program, Antimicrobial Utilization Committee (meets at least 1x quarterly), Infection Control Committee (1st Wednesday, Quarterly), and at least two Pharmacy and Therapeutics (P&T) Committee Meetings
  - Participation in the UC-Wide ID/ASP Collaborative and the UC-Wide ID Resident Network
  - Practice Management / Quality Improvement (Medication Utilization Evaluation (MUE), Orderset/Monograph/Guideline)
  - Infectious Diseases Appendix
  - Completion of competencies as assigned and required by department
- Effective Education / Teaching / Presentations (Longitudinal, 12 months)
  - Grand Rounds (1 required)
  - Journal Club Presentation (at least 2 required)
  - Presentations to health care professionals or those in training (e.g. Pharmacy Clinical Forum, Infectious Disease Grand Rounds) (at least 3 required)
  - Inservices (at least 3 required of which at least 1 must be to nursing)
  - Participation in UC San Diego Skaggs School of Pharmacy and Pharmaceutical Sciences Infectious Diseases Therapeutics Course
  - Preparation of manuscript suitable for publication

Required Learning Experiences:
PGY2 residents will gain the skills necessary to function as the primary ID/ASP pharmacist during their required learning experiences with the expectation that the resident will embrace the concept that ID/ASP pharmacists share in the responsibility and accountability for optimal drug therapy outcomes; participating, coordinating and/or handling all aspects of the antimicrobial medication process from culture/microbiologic identification/testing ordering to follow-up to auditing/feedback and reporting on quality metrics. The resident will be expected to build relationships within the interdisciplinary medical team, working proactively with a variety of disciplines (nurses, microbiologists, case managers, social workers, physicians and physician extenders, and learners) to achieve efficacy and safety and optimal antimicrobial medication therapy and outcomes. Depending on the core rotation, daily activities may include but are not limited to: attending daily multidisciplinary rounds on ID, serving as the first point of contact for ID pharmacy questions from students, residents (medical and pharmacy), pharmacists and ID fellows and ID attendings in a layered learning model, collaborating with physicians and other health care providers to discuss optimal pharmacotherapy, participating in patient education/consultation, performing pharmacokinetic monitoring on therapeutically monitored drugs, antimicrobial stewardship audit and feedback, participation in the set-up or optimization of antimicrobial medication orders/ordersets/guidelines and overseeing and directing PGY1 resident and pharmacy student activities. The interdisciplinary aspects of these required experiences prepare residents for any type of practice environment they may encounter in their future jobs by emphasizing the development of essential skills required for an advanced pharmacy practitioner including independent practice skills, proficiency in communication, leadership as well as the ability to multi-task and prioritize duties and responsibilities.
Elective Rotations (aka supplemental learning experiences):
The resident will have an opportunity to choose from 2 - 3 elective rotations, usually of 3 – 4 weeks in duration in an area dependent on the resident’s previous experience and goals. Areas of excellence include Critical Care (Medicine CCU, Burn ICU, Surgical ICU, Cardiovascular ICU, Neurocritical Care ICU), Bone Marrow Transplant, Hematology/Oncology, Hepatology, Cardiothoracic Transplant and Abdominal Transplant Services, HIV inpatient and outpatient services, Transitions of Care, and Information Services. The resident may choose to repeat a required rotation at a more advanced level (i.e. Transplant or BMT ID). The elective choices allow the resident the flexibility to tailor their PGY2 experience to an area of interest. The primary focus during these elective rotations would be the infectious diseases and antimicrobial stewardship associated with these patient populations.

Longitudinal Clinic:
In addition to the acute care learning experience, the resident will participate in at least two longitudinal clinic blocks of their choice during their residency. This clinic involvement will be a ½ day per week and will give the resident a chance to view the outpatient management of patients on a long term basis. Typically residents do one half-day clinic during the first half of the year (i.e. HCV Clinic) and a different clinic during the second half of the year, however, clinic choice, duration and schedule may vary by resident goals and clinic availability. It is highly encouraged that the resident participates in a clinic that oversees the care of patients with HCV (i.e. HCV clinic or HIV/HCV co-infection clinic) and, if the inpatient HIV service is chosen as a Core Learning Experience, residents are encouraged to also participate in a clinic that oversees HIV patients (i.e. Owen Clinic or HIV/HCV co-infection clinic). There are additional potential options for longitudinal experiences/clinics based on availability and resident goals (i.e. Cystic Fibrosis Clinic, Solid Organ Transplant ID Clinic).

Staffing:
Staffing will be incorporated into the residency experience with weekend shifts that provide the opportunity for PGY2 residents at UCSDH. The PGY2 resident will be invited to staff 16 weekends (which includes 1 minor holiday weekend PLUS 1 major holiday (Thanksgiving, Christmas, or New Year’s)). To help provide more formative feedback, residents are expected to seek feedback from at least one staff member each weekend they staff. The feedback will be solicited via an online survey which can be found on the Pharmacy intranet page.

Research Project / Project:
The resident will be responsible for conducting a resident project throughout the academic year that will be completed and presented at the UC Collaborative Annual Pharmacy Leadership Conference, or an equivalent conference. A Resident Research Primer Course has been developed by the UC San Diego Health Research Council to coach residents through the various aspects of the research process. PGY2 critical care residents who have not previously completed the Research Primer Course are required to attend. PGY2 critical care residents who have previously completed the Research Primer Course will required to attend some, but not all, meetings. They will be required to complete all competencies. Passing competency score is 80%.

More information can be found in the Resident Manual. If time allows, the resident will be involved with the initiation of a second project. This initiation phase will involve defining the study design, writing up the protocol and beginning the IRB approval phase. The purpose of starting a second project is to facilitate subsequent critical care residents who can then finish the projects that were started the previous year. A list of project ideas will be generated from the ICU preceptors and the resident is expected to select a project during the first month of the residency year.

Research time will be given during the resident year. During research weeks, the resident is expected to be onsite for at least 8 hours daily; preferably between 6:00 am and 6:00 pm. Any excursions from this time must be accounted for by requesting time off via the leave adjustment form on the Pharmacy intranet page.

Practice Management:
The PGY2 resident will track their progress and development in the areas of ongoing antimicrobial stewardship initiatives, practice management, clinical quality improvement projects (if not part of a year-long resident project), medication use evaluation, orderset review (and/or formulary monograph), and effective education or training to health care professionals or those in training through this longitudinal experience. Quarterly, the RPD and resident will complete a summative evaluation via PharmAcademic and update the resident’s customized training plan, as needed. Items which are included and evaluated in this longitudinal rotation include committee participation (Antimicrobial Utilization Committee, Infection Control Committee), Quality improvement opportunities (orderset or guideline creation or review), and the resident’s progress covering disease states listed in the ID Appendix and associated with the ASHP supplemental standard for an Advanced Practice Residency in Infectious Diseases.
Practice Management: The resident will be required to complete a formulary monograph or order set review and medication use evaluation. Each resident will be required to complete one annually. The projects will be larger in nature than PGY1 Pharmacy resident projects and focused on Antimicrobial Stewardship or Infectious Disease Topics.

Committee Participation/Meetings:
The resident will be required to participate in committees relevant to ID/ASP patient management at UCSDH in a longitudinal manner. These committees include participation in weekly Antimicrobial Stewardship Program team meetings, Antimicrobial Utilization Committee meetings (meets at least 1x quarterly), Infection Control Committee (at least quarterly), and at least two Pharmacy and Therapeutics (P&T) Committee Meetings. These committees review antimicrobial use, ASP processes, and collaborate with multidisciplinary team members to strive to find ways to optimize efficacy and safety of antimicrobial use at UCSDH. The resident will be an active participant through meeting attendance, and presentation and discussion of practice management initiatives. The resident will also participate actively in the UC-Wide ID/ASP Collaborative (meetings ~1x monthly) and UC-Wide ID Resident Network.

Infectious Diseases Appendix:
The resident's progress in covering disease states listed in the Infectious Diseases Appendix (topics listed individually in learning experience descriptions) will be tracked through attestation during core, longitudinal or elective learning experiences and quarterly in the customized training plan.

Required Competencies:
The resident functions as a licensed pharmacist in patient care activities. Completion of competencies as assigned and required by the pharmacy department and expected of all clinical pharmacists.

Effective Education:
Effective education opportunities which will be evaluated will include grand rounds, presentations to health care professionals or those in training (e.g. Pharmacy Clinical Forum, Infectious Disease Grand Rounds) (at least 3 required), didactic forums or inservices, journal clubs (at least 2 required during residency) and teaching opportunities (SSPPS Therapeutics Conference Leader and Didactic lecture of an Infectious Diseases related topic at SSPPS).

Grand Rounds: The resident will deliver a 1-hour CE lecture to the pharmacy staff regarding a controversial topic in infectious diseases. The grand rounds presentation needs to be presented to the project preceptor at least 2 weeks in advance for feedback and comments. A full “run-through” presentation must be scheduled at least one week in advance of the planned presentation to provide a seamless educational lecture. Please refer to the Residency Manual for more information on timelines, expectations and and evaluation strategies. An on-demand PharmAcademic evaluation will be used to track Grand Rounds completion. Progression towards completion of graduation requirements will be tracked via the Effective Education PharmAcademic evaluation, customized training plan, and/or via discussion with preceptors at RAC meetings.

Journal Clubs: Residents are required to present at least two formal journal club presentations during the year. Journal Club topics should be focus on critically analyzing a recently published journal article related to ID pharmacotherapy or Antimicrobial Stewardship. Presented journal clubs must be presented to the project preceptor at least one week in advance for feedback and comments. Failure to do so will result in delay of the presentation. An on-demand PharmAcademic evaluation by the RPD, learning experience preceptor, or clinical preceptor will be used to track Journal Clubs. Progression towards completion of graduation requirements will be tracked via the Effective Education PharmAcademic evaluation, customized training plan, and/or via discussion with preceptors at RAC meetings.

Presentations to health care professionals and those in training: The resident is required to present at least 3 presentations to health care professionals and those in training (e.g. Pharmacy Clinical Forum, Infectious Disease Grand Rounds) that are separate from learning experience-related presentations. Clinical Forums are typically clinically focused 20- minute presentations based on a recent patient case or pertinent topic. The resident is encouraged to discuss topics related to the ASHP supplemental Appendix for an Advanced Practice Residency in Infectious Diseases for those presentations. All topics and presentations should be presented to the project preceptor at least 1 week in advance for feedback and comments. An on-demand PharmAcademic evaluation will be used to track Clinical Forums and Journal Clubs. Progression towards completion of graduation requirements will be tracked via the Effective Education PharmAcademic evaluation, customized training plan, and/or via discussion with preceptors at RAC meetings.
In-Services: The resident is required to conduct 3 in-services during the residency year with 1 focused on nursing staff. The remaining in-services can target an audience of the resident’s choosing. The resident is expected to be proactive in determining the need for focused in-services as well as facilitating topics and logistics related to the in-service over the course of the residency year.

Teaching - Skaggs School of Pharmacy and Pharmaceutical Sciences: Involvement with UC San Diego’s School of Pharmacy will vary depending on the preceptor but it is anticipated that the resident will participate in case conferences as a conference leader. There will also be an opportunity to provide didactic lecture(s) on an Infectious Disease related topic, and may include preparing the lecture syllabus and exam questions and working with a SSPPS Faculty Member. Direct student precepting would occur while on rotation with UC San Diego pharmacy students jointly with the preceptor and direct precepting of PGY1 residents on rotation. Progression towards completion of graduation requirements will be tracked via the Effective Education PharmAcademic evaluation, customized training plan, and/or via discussion with preceptors at RAC meetings.

Teaching Certificate: Participation in the Teaching Certificate program is optional and will be discussed on a case by case basis. Please refer to the Residency Manual for more information on these topics. If the resident elects to complete the Teaching Certificate, the RPD will work with the PGY1 RPD to add the resident to expected events.

Manuscript Suitable for Publication: The resident will be required to write a manuscript suitable for publication by the end of their residency year. The purpose of this requirement will be the development of scientific writing and communication skills. The types of publishable literature can include any of the following types of manuscripts:

- Case Reports with a review of relevant literature
- Primary research/original research
- Medication Use Evaluation
- Meta-analysis of a disease state or therapy
- Review article
**Mock-Up Resident Learning Experiences and Rotation Schedule (2019 – 2020)**

* **A Minimum of 80% of rotation time must be completed on block rotations** *

<table>
<thead>
<tr>
<th>Month</th>
<th>August</th>
<th>August</th>
<th>August</th>
<th>Aug/Sept</th>
<th>Sept</th>
<th>Sept</th>
<th>Sept</th>
<th>Sept</th>
<th>Sep/Oct</th>
<th>October</th>
<th>October</th>
<th>October</th>
<th>Oct/Nov</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning Experience</td>
<td>Orient</td>
<td>Orient</td>
<td>Orient</td>
<td>Orient</td>
<td>ID Gen</td>
<td>ID Gen</td>
<td>ID Gen</td>
<td>ID Gen</td>
<td>Research week</td>
<td>ASP1</td>
<td>ASP1</td>
<td>HIV</td>
<td>HIV</td>
</tr>
<tr>
<td>Practice Management</td>
<td>ICC</td>
<td>AUC</td>
<td>JC1</td>
<td>Clin Forum</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Longitudinal clinic</td>
<td>HIV/HCV Friday PM</td>
<td>HIV/HCV Friday PM</td>
<td>HIV/HCV Friday PM</td>
<td>HIV/HCV Friday PM</td>
<td>HIV/HCV Friday PM</td>
<td>HIV/HCV Friday PM</td>
<td>HIV/HCV Friday PM</td>
<td>HIV/HCV Friday PM</td>
<td>HIV/HCV Friday PM</td>
<td>HIV/HCV Friday PM</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research primer</td>
<td>Mtg 1</td>
<td>Mtg 2</td>
<td>Mtg 3</td>
<td>Mtg 2.1</td>
<td>Mtg 4</td>
<td>Mtg 5</td>
<td>Mtg 6</td>
<td>Mtg 7</td>
<td>Mtg 8</td>
<td>Mtg 9</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Month</th>
<th>Nov</th>
<th>Nov</th>
<th>Nov</th>
<th>Nov</th>
<th>Dec</th>
<th>Dec</th>
<th>Dec</th>
<th>Dec</th>
<th>Dec</th>
<th>Jan</th>
<th>Jan</th>
<th>Jan</th>
<th>Jan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning Experience</td>
<td>HIV</td>
<td>HIV</td>
<td>Research week</td>
<td>Micro</td>
<td>Micro</td>
<td>Micro</td>
<td>Micro</td>
<td>Micro</td>
<td>Vac or Staff</td>
<td>Vac or Staff/Ad</td>
<td>BMT</td>
<td>BMT</td>
<td>BMT</td>
</tr>
<tr>
<td>Practice Management</td>
<td>AUC</td>
<td>ICC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>AUC</td>
<td>Clin Forum</td>
<td></td>
</tr>
<tr>
<td>Longitudinal clinic</td>
<td>HIV/HCV Friday PM</td>
<td>HIV/HCV Friday PM</td>
<td>HIV/HCV Friday PM</td>
<td>HIV/HCV Friday PM</td>
<td>HIV/HCV Friday PM</td>
<td>HIV/HCV Friday PM</td>
<td>HIV/HCV Friday PM</td>
<td>HIV/HCV Friday PM</td>
<td>HIV/HCV Friday PM</td>
<td>HIV/HCV Friday PM</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teaching</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>SSPPS ½ day/wk</td>
<td>SSPPS ½ day/wk</td>
<td>SSPPS ½ day/wk</td>
</tr>
<tr>
<td>Research primer</td>
<td></td>
<td>Mtg 10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Month</th>
<th>Feb</th>
<th>Feb</th>
<th>Feb</th>
<th>Feb</th>
<th>March</th>
<th>March</th>
<th>March</th>
<th>March</th>
<th>Mar/Ap</th>
<th>April</th>
<th>April</th>
<th>April</th>
<th>Ap/May</th>
<th>May</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning Experience</td>
<td>BMT</td>
<td>SOT</td>
<td>SOT</td>
<td>SOT</td>
<td>Research week</td>
<td>ASP2</td>
<td>ASP2</td>
<td>ASP2</td>
<td>Elect1</td>
<td>Elect1</td>
<td>Elect1</td>
<td>Elect1</td>
<td>Elect1</td>
<td>Elect2</td>
</tr>
<tr>
<td>Practice Management</td>
<td>ICC</td>
<td>JC2</td>
<td></td>
<td></td>
<td></td>
<td>AUC</td>
<td>Clin Forum</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Longitudinal clinic</td>
<td>Clinic TBD</td>
<td>Clinic TBD</td>
<td>Clinic TBD</td>
<td>Clinic TBD</td>
<td>Clinic TBD</td>
<td>Clinic TBD</td>
<td>Clinic TBD</td>
<td>Clinic TBD</td>
<td>Clinic TBD</td>
<td>Clinic TBD</td>
<td>Clinic TBD</td>
<td>Clinic TBD</td>
<td>Clinic TBD</td>
<td></td>
</tr>
<tr>
<td>Teaching</td>
<td>SSPPS ½ day/wk</td>
<td>SSPPS ½ day/wk</td>
<td>SSPPS ½ day/wk</td>
<td>SSPPS ½ day/wk</td>
<td>SSPPS ½ day/wk</td>
<td>SSPPS ½ day/wk</td>
<td>Optional</td>
<td>Optional</td>
<td>Optional</td>
<td>Optional</td>
<td>Optional</td>
<td>Optional</td>
<td>Optional</td>
<td></td>
</tr>
<tr>
<td>Research primer</td>
<td>Mtg 11</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Mock-Up Resident Learning Experiences and Rotation Schedule (2019 – 2020) (page 2)

**A Minimum of 80% of rotation time must be completed on block rotations**

<table>
<thead>
<tr>
<th>Month</th>
<th>May</th>
<th>May</th>
<th>May</th>
<th>June</th>
<th>June</th>
<th>June</th>
<th>June</th>
<th>Jun/Jul</th>
<th>July</th>
<th>July</th>
<th>July</th>
<th>July</th>
<th>July</th>
</tr>
</thead>
</table>

|---------------------|--------|--------|--------|--------|--------|--------|-------|-------|--------|--------|--------|--------|

| Practice Management | | AUC | ICC | | ASP train PGY1 | | AUC |
|---------------------|----------------|-----|-----|----------------|----------------|-----|

<table>
<thead>
<tr>
<th>Longitudinal clinic</th>
<th>Clinic TBD</th>
<th>Clinic TBD</th>
<th>Clinic TBD</th>
<th>Clinic TBD</th>
<th>Clinic TBD</th>
<th>Clinic TBD</th>
<th>Clinic TBD</th>
<th>Clinic TBD</th>
<th>Clinic TBD</th>
<th>Clinic TBD</th>
<th>Clinic TBD</th>
<th>Clinic TBD</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Teaching</th>
<th>Optional</th>
<th>Optional</th>
<th>Optional</th>
<th>Optional</th>
<th>-</th>
<th>-</th>
<th>-</th>
<th>-</th>
<th>-</th>
<th>-</th>
<th>-</th>
<th>-</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Research primer</th>
<th></th>
</tr>
</thead>
</table>

### Longitudinal and Part of ID Core Rotations:
- Micro Rounds on Tuesdays, Wednesdays, Fridays: 11 – 12 pm (Zoom)
- Attend ID Rounds on Thursdays from 3:30 – 5 pm
Assessment Strategy – PharmAcademic:
The PGY2 Infectious Diseases Specialty Residency Program uses the ASHP on-line evaluation tool called PharmAcademic, which is available for all ASHP-accredited pharmacy residency programs.

Residents who are matched with this PGY2 specialty program are entered into PharmAcademic prior to their arrival in August. The incoming resident completes two pre-residency questionnaires that help the RPD design a residency year that is tailored to the specific needs and interests of the resident:

- ASHP Standard Entering Interests Form
- Goal-Based Entering Interests Form

Residents’ schedules and assigned goals and objectives are entered into PharmAcademic. We have chosen to use the PharmAcademic evaluation tools for our Learning Experiences. For each Learning experience, the following Assessments are completed:

- Preceptor Assessment of Resident: Summative (for each Learning experience)
- Resident Self-Assessment: Summative-self (for each Learning experience)
- Resident Assessment of the Learning Experience
  - Resident assessment of Preceptor
  - Resident assessment of Learning Experience

Preceptors and residents are encouraged to exchange in on-going, daily verbal feedback throughout each rotation (learning experience). Six-week block rotations have a mid-point summative evaluation as well. The Resident and Preceptors are trained and reminded throughout the year to complete evaluations in a thorough (quantitatively and qualitatively) and timely manner. To this end, evaluations may be used, not only as assessment tools, but as tools that Preceptors may turn to for help in guiding Residents to improve, grow and achieve the residency programs and the residents’ goals and objectives for the residency year. The RPD reviews all evaluations and solicits verbal feedback from preceptors and residents to provide guidance to help the resident maximize the residency experience.

The resident will discuss individualized program goals and interests on a quarterly basis (Quarterly Update and Customized Training Plan) with the RPD to evaluate where they are in meeting the residency goals and to set or modify goals for the remainder of the residency program. The resident may request to meet with the RPD outside of this quarterly meeting, as needed, if their interests change throughout the year. The resident may request schedule modifications throughout the residency year and the RPD will make all efforts to accommodate these requests. Assessment tools will be adjusted as changes are made.

The resident will be expected complete all relevant exit evaluations as well as a year-long evaluation of the residency program.

The results of these year-end Program evaluations are reviewed by the RPD for potential merit and potential action plans are developed in an effort to achieve continuous quality improvement.
Assessment Overview (PGY2 Infectious Diseases)

*It is the resident’s responsibility to initiate the evaluation process with each rotation preceptor prior to the end of each learning experience and to schedule at least quarterly meetings with the residency director.*

<table>
<thead>
<tr>
<th>Learning Experience</th>
<th>Frequency</th>
<th>Resident Self-Assessment (summative)</th>
<th>Preceptor Assessment of Resident (summative)</th>
<th>Resident Assessment of Preceptor and Experience</th>
<th>On-demand</th>
<th>Feedback via Pharm Academic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orientation</td>
<td>Per learning experience</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Required LE</td>
<td>Per learning experience</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Longitudinal Clinic</td>
<td>Per learning experience</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Supplemental LE</td>
<td>Per learning experience</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Grand Rounds</td>
<td>Per experience</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Presentations to health care professionals and those in training</td>
<td>Per experience</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Journal Club</td>
<td>Per experience</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Teaching</td>
<td>Longitudinal</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Research</td>
<td>Quarterly</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>End</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Staffing</td>
<td>Quarterly</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>End</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Practice Management and Effective Education or Teaching</td>
<td>Quarterly</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>End</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Per experience (as appropriate*)</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Resident Skills and Knowledge</td>
<td>Beginning and end of residency</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Program Evaluation</td>
<td>End of Residency</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

* On-demand evaluations may be requested after inservices or presentations at required meetings. Intermittent on-demand evaluations may continually track progress of the ongoing projects. Feedback will also be provided via PharmAcademic.
**Local/Regional/National Meetings:**
The residents will have the opportunity to attend various professional meetings throughout the year. The annual travel stipend is variable, based on funding. In the past, residents have received a set stipend for the year which they can use at their discretion for registration, travel, accommodations, etc. The cost of attending UC Collaborative Annual Pharmacy Leadership Conference (or an equivalent conference) will be deducted from the travel stipend, along with any other conferences the resident chooses to attend. Residents are encouraged to attend a specialty meeting (e.g. IDWeek (IDSA), Infectious Diseases Association of California (IDAC) Symposia). Attendance at UC Collaborative Annual Pharmacy Leadership Conference (or an equivalent conference) to present their resident project is mandatory.

**PGY2 Infectious Diseases Competency Areas, Goals and Objectives:**
- Educational Outcome: broad categories of the residency graduates’ capabilities.
  - Outcome R1: Patient Care
  - Outcome R2: Advancing Practice and Improving Patient Care
  - Outcome R3: Leadership and Management
    - Outcome R4: Teaching, Education, and Dissemination of Knowledge
- Educational Goals: Goals listed under each outcome are broad sweeping statements of abilities.
- Educational Objectives: Resident achievement of educational goals is determined by assessment of the resident’s ability to perform the associated educational objective below each educational goal.
- The resident is encouraged to read detailed information about each goal at the ASHP website under Required Competency Areas, Goals and Objectives for Postgraduate Year Two (PGY2) Infectious Diseases Pharmacy Residencies (2017).
- For information about Goals and Objectives Taught/Taught and Evaluated in Learning Experiences, please visiting PharmAcademic, go the ‘Reports’ tab, and click on ‘Goals and Objectives Taught/Taught and Evaluated in Learning Experiences’.

**PGY2 Infectious Residency Requirements for Completion/Graduation:**
- Successful completion of all learning experiences. All learning experience objectives must be marked satisfactory progress (SP), achieved (ACH) or achieved for residency (ACHR) by the final evaluation of all learning experiences. Any expectations of the residents that are not met or learning objectives marked as needs improvement (N/I) from an on-demand or scheduled evaluation will result in a meeting between the learning experience preceptor, RPD, and the resident where a plan of correction will be formulated. Failure to complete the plan of correction may result in disciplinary action
- ≥90% of RLS objectives marked “Achieved for the Residency” by the end of the year (as evaluated by individual rotation preceptors or by the RPD upon final review of the resident’s progress). All patient care related objectives (Outcome R1: Patient Care) must be achieved.
- Twelve months minimum is allotted to successfully complete the core requirements. If a core rotation must be repeated, then elective time shall be used. If the above requirements are not met in full, the residency certificate may be withheld at the discretion of the residency director.
- If not completed during a UC San Diego PGY1 residency program, resident will be required to complete a Research Primer Course and demonstrate competence as defined by the Research Council. If necessary, a remediation plan will be designed for residents who do not demonstrate competence.
- Creation and completion of required projects and presentations and development of a manuscript suitable for publication.
The UC San Diego Health Department of Pharmacy offers a one-year specialty residency in critical care pharmacy practice beginning August 1st or upon licensure in California (see below).

**Scope:**
UC San Diego Health consists of three acute care hospitals (UC San Diego Medical Center in Hillcrest, Sulpizio Cardiovascular Center, and Jacobs Medical Center which inclMichelle will present the topic. udes former Thornton Hospital) and associated outpatient clinics. UC San Diego Health is also affiliated with Rady Children's Hospital-San Diego, the Veterans Affairs San Diego Healthcare System, and the Sharp Memorial Hospital Joint Blood and Marrow Transplant Program. The Health System is affiliated with the UC San Diego School of Medicine and the UC San Diego Skaggs School of Pharmacy and Pharmaceutical Sciences (SSPPS). The Department of Pharmacy provides clinical services at all three hospitals, including ICU services in the surgical, medical, burn, neonatal and cardiovascular ICUs, as well as assorted other clinical services.

**Purpose:**
PGY2 pharmacy residency programs build on Doctor of Pharmacy (Pharm.D.) education and PGY1 pharmacy residency programs to contribute to the development of clinical pharmacists in specialized areas of practice. PGY2 residencies provide residents with opportunities to function independently as practitioners by conceptualizing and integrating accumulated experience and knowledge and incorporating both into the provision of patient care or other advanced practice settings. Residents who successfully complete an accredited PGY2 pharmacy residency are prepared for advanced patient care, academic, or other specialized positions, along with board certification, if available.

**Program Description:**
UC San Diego Health is a university-affiliated teaching hospital which provides the unique capability to engage each of our residents in direct patient care activities, research, administration and project management, and teaching. Our PGY2 critical care pharmacy residency program emphasizes critical care pharmacotherapy, safe medication distribution, didactic and practical teaching, and pharmacy leadership. Graduates from our program have taken a wide variety of critical care, emergency department and academia positions. Graduates will be prepared to sit for the Board Certified Critical Care Pharmacy (BCCCP) exam.

PGY2 residents will gain the skills to function as the primary ICU pharmacist during their required, or core, ICU learning experiences, with the expectation that the resident will handle all aspects of the medication process from ordering to administration and follow up. Primary responsibilities include rounding with the ICU team(s), designing, recommending, monitoring, and evaluating patient-specific therapeutic regimens that incorporate the principles of evidence-based medicine, addressing all pharmacokinetically-monitored medications, being an active member of the Code Blue team, validating pharmacy orders for ICU patients, and overseeing and directing PGY1 resident and pharmacy student activities. This integration of staffing and clinical services prepares residents for any type of practice environment they may encounter in their future jobs by emphasizing the development of essential skills required for an advanced pharmacy practitioner: independent practice skills, multi-tasking and prioritization.

Teaching activities may include regular didactic presentations, leading ICU conferences for fourth year pharmacy students, involvement with UC San Diego SSPPS courses (e.g., conference leader for third year therapeutics course [optional], participation in Critical Care elective [required]), and, as warranted, clerkship preceptorship of PGY1 pharmacy practice residents and fourth-year UCSD pharmacy students. The ability to work independently and to supervise pharmacy students and residents will be emphasized. The resident will also be involved in a research project. Scientific writing is strongly emphasized and the preparation and submission of a manuscript suitable for publication will be expected.

**Number of residency positions available:** 2
Resident Pay and Benefits: Refer to UC San Diego Health Pharmacy Residency website (https://health.ucsd.edu/specialties/pharmacy/residency/Pages/Salary-and-Benefits.aspx) for details on salary and benefits

Requirements of Residents Prior to Starting the Program:
If matched with the UC San Diego Residency Program, matched candidates must have all of the following:
1. Graduated from an ACPE-accredited school of pharmacy with a Doctor of Pharmacy degree
2. Successfully completed an ASHP-accredited PGY1 pharmacy residency.
   a. Upon receipt of application to the program, the RPD will reach out to the PGY1 program director to assess good standing in the program
   b. A signed residency certificate will be required prior to beginning residency.
3. Obtained California pharmacy licensure prior to beginning residency.
   a. The residency is expected to begin on the last Monday of July, or first Monday of August, depending on the Human Resources orientation schedule. However, the resident must have obtained their California pharmacist license prior to beginning residency (absolute deadline to start is November 1st).
   b. If the resident is not licensed by November 1st, they will be dismissed from the residency. The residency offer may be rescinded if the resident does not take the California Board of Pharmacy law exam prior to August 1st or does not pass the California Board of Pharmacy law exam on the first attempt.

Application:
All applicants must be enrolled in the Resident Matching Program. To facilitate this enrollment process and for further information, please visit the following website: www.natmatch.com/ashprmp. Applications will be accepted when PhORCAS opens and due by December 31st.
1. Letter of intent: We no longer use a letter of intent to evaluate candidates. Instead, we will be asking all candidates to complete an online supplemental application. PhORCAS will require you to submit a letter of intent; please upload a blank document. The UCSDH supplemental application can be found at this link: https://ucsd.co1.qualtrics.com/jfe/form/SV_brXXVaKVum7wofz
2. Current Curriculum Vitae with all experiential completed and anticipated learning experiences as well as pharmacy and non-pharmacy work experience.
3. Three electronic references are required. At least two of the references should be from preceptors or supervisors who can directly comment on your clinical practice skills.
   Note: Please have recommendation writers complete the electronic reference form within PhORCAS with detailed characteristic and narrative comments. One to two areas of improvement or constructive feedback that the recommender feels the candidate should continue to work on as a PGY2 resident should be identified. No separate letter of recommendation is required.

Prior to an onsite interview, a virtual interview in early January is required for non-UC San Diego Health PGY1 residents. On-site interviews will be held late January through early March.

Program Structure 2022-2023 Academic Year:
• 2-4 weeks of orientation/training/research (duration determined by the resident’s previous experience)
• Core (required) learning experiences: (Block, 4 weeks each)
  o Unit/shift based learning experiences;
    ▪ C1 (Surgical and Trauma ICU)
    ▪ C2 (Burn ICU and Burn step down)
    ▪ C3 (Medical ICU)
    ▪ J1 (Mixed neuro/medical/oncology ICUs)
    ▪ S1 (Primarily cardiovascular)
    ▪ Repeat core (resident choice)
• Elective learning experiences: (Block, 4 weeks each)
  o Typically service-based ICU experiences
    ▪ See full list below
• Staffing (16 weekends, annually) (Longitudinal, 12 months)
• Resident project/research (Longitudinal, 12 months)
  o Includes participation in Research Primer Series
• Practice Management (Longitudinal, 12 months)
  o Committee Participation (alternate Code Blue 6 months and Critical Care MERP 6 months)
• Practice Management (MUE, Order set/Monograph)
  • Critical Care Appendix
  • Effective Education (Longitudinal, 12 months)
    • Journal club presentations (4 required, may choose to facilitate PGY1 journal club for final 2)
    • Clinical forum presentation (4 required)
    • Nursing or provider in-service (completed during each core learning experience, tracked via Effective Education PharmAcademic quarterly evaluation)
    • Grand Rounds (1 required, may be completed with co-resident)
    • Participation in SSPPS 274 Critical Care Elective
    • Publication submission (does not have to be accepted)

Core Learning Experiences (aka Core Rotations):
Descriptions of each learning experience can be found in PharmAcademic

PGY2 residents will gain the skills to function as the primary ICU pharmacist during their required learning experiences with the expectation that the resident will handle all aspects of the medication process from ordering to administration and follow up. Because required ICU experiences will focus on developing the skills necessary to effectively be the lead ICU pharmacist, they will primarily be assigned in the first half of the residency year. Rather than focusing on a specific team, the PGY2 resident will be expected to identify medication-related issues and manage the therapeutic plan of every patient in the unit, regardless of the primary service. The resident will be expected to build relationships with each medical team in the ICU and work proactively with other disciplines (i.e. physicians, nurses, respiratory therapists, dieticians, social workers, and case managers) to achieve efficient work flow and medication delivery. Daily activities will include: participation in rounds, carrying the Code Blue emergency pager as assigned by the Pharmacist’s schedule, reviewing each patient’s profile for appropriateness of drug therapy, performing pharmacokinetic monitoring on all therapeutically monitored drugs (TDM), validating pharmacy orders on all ICU patients, and overseeing and directing PGY1 resident and pharmacy student activities. This integration of staffing and clinical services prepares residents for any type of practice environment they may encounter in their future jobs by emphasizing the development of essential skills required for an advanced pharmacy practitioner: independent practice skills, multi-tasking and prioritization.

Elective Learning Experiences (aka Elective rotations):
Descriptions of each learning experience can be found in PharmAcademic

There are a wide variety of learning experiences the resident can choose their five electives from; and one elective must be a repeat of a required ICU learning experience. Electives can be selected from the list below and any of the required ICU learning experiences may be repeated again as a general elective. Elective learning experiences (except repeat core) generally allow the PGY2 resident to learn about being a service-based pharmacist. This will allow the resident the flexibility to tailor their PGY2 experience to an area of interest. Elective learning experiences will generally be scheduled in the second half of the residency year (after the required ICU learning experiences are completed). New experiences may be created on a case-by-case basis if the resident has an interest in a practice area not covered by the elective learning experiences below.

- Repeat required ICU
- Abdominal Transplant
- Administration
- Anesthesia Critical Care Medicine (ACCM)
- Bone Marrow Transplant
- Cardiology
- Cardiothoracic Transplant/Mechanical Assist Devices
- Emergency Department (ED)
- Informatics/Epic
- Geriatric ED
- Infectious Diseases
- Neuro critical care
- Neonatal ICU
- Pediatric ICU (Rady’s)
- Pulmonary Critical Care Medicine (PCCM)
- Trauma

Staffing:
Staffing will be incorporated into the residency experience with weekend shifts that provide the opportunity for PGY2 residents to cover 1-3 ICU’s simultaneously. The residents may also cover the Emergency Department after completion of the Emergency Department elective and discussion with the pharmacists in that practice area. The PGY2 critical care residents are required to staff 16 weekends (which includes 1 minor holiday weekend PLUS 1 major holiday (Thanksgiving, Christmas, or New Year’s). To help provide more formative feedback, residents are expected to seek
feedback from at least one staff member each weekend they staff. The feedback will be solicited via an online survey which can be found on the Pharmacy’s intranet page.

Resident Project/Research:
The resident will be responsible for conducting a resident project throughout the academic year that will be completed and presented at the UC Collaborative Annual Pharmacy Leadership Conference, or an equivalent conference. A Resident Research Primer Course has been developed by the UC San Diego Health Research Council to coach residents through the various aspects of the research process. PGY2 critical care residents who have not previously completed the Research Primer Course are required to attend. PGY2 critical care residents who have previously completed the Research Primer Course will be required to attend some, but not all, meetings. They will be required to complete all competencies. Passing competency score is 80%.

More information can be found in the Resident Manual. If time allows, the resident will be involved with the initiation of a second project. This initiation phase will involve defining the study design, writing up the protocol and beginning the IRB approval phase. The purpose of starting a second project is to facilitate subsequent critical care residents who can then finish the projects that were started the previous year. A list of project ideas will be generated from the ICU preceptors and the resident is expected to select a project during the first month of the residency year.

Research time will be given during the resident year. During research weeks, the resident is expected to be onsite for at least 8 hours daily; preferably between 6:00 am and 6:00 pm. Any excursions from this time must be accounted for by requesting time off via the leave adjustment form https://ishare.ucsd.edu/sites/RX/HR%20documents/Leave_Adjustment_Form.pdf

Practice Management:
The PGY2 resident will track their progress and development in the areas practice management and clinical quality improvement projects (if not a part of year-long resident project), medication use evaluation, order set review (and/or formulary monograph). Quarterly, the RPD and resident will complete a summative evaluation via PharmAcademic and update the resident’s customized training plan to track the resident’s progress. Items which are included and evaluated in this longitudinal rotation include:

**Committee Participation:** The resident will be required to participate in committees relevant to critical care patient management at UCSD in a longitudinal manner; 6 months in Code Blue and 6 months in Critical Care MERP. The Code Blue and Critical Care Medication Error Reduction Plan (MERP) Committees review medication use and strive to find ways to reduce errors and improve Code Blue (cardiac arrest) response at UCSDH. The resident will work with the pharmacist assigned to that committee to be an active participant through meeting attendance and investigating medication related events and solutions.

**Practice Management:** The resident will be required to complete a formulary monograph or order set review and medication use evaluation. Each resident will be required to complete at least one annually. Residents may collaborate with the other critical care resident for completion. The projects will be larger in nature than PGY1 Pharmacy resident projects and be focused on critical care topics.

**Critical Care Appendix:** The resident will demonstrate an understanding of the critical care relevant diseases and conditions and have the ability to design appropriate treatment regimens and treat and assess outcomes. For some diseases and conditions, direct patient care is required. For the other diseases and conditions, the resident will demonstrate understanding of the diseases and condition via didactic instruction, case-based application, simulation, or other appropriate approach.

For these diseases and conditions, the resident will demonstrate an understanding of signs and symptoms, epidemiology, risk factors and etiology, pathogenesis, pathophysiology, clinical course, and a comprehensive pharmacotherapy treatment plan. The resident’s progress in covering disease states listed in the Critical Care Appendix (topics listed individually in learning experience descriptions) will be tracked through attestation during core, unit-based learning experiences and quarterly in the customized training plan.

**Effective Education:** The resident will have opportunities to provide effective education through presentation of grand rounds (1 required during residency, may be done with co-resident), clinical forums (4 required during residency), journal clubs (4 required during residency), in-services (5 required during residency), didactic teaching opportunities (SPPS 274 Critical Care elective and ART facilitation/lecture) and submission of a manuscript for publication.
**Grand Rounds:** The resident will deliver a 1-hour CE lecture to the pharmacy staff regarding a topic in critical care. This presentation may be made in collaboration with their PGY2 Critical Care Pharmacy co-resident, with each resident presenting approximately 30 minutes of material. Please refer to the Residency Manual for more information on timelines, expectations, and evaluation strategies. An on-demand PharmAcademic evaluation by the RPD or preceptor will be used to track Grand Rounds completion. Progression towards completion of graduation requirements will be tracked via quarterly Effective Education PharmAcademic evaluation, customized training plan, and via discussion with preceptors at quarterly RAC meetings.

**Clinical Forums:** Residents are required to present four clinical forums during the year at our Pharmacy Clinical Forum. Clinical Forums are clinically-focused, 20-minute presentations based on a recent patient case. The resident is encouraged to discuss topics related to the ASHP Supplemental Appendix for an Advanced Practice Residency in Critical Care for these presentations. All Clinical Forum presentations need to be presented to the project preceptor at least one week in advance for feedback and comments. Failure to do so will result in delay of the presentation. Please refer to the residency manual for more information and evaluation strategies. An on-demand PharmAcademic evaluation by the RPD, learning experience preceptor, or clinical preceptor will be used to track Clinical Forums. Progression towards completion of graduation requirements will be tracked via the Effective Education PharmAcademic evaluation, customized training plan, and via discussion with preceptors at quarterly RAC meetings.

**Journal Clubs:** Residents are required to present four journal club presentations during the year. Journal Club topics should be focused on critically analyzing a recently published journal article related to critical care pharmacotherapy. During the second half of the year, the resident may choose to facilitate a PGY1 Journal Club in lieu of performing the final two of their required journal club presentations. Presented journal clubs must be presented to the project preceptor at least one week in advance for feedback and comments. Failure to do so will result in delay of the presentation. For facilitation, the resident assumes the role of the clinical preceptor and should critically analyze the article, coach the PGY1 resident through their analysis, and facilitate the discussion on the day of the presentation. Facilitators should provide feedback on their analysis and thoughts of the PGY1 one week prior to their presentation. Please refer to the residency manual for more information and evaluation strategies. An on-demand PharmAcademic evaluation by the RPD, learning experience preceptor, or clinical preceptor will be used to track Journal Clubs. Progression towards completion of graduation requirements will be tracked via the Effective Education PharmAcademic evaluation, customized training plan, and via discussion with preceptors at quarterly RAC meetings.

**In-services:** Nursing or provider in-services will be required on all core learning experiences and when designated by the learning experience description. Other interdisciplinary in-services may be required at the discretion of the preceptor. More information can be found in learning experience descriptions (see PharmAcademic). Summative learning experience evaluations completed by the preceptor will be used to track individual in-services. Progression towards completion of graduation requirements will be tracked via the Effective Education PharmAcademic evaluation, customized training plan, and via discussion with preceptors at quarterly RAC meetings.

**Teaching - Skagg’s School of Pharmacy and Pharmaceutical Sciences:** Involvement with UCSD’s School of Pharmacy will vary but the resident is required to participate in the Critical Care elective (SPPS 274) leading case conferences and the ACLS hands-on learning experience at the Sim Lab. The resident may be asked to write up cases for therapeutics conference based on real patients and prepare exam questions based on the lectures presented. PGY2 Critical Care residents may also choose to be a conference leader for one of the therapeutics course for 3rd year pharmacy students. Residents will also have multiple opportunities to directly precept students who are currently on rotation with the resident. If the resident has the opportunity to give a lecture in a course, an on-demand PharmAcademic evaluation will be completed by Course Faculty. Progression towards completion of graduation requirements will be tracked via the Practice Management and Effective Education PharmAcademic evaluation, customized training plan, and via discussion with preceptors at quarterly RAC meetings.

**BCCCP Lecture Series (aka Critical Care Bootcamp):** Critical care residents will be encouraged, but not required, to research and deliver at least one 120-minute lecture on various didactic topics throughout the year. These topics will be related to the BCCCP Preparatory Review Course and will be relevant to the patient population they are currently involved with from a learning experience perspective, when possible. All parties are welcome to attend but the core ICU pharmacists are
strongly encouraged to attend. This lecture series is held in conjunction with the San Diego Veteran’s Affairs and Scripps Mercy PGY2 critical care residents, giving the residents the opportunity to network with other critical care pharmacists in the area.

Teaching Certificate:
Participation in the Teaching Certificate program is optional and will be discussed on a case by case basis. Please refer to the Residency Manual for more information on these topics. If the resident elects to complete the Teaching Certificate, the RPD will work with the PGY1 RPD to add the resident to expected events.

Publication Submission:
The resident will be required to submit a manuscript for publication by the end of their residency year. The purpose of this requirement will be the development of scientific writing and communication skills. The types of publishable literature can include any of the following types of manuscripts. Previous residents have completed case Reports with a review of relevant literature, primary research/original research, medication Use Evaluation, meta-analysis of a disease state or therapy, or review articles.
### Resident Learning Experiences and Rotation Schedule (2019-2020 Example)

**A minimum of 80% of rotation time must be completed on block learning experiences**

<table>
<thead>
<tr>
<th>Learning Experience</th>
<th>Dates</th>
<th>Resident #1</th>
<th>Resident #2</th>
<th>Presentation Schedule or other items</th>
<th>Committee work</th>
<th>Research Primer Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orientation</td>
<td>8/1-8/16/xx</td>
<td>See attached schedule (TBD)</td>
<td>See attached schedule (TBD)</td>
<td></td>
<td>R2-Code Blue R1- CC MERP</td>
<td>Meeting #1: 8/5/20xx</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Meeting #2: 8/12/20xx</td>
</tr>
<tr>
<td>1</td>
<td>8/19-9/13/xx</td>
<td>J1</td>
<td>C3</td>
<td></td>
<td>R2-Code Blue R1- CC MERP</td>
<td>Meeting #3: 8/26/20xx</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>JC #1</td>
<td>Nursing In-service</td>
<td>Meeting #4: 9/9/20xx</td>
</tr>
<tr>
<td>1Research week 1</td>
<td>9/16-9/20/xx</td>
<td></td>
<td></td>
<td></td>
<td>Clinical forum #1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>9/23-10/18/xx</td>
<td>S1</td>
<td>C2</td>
<td></td>
<td>R2-Code Blue R1- CC MERP</td>
<td>Meeting #5: 10/1/20xx</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Nursing In-service</td>
<td></td>
<td>Meeting #6: 10/7/20xx</td>
</tr>
<tr>
<td>3</td>
<td>10/21-11/15/xx</td>
<td>C3</td>
<td>C1</td>
<td></td>
<td>R2-Code Blue R1- CC MERP</td>
<td>Meeting #7: 11/21/20xx</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Clinical forum #2 Nursing In-service</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>11/18-12/20/20xx</td>
<td>C1</td>
<td>S1</td>
<td></td>
<td>R2-Code Blue R1- CC MERP</td>
<td></td>
</tr>
</tbody>
</table>
| 2AD time | 12/23-1/3/20xx | Admin catch up and PGY2 candidate review | R2-Code Blue  
R1- CC MERP |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1Research week 2</td>
<td>1/6-1/10/20xx</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| 5 | 1/13-2/7/xx | C2 | J1 | SPPS 274  
PGY2 CC Interviews  
1/31 and 2/3  
Nursing In- 
service | R2-Code Blue  
R1- CC MERP |
| 84 | Meeting #8:  
1/27/20xx |
| 1Research week 3 | 3/11-3/15/20xx | | SPPS 274/ 
Interviews |
| 2AD time | 2/17-2/21/20xx | SCCM/AD | SPPS 274/ 
Interviews | R2-Code Blue  
R1- CC MERP |
| 6 | 2/24-3/20/20xx | ED | NICU | SPPS 274/ 
Interviews | R2-CC MERP  
R1- Code Blue  |
| 7 | 3/23-4/17/20xx | PCCM | ID | Clinical forum  
#3 (may use  
topic from  
SPPS 274) | R2-CC MERP  
R1- Code Blue  |
| 8 | 4/20-5/15/20xx | NCC | ACCM | JC #3 (may facilitate or present) | R2-CC MERP  
R1-Code Blue  |
| 9 | 5/18-6/12/20xx | CT txp/VAD | PCCM | Clinical forum  
#4 | R2-CC MERP  
R1- Code Blue |
| 10 | 6/15-7/10/20xx | C3 elective | NCC | JC #4 (may facilitate or present) | R2-CC MERP  
R1-Code Blue |
<table>
<thead>
<tr>
<th>11</th>
<th>7/13-7/31/20xx</th>
<th>ACCM</th>
<th>C3 elective</th>
<th>R2-CC MERP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>R1- Code Blue</td>
</tr>
</tbody>
</table>

**Orientation**

2 - 3 weeks (internal candidates=2 weeks, external candidates=3 weeks)

**Required learning experiences**

C3/MICU (4 weeks), C1/SICU (4 weeks), C2/BICU (4 weeks), S1/CT-ICU (4 weeks), J1/PCCM/SCC (4 weeks).

**Supplemental learning experiences**

Admin, Abdominal transplant, BMT, cardiology, CT txp/VAD, Emergency Department, Geriatric ED, Informatics/Epic, Infectious Disease, NICU, NCC, PCCM, ACCM, trauma, pediatric ICU

**Staffing**

PGY2 CC residents are required to staff 16 weekends during their PGY2 year. This includes one major and one minor holiday. Scheduled training weekends are also included. Voluntary training weekends are not included. To help provide more formative feedback, residents are expected to seek feedback from at least one staff member each weekend they staff. The feedback will be solicited via an online survey [https://ucsd.co1.qualtrics.com/jfe/form/SV_e9Zcl1CCEMbnw1v](https://ucsd.co1.qualtrics.com/jfe/form/SV_e9Zcl1CCEMbnw1v)

**Research**

3 weeks. During research weeks, the resident is expected to be onsite for at least 8 hours daily; preferably between 6:00 am and 6:00 pm. Prior to each research week, the resident and RPD will meet to discuss required ‘deliverables’ for the week, depending on the resident project progress. Any excursions from this time must be accounted for by requesting time off via the leave adjustment form [https://ishare.ucsd.edu/sites/RX/HR%20documents/Leave_Adjustment_Form.pdf](https://ishare.ucsd.edu/sites/RX/HR%20documents/Leave_Adjustment_Form.pdf)

**Admin time**

Ad Hoc; when returning from conferences or as assigned, remainders of weeks should be used for admin projects. They are not considered off time unless vacation has been requested via leave adjustment form [https://ishare.ucsd.edu/sites/RX/HR%20documents/Leave_Adjustment_Form.pdf](https://ishare.ucsd.edu/sites/RX/HR%20documents/Leave_Adjustment_Form.pdf)

**Committee**

Code Blue (2<sup>nd</sup> Thursday/month) noon-3pm, Hillcrest; Critical Care MERP (2<sup>nd</sup> Monday of odd months), 11:30-12:30 Jacobs

**Vacation/Weekend Makeup**

A minimum of 80% of rotation time must be completed on block learning experiences. When preceptors are on a minimum schedule and may not be available to provide constructive feedback, residents will not be permitted to make up days missed from learning experiences. All vacation requests, including this time period, should be documented with a leave adjustment form [https://ishare.ucsd.edu/sites/RX/HR%20documents/Leave_Adjustment_Form.pdf](https://ishare.ucsd.edu/sites/RX/HR%20documents/Leave_Adjustment_Form.pdf) before the time is taken.
Local/Regional/National Meetings:
The residents will have the opportunity to attend various professional meetings throughout the year. The annual travel stipend is variable, based on funding. In the past, residents have received a set stipend for the year which they can use at their discretion for registration, travel, accommodations, etc. The cost of attending UC Collaborative Annual Pharmacy Leadership Conference (or an equivalent conference) will be deducted from the travel stipend, along with any other conferences the resident chooses to attend. Residents are encouraged to attend a specialty meeting (e.g. Society of Critical Care Medicine Annual Congress). Attendance at UC Collaborative Annual Pharmacy Leadership Conference (or an equivalent conference) to present their resident project is mandatory.

Assessment Strategy – PharmAcademic:
The PGY2 Critical Care Specialty Residency Program uses the ASHP on-line evaluation tool called PharmAcademic, which is available for all ASHP-accredited pharmacy residency programs.

Residents who are matched with our program are entered into PharmAcademic prior to their arrival in August. The incoming resident completes two pre-residency questionnaires that help the Residency Program Director (RPD) design a residency year that is tailored to the specific needs and interests of the resident:
- ASHP Entering Interests Form
- Entering Objective-Based Self-Evaluation

The RPD uses the ASHP Entering Interest Form and Entering Objective-Based Self-Evaluation form to create residents customized training plan. The Residency Requirement Checklist and Customized Training Plan will be discussed and modified (as necessary) through a collaborative effort between the RPD and resident. In addition, the resident may request schedule modifications throughout the residency year and the RPD will make all efforts to accommodate these requests. Assessment tools will be adjusted as changes are made. The RPD will share changes to the Residency Requirement Checklist and Customized Training Plan via PharmAcademic automatic emails to scheduled preceptors and during quarterly PGY2 Critical Care Residency Advisory Council (RAC) meetings.

Residents’ schedules are entered into PharmAcademic. For each learning experience, the following assessments are completed:
- Preceptor Assessment of Resident: Summative (for each learning experience)
- Resident Self-Assessment: Summative-self (for each learning experience)
- Resident Assessment of the Learning Experience
  - Resident assessment of Preceptor(s)
  - Resident assessment of Learning Experience

Preceptors and residents are encouraged to exchange in on-going, daily verbal feedback throughout each learning experience. Residents are expected to provide constructive feedback to the preceptor in their PharmAcademic evaluation at the end of the learning experience. This feedback, along with Preceptor self-evaluation, is helpful in developing worthwhile and relevant preceptor development programming. The Resident and Preceptors are trained and reminded throughout the year to complete evaluations in a thorough (quantitatively and qualitatively) and timely manner (within 7 days of learning experience end). To this end, evaluations may be used, not only as assessment tools, but as tools that Preceptors may turn to for help in guiding Residents to improve, grow and achieve the residency programs and the residents’ goals and objectives for the residency year. The RPD reviews all evaluations and solicits verbal feedback from preceptors and residents to provide guidance to help the resident maximize the residency experience.

Residents will be required to complete a PGY2 Critical Care Program Evaluation during the 3rd quarter. Feedback will be discussed at the PGY2 Critical Care RAC meeting and agreed upon changes will be incorporated into the next academic year structure.
### Assessment Overview (PGY2 Critical Care)

*It is the resident’s responsibility to initiate the evaluation process with each rotation preceptor prior to the end of each learning experience and to schedule at least quarterly meetings with the residency director.*

<table>
<thead>
<tr>
<th>Learning Experience</th>
<th>Frequency</th>
<th>Resident Self-Assessment (summative)</th>
<th>Preceptor Assessment of Resident (summative)</th>
<th>Resident Assessment of Preceptor and Experience</th>
<th>On-Demand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orientation</td>
<td>Per learning experience</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Required LE</td>
<td>Per learning experience</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Supplemental LE</td>
<td>Per learning experience</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Grand Rounds</td>
<td>Per experience</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Clinical Forum</td>
<td>Per experience</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Journal Club</td>
<td>Per experience</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Teaching</td>
<td>Spring Quarter</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Research</td>
<td>Quarterly</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>End</td>
</tr>
<tr>
<td></td>
<td>End</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Staffing</td>
<td>Quarterly</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>End</td>
</tr>
<tr>
<td></td>
<td>End</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Practice Management</td>
<td>Quarterly</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>End</td>
</tr>
<tr>
<td></td>
<td>End</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Effective Education</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resident Skills and Knowledge</td>
<td>Beginning and end of residency</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Program Evaluation</td>
<td>3rd quarter of residency</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

### PGY2 Critical Care Competency Areas, Goals and Objectives (2016 Standard):

- Educational Outcome: broad categories of the residency graduates’ capabilities.
  - Outcome R1: Patient Care
  - Outcome R2: Advancing Practice and Improving Patient Care
  - Outcome R3: Leadership and Management
  - Outcome R4: Teaching, Education, and Dissemination of Knowledge
UC San Diego Health

• Educational Goals: Goals listed under each outcome are broad sweeping statements of abilities.
• Educational Objectives: Resident achievement of educational goals is determined by assessment of the resident’s ability to perform the associated educational objective below each educational goal.
• The resident is encouraged to read detailed information about each goal at the ASHP website (click on Critical Care Pharmacy (PGY2), 2016) https://www.ashp.org/Professional-Development/Residency-Information/Residency-Program-Directors/Residency-Accreditation/PGY2-Competency-Areas
• For information about Goals and Objectives Taught/Taught and Evaluated in Learning Experiences, please visiting PharmAcademic, go the ‘Reports’ tab, and click on ‘Goals and Objectives Taught/Taught and Evaluated in Learning Experiences’.

**PGY2 Critical Care Residency Requirements for Completion/Graduation:**

• Successful completion of learning experiences, including any required presentations listed in learning experience description: all learning experience objectives marked satisfactory progress (SP), ACH or achieved for residency (ACHR) by the final evaluation. Any expectations of the residents that are not met or learning objectives with needs improvement (N/I) from an on-demand or scheduled evaluation will result in a meeting between the learning experience preceptor, RPD, and resident and a plan of correction will be formulated. Failure to complete the plan of correction, may result in disciplinary action. Please refer to program structure for all components of required learning experiences, including projects, presentations, and research.

• ≥90% of RLS objectives marked “Achieved for the Residency” by the end of the year (as evaluated by individual rotation preceptors or by the RPD upon final review of the resident’s progress). All patient care related objectives (Outcome R1: Patient Care) must be achieved.
• Creation and completion of required projects and presentations. Please review structure for complete list of required presentations
• Twelve months minimum is allotted to successfully complete the core requirements. If a core learning experience must be repeated, then elective time shall be used. If the above requirements are not met in full by 90 days after the residency end, the residency certificate may be withheld at the discretion of the residency director.
The UC San Diego Health (UCSDH) Department of Pharmacy offers a one-year specialty residency in oncology pharmacy practice beginning August 1st of each year or upon licensure in California (see below for more information).

About UC San Diego Health
UC San Diego Health consists of three acute care hospitals (UC San Diego Medical Center in Hillcrest, and in La Jolla - Sulpizio Cardiovascular Center and Jacobs Medical Center which includes former Thornton Hospital) and associated outpatient clinics with hematology/oncology services at Moores Cancer Center in La Jolla, North County Cancer Services in Encinitas & Vista, and UCSD Medical Center in Hillcrest. UC San Diego Health is also affiliated with Rady Children’s Hospital-San Diego, the Veterans Affairs San Diego Healthcare System, and the Sharp Memorial Hospital Joint Blood and Marrow Transplant Program. The Health System is affiliated with the UC San Diego School of Medicine and the UC San Diego Skaggs School of Pharmacy and Pharmaceutical Sciences (SSPPS). Nationally recognized as a National Institute of Health (NIH), National Cancer Institute (NCI) – Designated Cancer Center and a member institution of the National Comprehensive Cancer Network (NCCN), UCSDH offers cutting edge cancer care and research opportunities for its patients.

Purpose
Post Graduate Year 2 (PGY2) pharmacy residency programs build on Doctor of Pharmacy (PharmD) education and PGY1 pharmacy residency programs to contribute to the development of clinical pharmacists in specialized areas of practice. PGY2 residencies provide residents with opportunities to function independently as practitioners by conceptualizing and integrating accumulated experience and knowledge and incorporating both into the provision of patient care or other advanced practice settings. Residents who successfully complete an accredited PGY2 pharmacy residency are prepared for advanced patient care, academic, or other specialized positions, along with board certification.

Program Description
UC San Diego Health PGY2 Oncology Pharmacy Residency Program prepares its graduates to assume positions in settings such as (but not limited to) an inpatient or outpatient hematology/oncology clinical specialist or as assistant professor at a college of pharmacy. Graduates will be prepared to sit for the Board Certified Oncology Pharmacist (BCOP) exam. Our academic medical center provides the unique capability to engage each of our residents in direct patient care activities across a vast array of disease states, research, administration and project management, and multidisciplinary teaching skills.

Oncology PGY2 residents will gain the skills to function as the primary oncology pharmacist during their required core rotations. Primary responsibilities vary based on rotation but can include rounding with the oncology, hematology, blood and marrow transplant disease specific teams (inpatient and outpatient), designing, recommending, monitoring, and evaluating patient-specific therapeutic regimens that incorporate the principles of evidence-based medicine, addressing all pharmacokinetically-monitored medications, acting as secretary of the Hematology/Oncology Pharmacy & Therapeutics subcommittee, validating pharmacy orders for oncology patients (including chemotherapy), and overseeing and directing PGY1 resident and pharmacy student activities. This integration of staffing, clinical services, and teaching prepares residents for any type of practice environment they may encounter in their future by emphasizing the development of essential skills required for an advanced pharmacy practitioner: independent practice skills, multi-tasking, and prioritization. Residents will also complete a research project and publication. Scientific writing is strongly emphasized and the preparation of a manuscript suitable for publication will be expected, and submission to a journal is strongly encouraged.

Teaching activities include regular didactic presentations, leading oncology topic discussions for fourth year pharmacy students, involvement with UCSD Skaggs School of Pharmacy and Pharmaceutical
Sciences (SSPPS) courses (e.g., conference leader for third year therapeutics course, lecturer for oncology elective and therapeutics course (as needed)). The ability to work independently and to supervise pharmacy students and residents will be emphasized. The resident will also be involved in a research project which may include student precepting.

**Number of residency positions available:** 2 residents are accepted each year

**Application Process:**
All applicants must be enrolled in the Resident Matching Program. To facilitate this enrollment process and for further information, please visit the following website: [www.natmatch.com/ashprmp](http://www.natmatch.com/ashprmp).

Applications will be accepted when PhORCAS opens and due by December 31. Applications should be submitted through PhORCAS and include the following:

1. Letter of Intent describing your interest in oncology and why this program is a good match for you
2. Additional Question - What is your vision of an oncology pharmacist practicing at the top of their license? (Please answer in 1-2 paragraphs)
3. Curriculum Vitae with all completed and anticipated learning experiences as well as pharmacy and non-pharmacy work experience
4. References - at least 3 individuals, 2 of which should be able to directly comment on your clinical practice skills
   a. NOTE: Please have recommendation writers complete the electronic reference form within PhORCAS with detailed characteristic and narrative comments. One to two areas of improvement or constructive feedback that the recommender feels the candidate should continue to work on as a PGY2 resident should be identified. No separate letter of recommendation is required.

Applicants may be contacted for a preliminary phone interview in January. On-site interviews will be held during late January through early March. This specialty residency program participates in the ASHP Resident Matching Program.

**Requirements of Residents Prior to Starting the Program:**
If matched with the UC San Diego Residency Program, matched candidates must have all the following:

1. Graduated from an ACPE-accredited school of pharmacy with a Doctor of Pharmacy degree
2. Successfully completed an ASHP-accredited PGY1 pharmacy residency.
   a. Upon receipt of application to the program, the RPD will reach out to the PGY1 program director to assess good standing in the program
   b. A signed residency certificate will be required prior to beginning residency
3. a. The residency is expected to begin on the last Monday of July, or the first Monday of August, depending on the Human Resources orientation schedule. However, the resident must have obtained their California pharmacist license prior to beginning residency (absolute deadline to start is November 1st),
   b. If the resident is not licensed by November 1st, they will be dismissed from the residency program. The residency offer may be rescinded if the resident does not take the California Board of Pharmacy law exam prior to August 1st or does not pass the California Board of Pharmacy law exam on the first attempt.

**Resident Pay and Benefits:** Refer to UC San Diego Health Pharmacy Residency website ([https://health.ucsd.edu/specialties/pharmacy/residency/Pages/Salary-and-Benefits.aspx](https://health.ucsd.edu/specialties/pharmacy/residency/Pages/Salary-and-Benefits.aspx)) for details on salary and benefits

**Program Structure**

**Learning Experiences:**
Descriptions of each learning experience can be found in [PharmAcademic](https://health.ucsd.edu/specialties/pharmacy/residency/Pages/Salary-and-Benefits.aspx)

Half of the year will focus on outpatient and half will focus on inpatient.
1 week of orientation
4 months outpatient
  ▪ 1 month outpatient infusion center (serves as orientation to outpatient staffing; CORE required)
  ▪ 3 months outpatient clinics (CORE required)
5 months inpatient
  ▪ 1 month inpatient staffing orientation (serves as training for inpatient staffing; CORE required)
  ▪ 2 months inpatient hematology/oncology consult (CORE required)
  ▪ 2 months inpatient hematopoietic stem cell transplant (CORE required)
2, 1 month long electives
Approximately 4 weeks of research time
Approximately 2 weeks Investigational Drug Service

Elective Choices:
Descriptions of each learning experience can be found in PharmAcademic
There will be a total of 5 rotations that the resident can choose their 2 electives from. Any of the required rotations could be repeated as an elective.
• Pain Management & Palliative Care (highly recommended)
• Investigational Drug Service
• Cancer Center Administration
• Cancer Center Retail Pharmacy
• Infectious Diseases

Rotation Schedule Example:
O=orientation, E=elective, C=core required rotation, R=research

<table>
<thead>
<tr>
<th>Month</th>
<th>Resident A</th>
<th>Resident B</th>
</tr>
</thead>
<tbody>
<tr>
<td>August</td>
<td>Outpatient Infusion Center (O)</td>
<td>Inpatient Training (O)</td>
</tr>
<tr>
<td>September</td>
<td>Outpatient Clinic (C)</td>
<td>Inpatient Hematology/Oncology (C)</td>
</tr>
<tr>
<td>October</td>
<td>Research (R)</td>
<td>Pain &amp; Palliative Care (E)</td>
</tr>
<tr>
<td></td>
<td>Pain &amp; Palliative Care (E)</td>
<td>Research (R)</td>
</tr>
<tr>
<td>November</td>
<td>Outpatient Clinic (C)</td>
<td>Inpatient BMT (C)</td>
</tr>
<tr>
<td>December</td>
<td>Inpatient Training (O)</td>
<td>Inpatient BMT (C)</td>
</tr>
<tr>
<td>January</td>
<td>Inpatient Hematology/Oncology (C)</td>
<td>Outpatient Infusion Center (O)</td>
</tr>
<tr>
<td>February</td>
<td>Investigational Drug Service (C)</td>
<td>Research (R)</td>
</tr>
<tr>
<td></td>
<td>Research (R)</td>
<td>Investigational Drug Service (C)</td>
</tr>
<tr>
<td>March</td>
<td>Inpatient BMT (C)</td>
<td>Outpatient Clinic (C)</td>
</tr>
<tr>
<td>April</td>
<td>Inpatient BMT (C)</td>
<td>Outpatient Clinic (C)</td>
</tr>
<tr>
<td>May</td>
<td>Outpatient Clinic (C)</td>
<td>Outpatient Clinic (C)</td>
</tr>
<tr>
<td>June</td>
<td>Elective (E), such as IDS</td>
<td>Inpatient Hematology/Oncology (C)</td>
</tr>
<tr>
<td>July</td>
<td>Inpatient Hematology/Oncology (C)</td>
<td>Elective (E), such as IDS</td>
</tr>
</tbody>
</table>

Since this program has 2 residents, one will be outpatient while the other is inpatient then they will swap.

Staffing:
The PGY2 resident will be required to staff 16 weekends at UCSD (which includes 1 minor holiday weekend and 1 major holiday (Thanksgiving, Christmas, or New Year’s)). Although subject to change this will be set up as inpatient staffing while on inpatient portion of the year and outpatient staffing while on outpatient portion of the year. Most months the resident will staff once, although some months will have two weekends scheduled due to training or major/minor holiday. There will be 1-2 weekends that may be exchanged for weekday staffing. Weekday staffing would be inpatient or outpatient staffing after rotation, one day per week, to allow the resident to gain more experience with chemotherapy order evaluation and to experience the differences between weekday and weekend staffing.
To help provide more formative feedback, residents are expected to seek feedback from at least one staff member each weekend they staff. The feedback will be solicited via an online survey https://ucsd.co1.qualtrics.com/jfe/form/SV_28XYFXGDFnhj0wd

Example Staffing Calendar:

<table>
<thead>
<tr>
<th>Month</th>
<th>Learning Experience</th>
<th>Staffing Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>August</td>
<td>Outpatient Infusion Center (O)</td>
<td>Outpatient x2</td>
</tr>
<tr>
<td>September</td>
<td>Outpatient Clinic (C)</td>
<td>Outpatient</td>
</tr>
<tr>
<td>October</td>
<td>Research (R)</td>
<td>Outpatient</td>
</tr>
<tr>
<td>November</td>
<td>Outpatient Clinic (C)</td>
<td>Outpatient</td>
</tr>
<tr>
<td>December</td>
<td>Inpatient Training (O)</td>
<td>Outpatient + Inpatient major holiday weekend</td>
</tr>
<tr>
<td>January</td>
<td>Inpatient Hematology/Oncology (C)</td>
<td>Inpatient</td>
</tr>
<tr>
<td>February</td>
<td>Investigational Drug Service (C)</td>
<td>Inpatient + 4h Outpatient staffing q Friday</td>
</tr>
<tr>
<td></td>
<td>Research (R)</td>
<td></td>
</tr>
<tr>
<td>March</td>
<td>Inpatient BMT (C)</td>
<td>Inpatient</td>
</tr>
<tr>
<td>April</td>
<td>Inpatient BMT (C)</td>
<td>Inpatient</td>
</tr>
<tr>
<td>May</td>
<td>Outpatient Clinic (C)</td>
<td>Inpatient</td>
</tr>
<tr>
<td>June</td>
<td>Elective (E), such as IDS</td>
<td>Inpatient</td>
</tr>
<tr>
<td>July</td>
<td>Inpatient Hematology/Oncology (C)</td>
<td>Inpatient + Outpatient minor holiday weekend</td>
</tr>
</tbody>
</table>

Research Project:
The resident will be involved with 2 projects throughout the academic year. They will be completing an ongoing project which will be presented at the either Western States Conference or at a national oncology meeting (i.e., Hematology/Oncology Pharmacy Association (HOPA), American Society of Clinical Oncology (ASCO), etc) as well as initiating a second project. This initiation phase will be to develop the study design, write up the protocol, and begin the IRB approval phase for the incoming PGY2 Oncology’s research project. The incoming oncology resident will then finish the project that they chose and that was started by the outgoing oncology resident. A list of project ideas will be generated from the core preceptors and the selection of a project will need to be completed in April-May prior to the incoming residents start date.

Other Projects:
The resident will be asked to complete multiple projects throughout the PGY2 year. Some will focus on formulary management & quality improvement; others may be to initiate new protocols or guidelines. These projects will be formulated through their involvement in the Hematology/Oncology Subcommittee of the Pharmacy & Therapeutics Committee or during their learning experiences.

Presentations and Teaching
The residents will be required to give many educational lectures to their colleagues throughout their residency year. The following details some of these events:

Grand Rounds:
The resident will be delivering a 1-hour CE lecture to the pharmacy staff regarding a new drug, new guidelines, controversial topic in hematology/oncology or another topic approved by PGY2 Onc Residency Program Director (RPD).

If there are 2 hematology/oncology PGY2 resident(s), they can present individual topics at separate times of the year, or they could present a controversial topic together (taking opposing stances). The idea behind a joint presentation isn’t to antagonize each other but to deliver an unbiased complete
presentation of the controversial topic diving into the pertinent literature that supports their viewpoint and counters their opponents. The residents will have rehearsed their presentation together ahead of time in order to provide a seamless educational lecture.

**Monthly Didactic Forums – BCOP Lecture Series:**
In addition to the grand rounds, the resident(s) will be required to research and deliver two or three 45–60-minute lectures on oncology related topics throughout the year. These topics will assist the resident as a study guide for the BCOP exam and will be relevant to the patient population they are currently involved with from a rotational perspective when possible. All parties are welcome to attend but the core hematology/oncology staff are strongly recommended to attend. This lecture series is held in conjunction with PGY2 Oncology residents from the San Diego area, along with the UCSD SSPPS/Pfizer fellows, which gives the residents/fellows the opportunity to network with other oncology pharmacists in the area.

**Drug/Disease Review:**
During outpatient blocks residents will go through various classes of anti-neoplastic agents and disease states. This will be an informal presentation to inpatient/outpatient preceptor(s). The drug topic discussions will focus on mechanism of action, pharmacokinetics, adverse effects, drug interactions, counseling pearls, etc. Disease topic discussions will focus on risk factors, treatment algorithms (first line treatment in each stage; other common agents they should know and when you would use them), long term follow-up. Preceptors will give the residents landmark trials to review prior to the discussion.

**Journal Club:**
Residents will prepare a hematology/oncology journal club where the resident(s) will be required to present 4 articles by the end of the year. These meetings will be scheduled during the inpatient (2 articles) and outpatient (2 articles) rotation blocks, and the date/location will be announced during the preceding week or so.

**Skagg’s School of Pharmacy and Pharmaceutical Sciences (SSPPS):**
The resident’s involvement with UCSD’s SSPPS will vary depending on requests from SSPPS, but possible activities include writing up hematology/oncology cases for student case conference, co-leading a case conference section with another PGY1 or PGY2 resident, preparing exam questions based on the hematology/oncology lectures presented, and/or presenting formal lectures on hematology/oncology topics. Involvement beyond this would be directly related to precepting a student if they are on a rotation with the resident.

**Publication**
Scientific writing is strongly emphasized and the preparation of a manuscript suitable for publication will be expected, and submission to a journal strongly encouraged. The purpose of this requirement will be the development of scientific writing skills and communication skills. The types of publishable literature can include any of the following types of manuscripts:
- Case reports with a review of the literature
- Primary research/original research
- Medication Use Evaluation
- Meta-analysis of a disease state or therapy
- Review article

**Meetings**

**Professional Meetings:**
The residents will attend a professional meeting during their PGY2 year. The UCSD program will grant the resident a travel stipend to be used as reimbursement for attendance at a specialty meeting (i.e., annual meetings for HOPA, ASCO, ASH, NCCN, etc.) or the resident may choose to attend California Society of Health System’s Pharmacist (CSHP), American Society of Health Systems Pharmacists (ASHP) midyear meeting or other local conference (i.e., UC Collaborative). Their research project must be presented at either the specialty meeting or the local conference. A resident may, upon request, be granted the opportunity to attend more than 1 of the meetings above but any reimbursement beyond the travel budget will be the responsibility of the resident. All meeting attendance must be approved by the RPD.

Appendix E PGY2 Oncology Pharmacy, page 5
Hematology/Oncology Subcommittee of Pharmacy & Therapeutics Committee:
The resident will attend, take minutes, and complete projects as needed for the monthly Hem/Onc P&T Subcommittee which meets on the first Friday of every month from 7-8am. This meeting will introduce the resident to healthcare professionals within UCSD, allow the resident to see policy making from infancy to the final product, and generate projects for the resident to gain involvement in. Drug monographs will be presented to this committee.

Weekly Residency Program Director (RPD) Meetings:
The resident will meet on a weekly basis with the RPD to review progress on learning experiences, projects, and upcoming commitments.

Research Meetings:
It is strongly encouraged for the residents to meet with their research preceptor weekly, especially as the project is starting. Meeting frequency may be extended to every 2-3 weeks as needed.

Assessment Strategy – PharmAcademic
The PGY2 Oncology Specialty Residency Program uses the ASHP on-line evaluation tool called PharmAcademic, which is available for all ASHP-accredited pharmacy residency programs. This system, which is technologically supported by the McCreadie Group, supports the ASHP Residency Learning System (RLS).

Residents who are matched with this PGY2 specialty program are entered into PharmAcademic prior to their arrival in August. The incoming resident completes two pre-residency questionnaires that help the RPD design a residency year that is tailored to the specific needs and interests of the resident:
- ASHP Standard Entering Interests Form
- Goal-Based Entering Interests Form

Residents’ schedules and assigned RLS Goals are entered into PharmAcademic. We have chosen to use the PharmAcademic evaluation tools for our Learning Experiences. For each Learning Experience, the following Assessments are completed:
- Preceptor Assessment of Resident: Summative (for each Learning experience)
- Resident Self-Assessment: Summative self (for each Learning experience)
- Resident Assessment of the Learning Experience
- Resident assessment of Preceptor

Preceptors and residents are encouraged to exchange on-going, daily verbal feedback throughout each rotation experience. The residents and preceptors are trained and reminded throughout the year to complete evaluations in a thorough (quantitative and qualitative) and timely manner. To this end, evaluations may be used, not only as assessment tools, but also as tools that preceptors may turn to for help in guiding residents to improve, grow and achieve the residency programs and the residents’ goals and objectives for the residency year. The RPD reviews all evaluations and solicits verbal feedback from preceptors and residents to provide guidance to help the resident maximize the residency experience.

The residents discuss their program goals and interests quarterly (Quarterly Update and Customized Training Plan) with the RPD to evaluate where they are in meeting the residency goals and to set or modify goals for the remaining months of the residency program. Residents may meet as needed as their interests change throughout the year. The resident may request schedule modifications throughout the residency year and the RPD will make all efforts to accommodate these requests. Assessment tools will be adjusted as changes are made.

The resident completes the ASHP PharmAcademic exit evaluation. Residents also are requested to complete a yearlong evaluation of the Residency Program by indicating pros/cons of each rotation. This document is to be updated at the end of each rotation rather than at the end of the year.

The results of these year-end program evaluations are reviewed by the RPD for potential merit and potential action plans are developed to achieve continuous quality improvement.
Assessment Overview

It is the resident’s responsibility to ensure the timely completion of all evaluations.
Self-reflection is encouraged to be included in Summative Evaluation of Resident for each rotation.

<table>
<thead>
<tr>
<th>Learning Experience</th>
<th>Type of Assessment</th>
<th>Frequency</th>
<th>Summative preceptor</th>
<th>Summative self</th>
<th>Resident Assessment of Preceptor and Learning Experience</th>
<th>Custom</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orientation Inpatient</td>
<td></td>
<td>Final</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>MCC Infusion Center</td>
<td></td>
<td>Final</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Outpatient Clinic #1</td>
<td></td>
<td>Final</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Outpatient Clinic #2</td>
<td></td>
<td>Final</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Outpatient Clinic #3</td>
<td></td>
<td>Final</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Inpatient Oncology</td>
<td></td>
<td>Final</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Inpatient BMT</td>
<td></td>
<td>Midpoint (informal) and Final</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Research Month</td>
<td></td>
<td>Final</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Pain &amp; Palliative Care</td>
<td></td>
<td>Final</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>MCC Retail Pharmacy</td>
<td></td>
<td>Final</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Investigational Drug Service</td>
<td></td>
<td>Final</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Cancer Center Administration</td>
<td></td>
<td>Final</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Infectious Disease</td>
<td></td>
<td>Final</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Inpatient Staffing</td>
<td></td>
<td>Quarterly</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Outpatient Staffing</td>
<td></td>
<td>Quarterly</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Hem/Onc P&amp;T Subcommittee</td>
<td></td>
<td>Quarterly</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Presentations</td>
<td></td>
<td>Quarterly</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Research Project/Publication</td>
<td></td>
<td>Quarterly</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

PGY2 Oncology Competency Areas, Goals and Objectives

- **Competency Areas**: Broad categories of the residency graduates’ capabilities.
  - ** Required-**
    - Competency Area R1: Patient Care
    - Competency Area R2: Advancing Practice and Improving Patient Care
    - Competency Area R3: Leadership and Management
    - Competency Area R4: Teaching, Education, and Dissemination of Knowledge
    - Competency Area R5: Oncology Investigational Drugs
  - ** Elective- (optional competency areas)**
    - Competency Area E1: Teaching and Learning
    - Competency Area E2: Initiating an Oncology Pharmacy-Related Service
    - Competency Area E3: Oncology Credentialing
    - Competency Area E4: Publishing
    - Competency Area E5: Management of Oncology Medical Emergencies
• Competency Area E6: Specialty Pharmacy

• Educational Goals: Goals listed under each outcome are broad sweeping statements of abilities.

• Educational Objectives: Resident achievement of educational goals is determined by assessment of the resident’s ability to perform the associated educational objective below each educational goal.

• The resident is encouraged to read detailed information about each goal at the ASHP website (click here or use this link: https://www.ashp.org/-/media/assets/professional-development/residencies/docs/pgy2-newly-approved-oncology-pharmacy-2016.ashx?la=en&hash=0897D1F3D3A0F3F2E9009DB480812AE9A618C594)

• For information about Goals and Objectives Taught/Taught and Evaluated in Learning Experiences, please visiting PharmAcademic, go the ‘Reports’ tab, and click on ‘Goals and Objectives Taught/Taught and Evaluated in Learning Experiences.

PGY2 Oncology Residency Requirements for Completion/Graduation

• Successful completion of all learning experiences
  o NOTE: Successful completion is defined as all learning experience objectives marked satisfactory progress (SP), achieved (ACH) or achieved for residency (ACHR) by the final evaluation, of all learning experiences. Any expectations of the residents that are not met or learning objectives with needs improvement (N/I) from an on-demand or scheduled evaluation will result in a meeting between the learning experience preceptor, RPD, and resident and a plan of correction will be formulated. Failure to complete the plan of correction may result in disciplinary action.

• Minimum 90% of RLS objectives marked “Achieved for the Residency” by the end of the year (as evaluated by individual rotation preceptors or by the RPD upon final review of the resident’s progress). All patient care goals (Outcome R1: Patient Care) and objectives must be achieved.

• If not completed during a UC San Diego Health PGY1 residency program, residents will be required to complete a Research Primer Course and demonstrate competence as defined by the Research Council. If necessary, a remediation plan will be designed for residents who do not demonstrate competence.

• Staffing 16 weekends per year or equivalent as approved by RPD

• Completion of required presentations: 4 Journal Clubs, 1 Grand Rounds, 2-3 BCOP lectures, 2-3 monographs, 1 in-service, 1 Clinical Forum, Outreach

• Completion of a residency project; including presentation at a suitable conference/meeting and manuscript suitable for publication

• Completion of a MUE

• Submission of a manuscript for publication

• Participation in Therapeutics Conference as a facilitator

• Twelve months maximum is allotted to successfully complete the core requirements. If a core rotation must be repeated, then elective time shall be used. If the above requirements are not met in full, the residency certificate may be withheld at the discretion of the residency director
Appendix F Solid Organ Transplantation

PGY2 Solid Organ Transplantation Pharmacy Residency Program
Overview

National Matching Service Code: 635476
https://health.ucsd.edu/specialties/pharmacy/residency/Pages/transplant.aspx

The UC San Diego Health Department of Pharmacy offers a one-year specialty residency in solid organ transplantation beginning August 1st.

Scope:
UC San Diego Health consists of three acute care hospitals and ambulatory care clinics that offer a broad spectrum of transplant programs, including kidney, combination kidney-pancreas, pancreas, liver, lung, heart, and mechanical circulatory support. The Health System is affiliated with the UCSD School of Medicine and UCSD Skaggs School of Pharmacy and Pharmaceutical Sciences. The Department of Pharmacy provides clinical services in both the inpatient and outpatient setting to all transplant patients in all phases of care.

This specialty residency balances service, research, and teaching opportunities and is tailored to the individual. The emphasis will be placed on providing excellent pharmaceutical care in conjunction with the multidisciplinary transplant team. Teaching activities include leading the transplant elective, didactic, therapeutics conference leader, and clerkship preceptorship of first-year pharmacy practice residents and fourth-year UC-San Diego pharmacy students in their clinical rotations. A residency project will be completed and presented at a national or regional conference with intent of publication.

Program Purpose:

PGY2 pharmacy residency programs build on Doctor of Pharmacy education and PGY1 pharmacy residency programs to contribute to the development of clinical pharmacists in specialized areas of practice. PGY2 residencies provide residents with opportunities to function independently as practitioners by conceptualizing and integrating accumulated experience and knowledge and incorporating both into the provision of patient care or other advanced practice settings. Residents who successfully complete an accredited PGY2 pharmacy residency are prepared for advanced patient care, academic, or other specialized positions, along with board certification.

Number of residency positions available: 1 new resident is accepted each year.

*This program will decide whether to offer an early commitment option on a year to year basis.

Requirements:
A virtual interview (via Zoom, GoToMeeting, Skype or other modality) in early January is required for non-UC San Diego Health PGY1 residents. On-site will be held during late January through early March. This specialty residency program participates in the ASHP Resident Matching Program. All non-early commitment applicants must be enrolled in the Resident Matching Program. To facilitate this enrollment process and for further information, please visit the following website: www.natmatch.com/ashprmp

If matched with the UC San Diego Residency Program, matched candidates must have all of the following:
1. Graduated from an accredited school of pharmacy with a Doctor of Pharmacy degree
2. Successfully completed a PGY1 pharmacy practice residency
3. Obtained California pharmacy licensure prior to beginning residency.
   a. The residency is expected to begin on the last Monday of July, or first Monday of August, depending on the Human Resources orientation schedule. However, the resident must have obtained their California pharmacist license prior to beginning residency (absolute deadline to start is November 1st).
b. If the resident is not licensed by November 1st, they will be dismissed from the residency. The residency offer may be rescinded if the resident does not take the California Board of Pharmacy law exam prior to August 1st or does not pass the California Board of Pharmacy law exam on the first attempt.

**Application:**  
Applications will be accepted when PhORCAS opens and due by December 31st. Applications should be submitted through PhORCAS and include the following:

1. Letter of intent.
2. Current *Curriculum Vitae* with all experiential completed and anticipated rotations as well as pharmacy work experience.
3. Three electronic references are required. At least 2 of the references should be from preceptors or supervisors who can directly comment on your clinical and practice skills.
   - **Note:** Please have recommendation writers complete the electronic reference form within Phorcas with detailed characteristic and narrative comments. One to two areas of improvement or constructive feedback that the recommender feels the candidate should continue to work on as a PGY2 resident should be identified. No separate letter of recommendation is required.

**Program Structure:**  
Descriptions of each learning experience can be found in [PharmAcademic](#).

**Required learning experiences:**

- **Orientation Training**  
- **Inpatient Abdominal Transplant**  
- **Inpatient Heart Transplant/LVAD and Lung Transplant**  
- **Ambulatory Care Clinics for Abdominal Transplant**  
- **Ambulatory Care Clinics for Cardiothoracic Transplant**  
- **Supplemental Learning Experiences**

**Supplemental Learning Experience Options:**

- Transplant Infectious Disease
- Informatics
- Critical Care
- Academia
- HLA Immunology Lab (1-2 day experience)
- Transplant elective at School of Pharmacy
- Option to repeat any required learning experience as a supplemental learning experience
- Additional learning experiences can be created as needed based on resident interest

**Longitudinal Clinic Experience:**

The resident will choose two 6 month longitudinal clinics to participate in throughout the year. Each clinic is ½ day per week. Available clinics include: Perioperative Kidney Transplant, Long-Term Kidney Transplant, Liver Transplant, Heart Transplant/LVAD, and Lung Transplant.

**Committee Experience:**

The resident will participate in select hospital and transplant committees throughout the year. This will include participation in the transplant teams selection and quality assurance committees.

**Research Project:**

The resident will serve in a lead role for a research project throughout the year that will be completed and presented at a conference. A Resident Research Primer Course has been developed by the UC San Diego Health Research Council to coach residents through the various aspects of the research process. PGY2 transplant residents who have not previously completed the Research Primer Course are required to attend. More information can be found in the Resident Manual, Appendix S. A list of project ideas will be generated from the ICU preceptors and the resident is expected to select a project during the first month of the residency year.
Research time will be given during the resident year. During research weeks, the resident is expected to be onsite for at least 8 hours daily; preferably between 6:00 am and 6:00 pm. Any excursions from this time must be accounted for by requesting time off via the leave adjustment form.

**CQI Project:**
The residents will need to complete a Continuous Quality Improvement project during the year. A list of project ideas will be provided to residents at the start of their residency year. Residents also have the option of The project will be selected during the first month of the residency year and will be prepare a final write-up or PDSA for this project.

**Teaching Experience:**
The resident will precept students and PGY1 residents on assigned learning experiences and also have the option to participate as a leader in therapeutic case conference at SSPPS. Additionally, the resident may elect to lead the didactic transplant elective offered at the school of pharmacy. Also, focus is placed on teaching patients and care givers pre and post-transplant in both the inpatient and outpatient setting.

**Transplant Policy and procedure review/update:**
The resident will assist in writing or updating a minimum of 1 transplant protocol/guideline or policy and procedure during the residency year.

**Presentations:**
The residents will give many educational lectures to their professional colleagues and patients throughout their residency year. The presentations will include a 1-hour Grand Rounds CE lecture to the Pharmacy staff regarding a topic in transplantation. Additionally, the resident will be given the opportunity to give in-service lectures to various nursing staff and educational presentations for the transplant patient support groups. The resident will also present a minimum of 1 journal club throughout the year.

**Staffing:**
Staffing will be incorporated into the residency experience with weekend shifts that provide the opportunity for PGY2 residents to cover the inpatient transplant services. The PGY2 solid organ transplant residents are required to staff 16 weekends (which includes 1 minor holiday weekend PLUS 1 major holiday (Thanksgiving, Christmas, or New Year's). To help provide more formative feedback, residents are expected to seek feedback from at least one staff member each weekend they staff. The feedback will be solicited via an online survey https://ucsd.co1.qualtrics.com/jfe/form/SV_28XYFXGDFnhj0wd

**Resident Pay and Benefits:** Refer to UC San Diego Health Pharmacy Residency website (https://health.ucsd.edu/specialties/pharmacy/residency/Pages/Salary-and-Benefits.aspx) for details on salary and benefits.

**Quarterly Evaluation:**
The PGY2 resident will track their progress and development in the areas of practice management, clinical quality improvement projects, and effective education or training to health care professionals or health care professionals in training. The RPD will review this quarterly evaluation with the resident during his or her quarterly meeting and update the resident's customized training plan, as needed. Items which may be included and/or evaluated in this longitudinal rotation include committee participation and practice management opportunities such as guideline creation, orderset review, formulary monographs, and other practice leadership opportunities.

**Professional Meetings:**
The resident will have the opportunity to attend various professional meetings throughout the year. Residents receive an annual travel stipend that is variable based on available funding. Residents are encouraged to attend a transplant specialty meeting (e.g. American Transplant Congress, ISHLT Annual Meeting).

**Teaching Certificate:**
Participation in the Teaching Certificate program is optional and will be discussed on a case by case basis. Please refer to Appendix N in the Residency Manual for more information on these topics.
Assessment Strategy – PharmAcademic:
The PGY2 Solid Organ Transplant Specialty Residency Program uses the ASHP on-line evaluation tool called PharmAcademic, which is available for all ASHP-accredited pharmacy residency programs. This system, which is technologically supported by the McCreadie Group, supports the ASHP Residency Learning System (RLS).

Residents who are matched with this PGY2 specialty program are entered into PharmAcademic prior to their arrival. The incoming resident completes two pre-residency questionnaires that help the Residency Program Director (RPD) design a residency year that is tailored to the specific needs and interests of the resident:
- ASHP Standard Entering Interests Form
- Goal-Based Entering Interests Form

Residents’ schedules and assigned RLS Goals are entered into PharmAcademic. We have chosen to use the PharmAcademic evaluation tools for our Learning Experiences. For each learning experience, the following assessments are completed:
- Preceptor assessment of resident: Summative (for each learning experience)
- Resident Self-Assessment: Summative-self (for each learning experience)
- Resident Assessment of the learning Experience
  - Resident assessment of Preceptor
  - Resident assessment of learning experience

Preceptors and residents are encouraged to exchange in ongoing, daily verbal feedback throughout each rotation experience. Residents are expected to provide constructive feedback to the preceptor in their PharmAcademic evaluation at the end of the learning experience. This feedback, along with preceptor self-evaluation is helpful in developing worthwhile and relevant preceptor development programming. The resident and preceptors are trained and reminded throughout the year to complete evaluations in a thorough (quantitatively and qualitatively) and timely manner. To this end, evaluations may be used, not only as assessment tools, but as tools that preceptors may turn to for help in guiding residents to improve, grow, and achieve the residency program’s and the residents’ goals and objectives for the residency year. The RPD reviews all evaluations and solicits verbal feedback from preceptors and residents to provide guidance to help the resident maximize the residency experience.

The residents discuss their program goals and interests quarterly (Quarterly Update and Customized Training Plan) with the RPD to evaluate progress in meeting the residency goals and to set or modify goals for the remainder of the residency program. Residents may meet, as needed, as their interests change throughout the year. The resident may request schedule modifications throughout the residency year, and the RPD will make all efforts to accommodate these requests. Assessment tools will be adjusted as changes are made.

Residents must complete the ASHP PharmAcademic exit evaluation. Residents also are requested to complete a year-long evaluation of the residency program.

The results of these year-end program evaluations are reviewed by the RPD and the Resident Advisory Committee (RAC) for potential merit and potential action plans are developed in an effort to achieve continuous quality improvement.
PGY2 Solid Organ Transplant Competency Areas, Goals and Objectives (2018 Standard):

- Educational Outcome: broad categories of the residency graduates’ capabilities.
  - Outcome R1: Patient Care
  - Outcome R2: Advancing Practice and Improving Patient Care
  - Outcome R3: Leadership and Management
  - Outcome R4: Teaching, Education, and Dissemination of Knowledge

- Educational Goals: Goals listed under each outcome are broad sweeping statements of abilities.

- Educational Objectives: Resident achievement of educational goals is determined by assessment of the resident’s ability to perform the associated educational objective below each educational goal.

The resident is encouraged to read detailed information about each goal at the ASHP website https://www.ashp.org/-/media/assets/professional-development/residencies/docs/pgy2-transplant-cago-2017.ashx?la=en&hash=1B1C07A56083EA715EDEBA0474D72D45FFC0B1DF

For information about Goals and Objectives Taught/Taught and Evaluated in Learning Experiences, please visiting PharmAcademic, go the ‘Reports’ tab, and click on ‘Goals and Objectives Taught/Taught and Evaluated in Learning Experiences’.

PGY2 Solid Organ Transplantation Residency Requirements for Completion/Graduation:

- Successful completion of all learning experiences (all objectives marked satisfactory progress (SP), ACH or achieved for residency (ACHR) by the final evaluation). Any expectations of the residents that are not met or learning objectives with needs improvement (N/I) from an on-demand or scheduled evaluation will result in a meeting between the learning experience preceptor, RPD, and resident and a plan of correction will be formulated. Failure to complete the plan of correction, may result in disciplinary action.

- ≥90% of RLS objectives marked ‘Achieved for the Residency’ by the end of the year (as evaluated by individual rotation preceptors or by the RPD upon final review of the resident’s progress). All patient care goals (Outcome R1: Patient Care) and objectives must be achieved.

- Completion of required presentations: 1 Journal Clubs, 1 Grand Rounds, 1 In-service

- Residents will be required to complete a Research Primer Course at the beginning of the residency year and demonstrate competence as defined by the Research Council. If necessary, a remediation plan will be designed for residents who do not demonstrate competence.

- Completion of a residency project; including presentation at a suitable conference/meeting and completion of a project ‘write-up’ in a manuscript suitable for publication (does not need to be submitted for publication)

- Protocol or policy update

- CQI project

- Twelve months minimum is allotted to successfully complete the core requirements. If a core rotation must be repeated, then elective time shall be used. If the above requirements are not met in full, the residency certificate may be withheld at the discretion of the residency director
Appendix G Internal Medicine

PGY2 Internal Medicine Pharmacy Residency Program Overview

National Matching Service Code: 772256
https://health.ucsd.edu/specialties/pharmacy/residency/Pages/internal-medicine.aspx

The UC San Diego Health Department of Pharmacy offers a one-year specialty residency in internal medicine pharmacy practice beginning August 1st or upon licensure in California (see below).

Scope:
UC San Diego Health consists of three acute care hospitals (UC San Diego Medical Center in Hillcrest, Sulpizio Cardiovascular Center, and Jacobs Medical Center which includes former Thornton Hospital) and associated outpatient clinics. UC San Diego Health is also affiliated with Rady Children's Hospital-San Diego, the Veterans Affairs San Diego Healthcare System, and the Sharp Memorial Hospital Joint Blood and Marrow Transplant Program. The Health System is affiliated with the UC San Diego School of Medicine and the UC San Diego Skaggs School of Pharmacy and Pharmaceutical Sciences (SSPPS). The Department of Pharmacy provides clinical services in both the inpatient and outpatient setting to a broad spectrum of patient populations including internal medicine, surgery, cardiology, oncology, solid organ transplant, bone marrow transplant, infectious diseases, nephrology, cystic fibrosis, pulmonary hypertension and HIV/AIDS.

This specialty residency balances the provision of direct patient care to internal medicine patients in both the inpatient and ambulatory care setting with research and teaching opportunities, and is tailored to the individual. Emphasis will be placed in providing excellent pharmaceutical care in conjunction with the multidisciplinary team as well as the facilitation of care transitions when possible. The resident will also have access to a wide variety of elective rotations.

Program Purpose:
PGY2 pharmacy residency programs build on Doctor of Pharmacy (Pharm.D.) education and PGY1 pharmacy residency programs to contribute to the development of clinical pharmacists in specialized areas of practice. PGY2 residencies provide residents with opportunities to function independently as practitioners by conceptualizing and integrating accumulated experience and knowledge and incorporating both into the provision of patient care or other advanced practice settings. Residents who successfully complete an accredited PGY2 pharmacy residency are prepared for advanced patient care, academic, or other specialized positions, along with board certification, if available.

Program Description:
UC San Diego Health is a university-affiliated teaching hospital which provides the unique capability to engage each of our residents in direct patient care activities, research, administration and project management, and teaching. PGY2 Internal Medicine residents will gain the skills necessary to function as the primary internal medicine pharmacist during their required core internal medicine learning experiences, with the expectation that the resident will handle all aspects of the medication process as well as the facilitation of safe and effective discharges in patients deemed high risk for readmission. Outside of the core internal medicine learning experiences, other learning experiences that will be required in order to broaden the resident’s experiences and scope of practice include the continuation of care transitions, management of patient populations at high risk for readmission (advanced heart failure, HIV/ID) and management of critically ill patients (ICU).

Primary clinical responsibilities will include rounding with assigned teams, validating pharmacy orders, performing pharmacokinetic monitoring, as well as designing, recommending, monitoring and evaluating patient-specific therapeutic regimens that incorporate the principles of evidence-based medicine. When opportunities are available, the resident will also be expected to assume oversight and responsibility for pharmacy trainees (including fourth-year pharmacy students and PGY1 pharmacy residents). Additionally, residents will assume responsibility for all medication management activities for their service, including transitions between different locations or levels of care. The resident will become proficient at resolving medication system issues when appropriate to assure safe
transition to community pharmacies and providers. The resident will also become skilled in providing education to multiple audiences: patients, caregivers, providers and other members of the multidisciplinary health care team.

Teaching activities may include presentations (grand rounds, clinical forums, journal clubs, topic discussions, etc.), involvement with UC San Diego SSPPS courses (e.g. conference leader for third year therapeutics course), and clerkship preceptorship of PGY1 pharmacy practice residents and fourth-year pharmacy students on clinical rotations. The ability to work independently and to supervise pharmacy students and residents will be emphasized. The resident will also be involved in a research project where scientific writing is strongly emphasized and the preparation of a manuscript suitable for publication will be expected.

Number of residency positions available: 2

Resident Pay and Benefits: Refer to UC San Diego Health Pharmacy Residency website (https://health.ucsd.edu/specialties/pharmacy/residency/Pages/Salary-and-Benefits.aspx) for details on salary and benefits

Requirements of Residents Prior to Starting the Program:
If matched with the UC San Diego Residency Program, matched candidates must have all of the following:
1. Graduated from an ACPE-accredited school of pharmacy with a Doctor of Pharmacy degree
2. Successfully completed an ASHP-accredited PGY1 pharmacy residency.
   a. Upon receipt of application to the program, the RPD will reach out to the PGY1 program director to assess good standing in the program
   b. A signed residency certificate will be required prior to beginning residency.
3. Obtained California pharmacy licensure prior to beginning residency.
   a. The residency is expected to begin on the last Monday of July, or first Monday of August, depending on the Human Resources orientation schedule. However, the resident must have obtained their California pharmacist license prior to beginning residency (absolute deadline to start = November 1st).
   b. If the resident is not licensed by November 1st, they will be dismissed from the residency. The residency offer may be rescinded if the resident does not take the California Board of Pharmacy law exam prior to August 1st or does not pass the California Board of Pharmacy law exam on the first attempt.

Application:
All applicants must be enrolled in the Resident Matching Program. To facilitate this enrollment process and for further information, please visit the following website: http://www.natmatch.com/ashprmp. Applications will be accepted when PhORCAS opens and are due by December 31st. Applications should be submitted through PhORCAS and include the following:

1. Letter of intent. Please address the following item in your letter including your own personal goals to achieve this:
   • Address your vision of an internal medicine pharmacist practicing at the top of their license.
2. Current Curriculum Vitae with all experiential completed and anticipated rotations as well as pharmacy work experience.
3. Three electronic references are required. At least two of the references should be from preceptors who can directly comment on your clinical and practice skills.

Note: Please have recommendation writers complete the electronic reference form within PhORCAS with detailed characteristic and narrative comments. One to two areas of improvement or constructive feedback that the recommender feels the candidate should continue to work on as a PGY2 resident should be identified. No separate letter of recommendation is required.

On-site interviews will be held during late January through February.

Program Structure:
• 2-4 weeks of orientation/training/research (duration determined by the resident’s previous experience)
• Required learning experiences: (Block, 5 weeks each)
• Internal Medicine Hillcrest
• Internal Medicine La Jolla
• Internal Medicine Hematology/Oncology
• Family Medicine
• Advanced Heart Failure
• HIV & Infectious Disease
• Cardiovascular ICU
• Longitudinal learning experiences (half-day per week block)
  o Therapeutics Conference (10 weeks)
  o Heart Failure/Cardiomyopathy Clinic (20 weeks)
  o Elective (20 weeks)
• Elective learning experiences: (2-Block, 5 weeks each)
  o See full list below
• Staffing (16 weekends, annually) (Longitudinal, 12 months)
• Resident project/research (Longitudinal, 12 months)
  o Includes participation in Research Primer Series
• Practice Management (Longitudinal, 12 months)
  o Committee Participation (alternate MERP La Jolla 6 months and MERP Hillcrest 6 months)
  o Practice Management (MUE, Order set, Monograph/Drug class review)
  o Internal Medicine Appendix
• Effective Education (Longitudinal, 12 months)
  o Journal club presentations (3 required, may choose to facilitate PGY1 journal club or present at ACCP Internal Medicine Journal Club for one of the three)
  o Clinical forum presentation (3 required)
  o In-service (3 required, nursing, pharmacy technicians, and one audience of choice)
  o Grand Rounds (1 required, may be completed with co-resident)

**Required Learning Experiences:**
Descriptions of each learning experience can be found in PharmAcademic.

PGY2 residents will gain the skills necessary to function as the primary internal medicine pharmacist during their required internal medicine learning experiences as well as the primary pharmacist within the other core learning experiences. The resident will also be expected to handle all aspects of medication management from admission through discharge (and beyond when applicable). The resident will be expected to build relationships with each interdisciplinary team in a variety of settings and to work proactively with nurses, case managers, social workers, physicians and physician extenders to help manage patients during hospital admission and to successfully transition patients from the hospital to the home or other healthcare setting. Daily activities will include: attending daily multidisciplinary rounds, managing patients across the continuum of care, performing medication reconciliation at both admission and discharge, collaborating with physicians and other health care providers to discuss optimal pharmacotherapy, participating in patient education/consultation, performing pharmacokinetic monitoring on all therapeutically monitored drugs, and overseeing and directing PGY1 resident and pharmacy student activities. This integration of staffing and clinical services prepares residents for any type of practice environment they may encounter in their future jobs by emphasizing the development of essential skills required for an advanced pharmacy practitioner including independent practice skills as well as the ability to multi-task and prioritize duties and responsibilities.

**Elective Learning Experiences:**
Descriptions of each learning experience can be found in PharmAcademic.

There are a variety of elective learning experiences from which the resident can choose. This will allow the resident the flexibility to tailor their PGY2 experience to an area of interest. Elective learning experiences will generally be scheduled in the second half of the residency year (after the majority of the required rotations are successfully completed). Electives can be selected from the list below and there will also be opportunities to develop new elective learning experiences:
• Ambulatory Care
• Cardiothoracic Transplant and Medical Assist Devices
• Emergency Department
• Infectious Disease
• Medical Intensive Care
• Neurology Critical Care
• Oncology Infusion Center
• Pharmacy Informatics

Longitudinal Clinic Experience:
Descriptions of each learning experience can be found in PharmAcademic.

The resident will have two longitudinal experience blocks in which to participate throughout the year with the Heart Failure / Cardiomyopathy Clinic being a required learning experience. Additional elective longitudinal clinics:
• Chronic Kidney Disease
• Diabetes Self-Management
• Internal Medicine Clinic
• Kidney Transplant Clinic
• Pulmonary Hypertension Clinic
• Hepatitis Clinic

Staffing:
Staffing will be incorporated into the residency experience with weekend shifts that provides the opportunity for PGY2 residents to staff transitions of care shifts as well as traditional inpatient weekend staffing. The PGY2 residents will be required to staff 16 weekends (9 weekends of TOC staffing and 7 weekends of inpatient traditional/operations staffing), which includes 1 minor holiday weekend AND 1 major holiday (Thanksgiving, Christmas, or New Year’s). This will effectively reduce holiday pay consistent with the holidays worked. To help provide more formative feedback, residents are expected to seek feedback from at least one staff member each weekend they staff. The feedback will be solicited via an online survey which can be found on the Pharmacy’s intranet page.

Research Project:
The resident will be responsible for conducting a research project throughout the academic year that will be completed and presented at the UC Collaborative Annual Pharmacy Leadership Conference or an equivalent conference. A Resident Research Primer Course has been developed by the UC San Diego Health Research Council to coach residents through the various aspects of the research process. PGY2 internal medicine residents who have not previously completed the Research Primer Course are required to attend. PGY2 internal medicine residents who have previously completed the Research Primer Course will required to attend some, but not all, meetings. They will be required to complete all competencies. Passing competency score is 80%.

More information can be found in the Resident Manual. If time allows or if residents received an already IRB-approved research project, the resident will be involved with the initiation of a second project. This initiation phase will involve defining the study design, writing up the protocol and beginning the IRB approval phase. This will facilitate subsequent internal medicine residents who can then finish the projects that were started the previous year. Research time will be given during the resident year.

Practice Management: The PGY2 resident will track their progress and development in the areas practice management, clinical quality improvement projects (if not a part of year-long resident project), medication use evaluation, order set review, drug class review or formulary monograph, and effective education or training to health care professionals or health care professionals in training through this longitudinal experience. Quarterly, the RPD and resident will complete a summative evaluation via PharmAcademic and update the resident’s customized training plan to track the resident’s progress. Items which are included and evaluated in this longitudinal rotation include:
Committee Participation: The resident will be required to participate in Medication Error Reduction Plan (MERP) Committee (6 months in La Jolla and 6 months in Hillcrest). The committee review medication use and strive to find ways to reduce errors at UCSDH. The resident will work with the pharmacist assigned to that committee to be an active participant through meeting attendance and investigating medication related events and solutions.

Practice Management: The resident will be required to complete a formulary monograph or drug class review, order set review, and medication use evaluation. Each resident will be required to complete one annually. Residents may collaborate with the other internal medicine resident for completion.

Internal Medicine Appendix: The resident’s progress in covering disease states listed in the Appendix (topics listed individually in learning experience descriptions) will be tracked through provided check-list and quarterly in the customized training plan.

Effective Education: The resident will have opportunities to provide effective education through presentation of grand rounds (1 required during residency, may be done with co-resident), clinical forums (3 required during residency), journal clubs (3 required during residency), in-services (3 required during residency), didactic teaching opportunities and development of a manuscript for publication.

Grand Rounds: The resident will deliver a 1-hour CE lecture to the pharmacy staff regarding a topic in internal medicine. This presentation may be made in collaboration with their PGY2 Internal Medicine Pharmacy co-resident, with each resident presenting approximately 30 minutes of material. Please refer to the Residency Manual for more information on timelines, expectations, and evaluation strategies.

Clinical Forums: Residents are required to present three clinical forums during the year at our Pharmacy Clinical Forum. Clinical Forums are clinically-focused, 20-minute presentations based on a recent patient case. The resident is encouraged to discuss topics related to the ASHP Supplemental Appendix. All Clinical Forum presentations need to be presented to the project preceptor at least one week in advance for feedback and comments. Failure to do so will result in delay of the presentation. Please refer to the residency manual for more information and evaluation strategies.

Journal Clubs: Residents are required to present three journal club presentations during the year. Journal Club topics should be focus on critically analyzing a recently published journal article related to critical care pharmacotherapy. The resident may choose to facilitate a PGY1 Journal Club in lieu of performing the final one of their required journal club presentations. Presented journal clubs must be presented to the project preceptor at least one week in advance for feedback and comments. Failure to do so will result in delay of the presentation. For facilitation, the resident assumes the role of the clinical preceptor and should critically analyze the article, coach the PGY1 resident through their analysis, and facilitate the discussion on the day of the presentation. Facilitators should provide feedback on their analysis and thoughts of the PGY1 one week prior to their presentation. Please refer to the residency manual for more information and evaluation strategies.

In-Services: The resident is required to conduct 3 in-services during the residency year with 1 focused on pharmacy technicians (‘tech talks’) and 1 focused on nursing staff. The remaining in-service can target an audience of the resident’s choosing. The resident is expected to be proactive in determining the need for focused in-services as well as facilitating topics and logistics related to the in-service over the course of the residency year.

Teaching - Skagg’s School of Pharmacy and Pharmaceutical Sciences: Involvement with the UC San Diego SSPPS will vary but the resident is required to participate as a conference leader for one of the therapeutics courses. The resident may be asked to write up cases for the therapeutics conference based on real patient cases. Residents will also have multiple opportunities to directly precept students who are on the same learning experience as the resident.

Teaching Certificate:
Participation in the Teaching Certificate program is required unless resident has completed a teaching certificate program during his/her PGY1 and will be discussed on a case by case basis. Please refer to the Residency Manual for more information on these topics. If the resident elects to complete the Teaching Certificate, the RPD will work with the PGY1 RPD to add the resident to expected events.

**Assessment Strategy – PharmAcademic:**
The PGY2 Internal Medicine Specialty Residency Program uses the ASHP online evaluation tool called PharmAcademic, which is available for all ASHP-accredited pharmacy residency programs. This system, which is technologically supported by the McCreadie Group, supports the ASHP Residency Learning System (RLS).

Residents who are matched with this PGY2 specialty program are entered into PharmAcademic prior to their anticipated start date in August. The incoming resident completes two pre-residency questionnaires that help the RPD design a residency year that is tailored to the specific needs and interests of the resident:
- ASHP Standard Entering Interests Form
- Goal-Based Entering Interests Form

Residents’ schedules and assigned RLS Goals are entered into PharmAcademic. We have chosen to use the PharmAcademic evaluation tools for our Learning Experiences. For each Learning experience, the following Assessments are completed:
- Preceptor Assessment of Resident: Summative (for each Learning experience)
- Resident Self-Assessment: Summative-self (for each Learning experience)
- Resident Assessment of the Learning Experience
  - Resident assessment of Preceptor
  - Resident assessment of Learning Experience

Preceptors and residents are encouraged to exchange in ongoing, daily, verbal feedback throughout each learning experience. The resident and preceptors are trained and reminded throughout the year to complete evaluations in a thorough (quantitatively and qualitatively) and timely manner. To this end, evaluations may be used, not only as assessment tools, but as tools that preceptors may turn to for help in guiding residents to improve, grow and achieve both the residency program’s and the residents’ goals and objectives for the residency year. The RPD reviews all evaluations and solicits feedback from preceptors and residents to provide guidance to help the resident maximize the residency experience.

The resident will discuss individualized program goals and interests on a quarterly basis (Quarterly Update and Customized Training Plan) with the RPD to evaluate where they are in meeting the residency goals and to set or modify goals for the remainder of the residency program. The resident may request to meet with the RPD outside of this quarterly meeting, as needed, if their interests change throughout the year. The resident may request schedule modifications throughout the residency year and the RPD will make all efforts to accommodate these requests. Assessment tools will be adjusted as changes are made.

The resident will be expected to complete the all relevant exit evaluations well as a year-long evaluation of the residency program.

The results of these year-end program evaluations are reviewed by the RPD and internal medicine Residency Advisory Committee (RAC) for merit and the potential development of action plans in an effort to achieve continuous quality improvement.

**Assessment Overview (PGY2 Internal Medicine)**

*It is the resident's responsibility to initiate the evaluation process with each rotation preceptor prior to the end of each learning experience and to schedule at least quarterly meetings with the RPD.*
<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Summative Evaluation (Preceptor)</th>
<th>Summative Evaluation (Resident)</th>
<th>Preceptor Evaluation (Resident)</th>
<th>Learning Experience Evaluation (resident)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Orientation / Training</strong></td>
<td>End of Learning Experience</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td><strong>Required Learning Experience</strong></td>
<td>End of Learning Experience</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td><strong>Elective Learning Experience</strong></td>
<td>End of Learning Experience</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td><strong>Practice Management</strong></td>
<td>Quarterly</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>End of Learning Experience</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td><strong>Therapeutics Conference</strong></td>
<td>Midpoint</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>End of Learning Experience</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td><strong>Research</strong></td>
<td>Quarterly</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>End of Learning Experience</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td><strong>Staffing</strong></td>
<td>Quarterly</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>End of Learning Experience</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>
Local/Regional/National Meetings:
The residents will have the opportunity to attend various professional meetings throughout the year. The annual travel stipend is variable, based on funding. In the past, residents have received a set stipend for the year which they can use at their discretion for registration, travel, accommodations, etc. The cost of attending UC Collaborative Annual Pharmacy Leadership Conference (or an equivalent conference) will be deducted from the travel stipend, along with any other conferences the resident chooses to attend. Attendance at UC Collaborative Annual Pharmacy Leadership Conference (or an equivalent conference) to present their resident project is mandatory.

PGY2 Internal Medicine Competency Areas, Goals and Objectives (2017 Standard):
- Competency Areas: Categories of the residency graduates’ capabilities.
  - Competency Area R1: Patient Care
  - Competency Area R2: Advancing Practice and Improving Patient Care
  - Competency Area R3: Leadership and Management
  - Competency Area R4: Teaching, Education, and Dissemination of Knowledge
- Educational Goals: Broad statement of abilities.
- Educational Objectives: Observable, measurable statements describing what residents will be able to do as a result of participating in the residency program.
- The resident is encouraged to read detailed information about each goal at the ASHP website (click on “Internal Medicine Pharmacy – Effective 2017”).
  - [https://www.ashp.org/Professional-Development/Residency-Information/Residency-Program-Directors/Residency-Accreditation/PGY2-Competency-Areas](https://www.ashp.org/Professional-Development/Residency-Information/Residency-Program-Directors/Residency-Accreditation/PGY2-Competency-Areas)
- For information about Goals and Objectives Taught/Taught and Evaluated in Learning Experiences, visit PharmAcademic, go the ‘Reports’ tab, and click on ‘Goals and Objectives Taught/Taught and Evaluated in Learning Experiences’.

PGY2 Internal Medicine Residency Requirements for Completion / Graduation:
- Successful completion of all learning experiences:
  - All learning experience objectives must be marked satisfactory progress (SP), achieved (ACH) or achieved for residency (ACHR) by the final evaluation of all learning experiences. Any expectations of the residents that are not met or learning objectives marked as needs improvement (N/I) from an on-demand or scheduled evaluation will result in a meeting between the learning experience preceptor, RPD, and the resident where a plan of correction will be formulated. Failure to complete the plan of correction may result in disciplinary action.
  - ≥90% of RLS objectives marked “Achieved for the Residency” by the end of the year (as evaluated by individual rotation preceptors or by the RPD upon final review of the resident’s progress). All patient care related objectives (Outcome R1: Patient Care) must be achieved.
- Creation and completion of required presentations: 3 Journal Clubs, 3 Clinical Forums, 3 In-Services, 1 Grand Rounds
- Research Primer Course
- Completion of a residency project; including presentation at a suitable conference/meeting and completion of a project ‘write-up’ in a manuscript suitable for publication (does not need to be submitted for publication)
- Twelve months minimum is allotted to successfully complete the core requirements. If a core learning experience must be repeated, then elective time shall be used. If the above requirements are not met in full by 90 days after the residency end, the residency certificate may be withheld at the discretion of the residency director.
Appendix H Psychiatry

PGY2 Psychiatric Pharmacy Residency Program Overview

National Matching Service Code: 669066
https://health.ucsd.edu/specialties/pharmacy/residency/Pages/psych.aspx

The UC San Diego Health Department of Pharmacy and the UC San Diego Skaggs School of Pharmacy and Pharmaceutical Sciences (SSPPS) offers a one-year specialty residency in psychiatric pharmacy practice beginning August 1 of each year or upon licensure in California (see below).

Scope:
UC San Diego Health consists of three acute care hospitals (UC San Diego Medical Center in Hillcrest, Sulpizio Cardiovascular Center, and Jacobs Medical Center which includes former Thornton Hospital) and associated outpatient clinics. UC San Diego Health is also affiliated with Rady Children’s Hospital-San Diego, the Veterans Affairs San Diego Healthcare System, and the Sharp Memorial Hospital Joint Blood and Marrow Transplant Program. The Health System is affiliated with the UC San Diego School of Medicine and the UC San Diego Skaggs School of Pharmacy and Pharmaceutical Sciences. The Department of Pharmacy provides clinical services at all three hospitals and all associate clinics, infusion centers and physician practices.

Purpose:
PGY2 pharmacy residency programs build on Doctor of Pharmacy (Pharm.D.) education and PGY1 pharmacy residency programs to contribute to the development of clinical pharmacists in specialized areas of practice. PGY2 residencies provide residents with opportunities to function independently as practitioners by conceptualizing and integrating accumulated experience and knowledge and incorporating both into the provision of patient care or other advanced practice settings. Residents who successfully complete an accredited PGY2 pharmacy residency are prepared for advanced patient care, academic, or other specialized positions, along with board certification.

Program Description:
Pharmacy residents completing the UC San Diego Postgraduate Year Two (PGY2) Psychiatric Pharmacy Practice Residency will be described as advanced practitioners who can serve as an authoritative resource on the optimal use of medications used to treat individuals with psychiatric and neuropsychiatric disorders. The resident will be competent in the management of patients with a wide range of acuity, including medication therapy management for various neuropsychiatric disease states in a variety of acute care and ambulatory health settings and health systems. They will have been responsible for achieving optimal drug therapy outcomes as part of an interdisciplinary health care team. The resident will have demonstrated proficiency in oral and written communication skills and in educating other health care professionals, patients, students and the community on mental health disease and drug related topics. The resident will have opportunities to precept students on rotation from the UCSD Skaggs School of Pharmacy and Pharmaceutical Sciences. Residents will have demonstrated professional maturity by evaluating and monitoring their own performance, as well as the performance of their preceptors. The resident will have been trained in research methodologies and leadership skills, developed organizational and time management skills, and become proficient in the use of technology to support evidence-based medicine and patient-centered care. Graduates of this PGY2 residency will possess knowledge and skills that should prepare them for career opportunities in any neuropsychiatric unit for any health care organization. Graduates of this program will also be eligible for the board certification examination in psychiatric pharmacy.

Number of residency positions available: 1

Resident Pay and Benefits: Refer to UC San Diego Health Pharmacy Residency website (https://health.ucsd.edu/specialties/pharmacy/residency/Pages/Salary-and-Benefits.aspx) for details on salary and benefits

Requirements of Residents Prior to Starting the Program:
If matched with the UC San Diego Residency Program, matched candidates must have all of the following:
1. Graduated from an ACPE-accredited school of pharmacy with a Doctor of Pharmacy degree
2. Successfully completed an ASHP-accredited PGY1 pharmacy residency
a. Upon receipt of application to the program, the RPD will reach out to the PGY1 program director to assess good standing in the program.
b. A signed residency certificate will be required prior to beginning residency.

3. Obtained California pharmacy licensure prior to beginning residency.
   a. The residency is expected to begin on the last Monday of July, or first Monday of August, depending on the Human Resources orientation schedule. However, the resident must have obtained their California pharmacist license prior to beginning residency (absolute deadline to start = November 1st).
   b. If the resident is not licensed by November 1st, they will be dismissed from the residency. The residency offer may be rescinded if the resident does not take the California Board of Pharmacy law exam prior to August 1st or does not pass the California Board of Pharmacy law exam on the first attempt.

Application:
All applicants must be enrolled in the Resident Matching Program. To facilitate this enrollment process and for further information, please visit the following website: www.natmatch.com/ashprmp. Applications will be accepted when PhORCAS opens and due by December 31st.

Applications should include the following:
1. Letter of intent. Please address the following items in your letter of intent and how you will play a role in these items. Your letter of intent should be no more than two pages long.
   a. Address where you feel psychiatric pharmacy will be in 5 years.
   b. Address your vision of a psychiatric pharmacist practicing at the top of their license.
2. Current Curriculum Vitae with all completed and anticipated experiential learning experiences, pharmacy work experience and research experience.
3. Three electronic references are required. At least 2 of the references should be from preceptors or supervisors who can directly comment on your clinical and practice skills.
   Note: Please have recommendation writers complete the electronic reference form within PhORCAS with detailed characteristic and narrative comments. One to two areas of improvement or constructive feedback that the recommender feels the candidate should continue to work on as a PGY2 resident should be identified. No separate letter of recommendation is required.

On-site/virtual interviews will be held in February and is required for all candidates who are considered for the Match.

Program Structure:
The PGY2 resident will gain the skills to function as a psychiatric pharmacist during the required and elective rotations. Primary service responsibilities include rounding with the interdisciplinary team (inpatient experiences) to design, recommend, monitor, and evaluate patient-specific therapeutic regimens that incorporate the principles of evidence-based medicine. The resident will also learn skills needed to function within a multidisciplinary mental health treatment team. Daily activities will include: participating in treatment rounds, reviewing each patient’s profile for appropriateness of drug therapy, providing provider, nursing and patient education, validating pharmacy orders on patients, and overseeing and directing PGY1 resident and pharmacy student activities. This integration of staffing and clinical services prepares the resident for any type of practice environment they may encounter in their future jobs by emphasizing the development of essential skills required for an advanced pharmacy practitioner: independent practice skills, multi-tasking and prioritization. During ambulatory care experiences, the resident will learn to integrate psychopharmacology knowledge in the care of specialty clinic patient populations.

Descriptions of each learning experience can be found in PharmAcademic

<table>
<thead>
<tr>
<th>Orientation &amp; Staffing Training</th>
<th>1-4 weeks (depending on resident’s previous experience)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 Inpatient Experiences (4-6 weeks)</td>
<td>Adult Psychiatry I, Adult Psychiatry II (end of year), Geropsychiatry, Child &amp; Adolescent Psychiatry, Consult Liaison Psychiatry, Correctional Psychiatry</td>
</tr>
<tr>
<td>3 Longitudinal Outpatient Clinics</td>
<td>General Psychiatry, Neurology, Substance Use Disorder</td>
</tr>
<tr>
<td>3-4 Electives (4-5 weeks)</td>
<td>Pain &amp; Palliative Care, HIV/Owen Clinic, Academia, ED Pharmacy, Adult Psychiatry (Scripps Mercy), Informatics, Neurocritical Care, or any of the PGY1 electives The resident may also choose to repeat one of the following Core rotations: Geropsychiatry, Consult Liaison Psychiatry, Child/Adolescent Psychiatry</td>
</tr>
</tbody>
</table>
### Staffing
16 weekends, annually (longitudinal, 12 months)

### Research
Resident project/research (longitudinal, 12 months)
1-2 weeks dedicated time during year (as allowed per schedule)

### Teaching & Professional Development (Longitudinal)
- Weekly conference facilitation for Therapeutics Course at SSPPS (10 weeks)
- Minimum of 1 didactic lecture in Therapeutics 212C course (1-2 hours)
- Psychiatry Core Discussions: 5:30-7:00 PM monthly; schedule will be distributed separately. Attendance mandatory, minimum 2 presentations.
- Clinical Forums/M&M Rounds: 4 sessions during year; may be combined with Psychiatry Core Discussions
- Journal club presentations, minimum 2 presentations
- RN In-service presentations, minimum 2 presentations
- Psychiatry CQI Meeting: NBMU Conference Room, Second Monday of the month, every other month starting August 8th (12:45-2:00 PM)
- MERP Meeting: Debbie Crutchfield’s Office, 7th Floor, Hillcrest Tower, Fourth Wednesdays of the month, every third month starting August 24th (2:00-2:30 pm)
- Pharmacy Grand Rounds: 1 session per year (UC San Diego Medical Center, Hillcrest Auditorium); complete schedule attached (mandatory attendance when on-site)

### Additional Professional Development Opportunities
- SDPRL seminars: optional depending on topic (complete schedule provided separately)
  Attendance at other Grand Rounds (when on-site):
  - UCSD Department of Psychiatry: Tuesdays, 8:00-9:30 am (Center for Neural Circuits and Behavior [CNCB]), Large Conference Room
  - Rady Children’s Hospital: Tuesdays 1:00-2:00 pm (mandatory during Child & Adolescent Psychiatry rotation; Rady Children’s Hospital-San Diego, Dining Room Conference Rooms (Hahn Family Pavilion, 3020 Children’s Way, San Diego, CA 92123)
  - Center for Healthy Aging and Stein Institute for Research on Aging Seminars: TBD
  Professional Meetings:
  - ASHP Midyear Clinical Meeting (may be optional depending on recruitment)
  - AAPP Annual Meeting
  - UC Collaborative Meeting (unless platform presentation given at AAPP)

---

**PGY2 Psychiatric Pharmacy Practice Residency Learning Experiences and Rotation Schedule (Sample)**

<table>
<thead>
<tr>
<th>Rotation</th>
<th>Dates</th>
<th>Learning Experience*</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>8/1 – 8/26</td>
<td>Orientation and Staffing Training (4 weeks)</td>
</tr>
<tr>
<td>1</td>
<td>8/29 – 9/30</td>
<td>Adult Psychiatry I Core(^1) (5 weeks)</td>
</tr>
<tr>
<td>2</td>
<td>10/3 – 10/21</td>
<td>Geropsychiatry Core(^1) (3 weeks)</td>
</tr>
<tr>
<td>4</td>
<td>10/24 – 11/25</td>
<td>HIV/Owen Clinic(^1) (5 weeks)</td>
</tr>
<tr>
<td>5</td>
<td>11/28 – 12/30</td>
<td>Academia Elective(^5) (5 weeks)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Research/Project(^1)</td>
</tr>
<tr>
<td>6</td>
<td>1/2 – 2/3</td>
<td>Child and Adolescent Psychiatry Core(^3) (5 weeks)</td>
</tr>
<tr>
<td>7</td>
<td>2/6 – 3/12</td>
<td>Correctional Psychiatry (5 weeks)</td>
</tr>
<tr>
<td>8</td>
<td>3/13 – 4/21</td>
<td>Pain and Palliative Care Elective(^2) (6 weeks) + Teaching(^5)</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>9</td>
<td>4/24 – 5/26</td>
<td>Consult Liaison Psychiatry Core(^1) (5 weeks) + Teaching(^5)</td>
</tr>
<tr>
<td>10</td>
<td>5/29 – 6/30</td>
<td>Neurocritical Care Elective(^1) (5 weeks) + Teaching(^5)</td>
</tr>
<tr>
<td>11</td>
<td>7/3 – 7/28</td>
<td>Adult Psychiatry II Core(^1) (2 weeks)</td>
</tr>
<tr>
<td>12</td>
<td>7/29 – 7/31</td>
<td>Research/Project(^1)</td>
</tr>
<tr>
<td>Longitudinal</td>
<td>8/1 – 7/31</td>
<td>Operations(^1) (16 weekends per year and holidays)</td>
</tr>
<tr>
<td>Longitudinal</td>
<td>8/1 – 7/31</td>
<td>Teaching and Continuous Professional Development(^1,2)</td>
</tr>
<tr>
<td>Longitudinal</td>
<td>10/3 – 1/31</td>
<td>General Psychiatry Clinic(^7) (4 months)</td>
</tr>
<tr>
<td>Longitudinal</td>
<td>2/1 – 3/30</td>
<td>Neurology Clinic(^2) (2 months, 1 day per week, Fridays)</td>
</tr>
<tr>
<td>Longitudinal</td>
<td>4/1 – 6/14</td>
<td>Therapeutics Course(^5) (10 weeks, Wed 1-5 PM + Exams)</td>
</tr>
<tr>
<td>Longitudinal</td>
<td>4/1 – 6/30</td>
<td>Addiction Recovery and Treatment Clinic(^7) (3 months)</td>
</tr>
</tbody>
</table>

\(^1\)UC San Diego (Hillcrest), \(^2\)UC San Diego (Jacobs), \(^3\)Radys Children’s Hospital, \(^4\)Richard J. Donovan Correctional Facility, \(^5\)UCSD Skaggs School of Pharmacy & Pharmaceutical Sciences; \(^6\)Scripps Mercy Hospital, \(^7\)UCSD Outpatient Psychiatry Services – La Jolla

Presentation Schedule (Sample)

<table>
<thead>
<tr>
<th>Dates</th>
<th>Presentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>September</td>
<td>Schizophrenia Core Discussion</td>
</tr>
<tr>
<td>October</td>
<td>Anxiety Disorders Core Discussion</td>
</tr>
<tr>
<td>November</td>
<td>AAPP Research Community Journal Club Webinar</td>
</tr>
<tr>
<td>November</td>
<td>Nursing In-Service</td>
</tr>
<tr>
<td>December</td>
<td>Clinical Forum/M&amp;M</td>
</tr>
<tr>
<td>January</td>
<td>Nursing In-Service</td>
</tr>
<tr>
<td>February</td>
<td>Journal Club</td>
</tr>
<tr>
<td>March</td>
<td>Grand Rounds (Hillcrest)</td>
</tr>
<tr>
<td>April</td>
<td>Clinical Forum/M&amp;M</td>
</tr>
<tr>
<td>April</td>
<td>AAPP Poster Session</td>
</tr>
<tr>
<td>May</td>
<td>Therapeutics Lecture</td>
</tr>
<tr>
<td>June</td>
<td>UC Collaborative Research Presentation</td>
</tr>
</tbody>
</table>

Staffing:
Staffing will be incorporated into the residency experience with weekend shifts that provide the opportunity for PGY2 residents to independently cover admitted patients. The PGY2 psychiatry residents are required to staff 16 weekends (which includes 1 minor holiday weekend PLUS 1 major holiday (Thanksgiving, Christmas, or New Year’s). To help provide more formative feedback, residents are expected to seek feedback from at least one staff member each weekend they staff. The feedback will be solicited via an online survey [https://ucsd.co1.qualtrics.com/jfe/form/SV_28XYFXGDfnhj0wd](https://ucsd.co1.qualtrics.com/jfe/form/SV_28XYFXGDfnhj0wd)

**Resident Project/Research:**
The resident will be responsible for conducting one research project throughout the academic year that will be presented at the American Association of Psychiatric Pharmacists (AAPP) Annual Meeting. A Resident Research Primer Course has been developed by the UC San Diego Health Research Council to coach residents through the various aspects of the research process. PGY2 psychiatric pharmacy residents who have not previously completed the Research Primer Course are required to attend and demonstrate competence as defined by the Research Council. If necessary, a remediation plan will be designed for residents who do not demonstrate competence. The resident will also be required to conduct a brief Medication Use Evaluation (MUE) project during the course of the year. The topic/location of the MUE will be determined at the beginning of the residency year along with a suitable timeline. A list of project ideas will be generated from the preceptors and the resident is expected to select a project during the first month of the residency year. In addition to the AAPP Annual Meeting, the resident will be asked to present the research project to the pharmacy department in a platform format. The resident is expected to submit the research findings to a peer-reviewed journal for publication prior to end of the residency year. A list of project ideas will be generated from the preceptors and resident is expected to select a project during the first month of the residency year.

**Local/Regional/National Meetings:**
The residents will have the opportunity to attend various professional meetings throughout the year. The annual travel stipend is variable, based on funding. The resident will receive a set stipend for the year which can be used at his/her discretion for registration, travel, accommodations, etc. Attendance at UC Collaborative Annual Pharmacy Leadership Conference (or an equivalent conference) to present their resident project is mandatory as well as AAPP Annual Meeting. The cost of attending the AAPP Annual Meeting (or an equivalent conference) will be deducted from the travel stipend, along with any other conferences the resident chooses to attend.

**Quarterly Evaluation:**
The PGY2 resident will track their progress and development in the areas practice management, clinical quality improvement projects (if not a part of year-long resident project), medication use evaluation, formulary modification, and effective education or training to health care professionals or health care professionals in training. The RPD will review this quarterly evaluation with the resident during their quarterly meeting and update the resident's customized training plan, as needed. Items which may be included and/evaluated in this longitudinal rotation include committee participation and practice management opportunities such as guideline creation, orderset review, formulary monographs, and other practice leadership opportunities. Effective education opportunities will also be evaluated and may include clinical forums (4 required during residency), journal clubs (2 required during residency), inservices (as possible), teaching opportunities (Therapeutics), and on-demand evaluations as they arise.

**Presentations/Teaching:**
The resident will have the opportunity to provide many educational lectures to their colleagues throughout the residency year. The resident will be evaluated on his/her teaching and professional outreach participation during the longitudinal Teaching and Continuous Professional Development learning experience.

**Grand Rounds:**
The resident will deliver a 1-hour CE lecture to the pharmacy staff regarding a topic in psychiatry. Allied health professionals are welcome to attend. Presentations are accredited for continuing education through California Accreditation for Pharmacy Education (CAPE). The resident is expected to present at the Hillcrest location during the designated Grand Rounds dates/times.

**Psychiatry Clinical Forums and Journal Clubs:**
The resident is required to present 4 (at minimum) Clinical Forum topic discussions and 2 journal club presentations during the year. One out of the 4 Clinical Forum topic discussions can be replaced with a M&M presentation as topics allow. Residents will have the opportunity to present at a Clinical Forum during the course of the learning experiences and the monthly Psychiatry Core Discussions. Clinical forums are clinically focused 20-minute presentations based on a recent patient case. Journal club presentations may be presented locally and/or through the AAPP Journal Club Webinar. The objective of journal club will be to select and critically review a recently published journal article related to
psychiatry/neurology. All Clinical Forum and Journal Club presentations need to be presented to the project preceptor at least one week in advance for feedback and comments. Failure to do so will result in delay of the presentation. Please refer to Appendix K (Journal Club) and Appendix M (Clinical Forum) for more information and evaluation strategies.

**Skaggs School of Pharmacy and Pharmaceutical Sciences:**
Teaching is a large component of our program. The PGY2 resident will have many opportunities to precept/teach and their training will include learning how to incorporate teaching into their clinical responsibilities. UC San Diego is a teaching institution affiliated with UCSD Skaggs School of Pharmacy and Pharmaceutical Sciences (SSPPS) and UCSD School of Medicine. The resident is required to deliver at least 1 (50-minute) didactic lecture for 3rd year pharmacy students at UCSD SSPPS for the Therapeutics Course. The PGY2 psychiatry resident will also be a conference facilitator for the course. The resident will be required to participate in weekly preconferences and serve as a facilitator for a group of students. The resident will create patient cases and PPCP keys for teaching purposes and may assist with creating/grading written exams. The PGY2 resident will also have multiple opportunities to precept 4th year SSPPS pharmacy students and PGY1 pharmacy practice residents, as well as to work with UCSD physician interns, residents and fellows on most, if not all, rotations. In addition, the resident will be asked to give many educational lectures to their colleagues throughout their residency year.

**Publication:**
The resident will be required to write a manuscript suitable for publication by the end of the residency year. The purpose of this requirement will be the development of scientific writing and communication skills. The types of publishable literature can include any of the following types of manuscripts:

- Case reports with a review of the literature
- Primary research / original research
- Medication Use Evaluation
- Meta-analysis of a disease state or therapy
- Review article

**Assessment Strategy – PharmAcademic:**
The PGY2 Psychiatry Specialty Residency Program uses the ASHP on-line evaluation tool called PharmAcademic, which is available for all ASHP-accredited pharmacy residency programs.

Residents who are matched with this PGY2 specialty program are entered into PharmAcademic prior to their arrival in August. The incoming resident completes two pre-residency questionnaires that help the Residency Program Director (RPD) design a residency year that is tailored to the specific needs and interests of the resident:

- ASHP Standard Entering Interests Form
- Goal-Based Entering Interests Form

The RPD uses the ASHP Entering Interest Form and Entering Objective-Based Self-Evaluation to create the residents customized training plan. The Residency Requirement Checklist and Customized Training Plan will be discussed and modified (as necessary) through a collaborative effort between the RPD and resident. In addition, the resident may request schedule modifications throughout the residency year and the RPD will make all efforts to accommodate these requests. Assessment tools will be adjusted as changes are made. The RPD will share changes to the Residency Requirement Checklist and Customized Training Plan via PharmAcademic automatic emails to scheduled preceptors and during quarterly PGY2 Psychiatric Pharmacy Residency Advisory Council (RAC) meetings.

Residents` schedules are entered into [PharmAcademic](#). For each Learning experience, the following assessments are completed:

- Preceptor Assessment of Resident: Summative (for each Learning experience)
- Resident Assessment of the Learning Experience
  - Resident assessment of Preceptor
  - Resident assessment of Learning Experience

Preceptors and residents are encouraged to exchange on-going, daily verbal feedback throughout each rotation experience. Six-week block rotations have a mid-point summative evaluation as well. The Resident and Preceptors are trained and reminded throughout the year to complete evaluations in a thorough (quantitatively and qualitatively) and timely manner. To this end, evaluations may be used, not only as assessment tools, but as tools that Preceptors may turn to for help in guiding Residents to improve, grow and achieve the residency programs and the residents’ goals and objectives for the residency year. The RPD reviews all evaluations and solicits verbal feedback from preceptors and residents to provide guidance to help the resident maximize the residency experience.
The Resident will be required to complete the ASHP PharmAcademic exit evaluation and the year-long evaluation of the Residency Program. The results of these year-end Program evaluations are reviewed by the RPD for potential merit and potential action plans are developed in an effort to achieve continuous quality improvement.

### Assessment Overview (PGY2 Psychiatric Pharmacy)

*It is the resident’s responsibility to initiate the evaluation process with each rotation preceptor prior to the end of each learning experience and to schedule at least quarterly meetings with the RPD.*

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Summative Evaluation (Preceptor)</th>
<th>Preceptor Evaluation (Resident)</th>
<th>Learning Experience Evaluation (Resident)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orientation / Training</td>
<td>End of Learning Experience</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Required Inpatient Learning Experience</td>
<td>End of Learning Experience</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Required Outpatient Learning Experience</td>
<td>End of Learning Experience</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Elective Learning Experience</td>
<td>End of Learning Experience</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Teaching and Continuous Professional Development</td>
<td>Quarterly</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Research</td>
<td>End of Learning Experience</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Staffing</td>
<td>Quarterly</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Program Evaluation</td>
<td>End of Residency</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Quarterly Plan</td>
<td>Quarterly</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

### PGY2 Psychiatric Pharmacy Competency Areas, Goals and Objectives (2017 Standard):

- **Competency Areas:** Categories of the residency graduates’ capabilities.
  - Competency Area R1: Patient Care
  - Competency Area R2: Advancing Practice and Improving Patient Care
  - Competency Area R3: Leadership and Management
  - Competency Area R4: Teaching, Education, and Dissemination of Knowledge
- **Educational Goals:** Optimize the outcomes of diverse populations of inpatients and outpatients with a variety of psychiatric and neuropsychiatric disorders and a range of complexity of problems by providing evidence-based, patient-centered medication therapy as an integral part of an interdisciplinary team.
- **Educational Objectives:** Resident achievement of educational goals is determined by assessment of the resident’s ability to perform the associated educational objective below each educational goal.
- The resident is encouraged to read detailed information about each goal at the ASHP website (click on “Internal Medicine Pharmacy – Effective 2017”).
  https://www.ashp.org/Professional-Development/Residency-Information/Residency-Program-Directors/Residency-Accreditation/PGY2-Competency-Areas
• For information about Goals and Objectives Taught/Taught and Evaluated in Learning Experiences, visit PharmAcademic, go to the ‘Reports’ tab, and click on ‘Goals and Objectives Taught/Taught and Evaluated in Learning Experiences’.

**PGY2 Psychiatric Pharmacy Residency Requirements for Completion / Graduation:**

- Successful completion of learning experiences: all learning experience objectives marked satisfactory progress (SP), ACH or achieved for residency (ACHR) by the final evaluation. Any expectations of the residents that are not met or learning objectives with needs improvement (N/I) from an on-demand or scheduled evaluation will result in a meeting between the learning experience preceptor, RPD, and resident and a plan of correction will be formulated. Failure to complete the plan of correction may result in disciplinary action.
- ≥90% of RLS objectives marked “Achieved for the Residency” by the end of the year (as evaluated by individual rotation preceptors or by the RPD upon final review of the resident’s progress). All patient care related objectives (Outcome R1: Patient Care) must be achieved.
- Creation and completion of required presentations: 2 Journal Clubs, 4 Core Discussion/Clinical Forum/M&M presentations, 2 nursing in-services, 1 Didactic Teaching, 1 Grand Rounds, 1 Research Project presentation (either at AAPP or UC Collaborative Conference via platform format)
- Unless already completed, the resident will be required to complete a Research Primer Course at the beginning of the residency year and demonstrate competence as defined by the Research Council. If necessary, a remediation plan will be designed for residents who do not demonstrate competence.
- Participation as a Therapeutics Conference facilitator for pharmacy students.
- Completion of a residency project including presentation at the AAPP and/or suitable conference/meeting and completion of a manuscript suitable for publication.
- Submission of a manuscript for publication (does not have to be accepted)
- Twelve months minimum is allotted to successfully complete the core requirements. If a core learning experience must be repeated, then elective time shall be used. If the above requirements are not met in full by 90 days after the residency end, the residency certificate may be withheld at the discretion of the residency director.
The UC San Diego Health (UCSDH) Department of Pharmacy offers a one-year specialty residency in health-system pharmacy administration and leadership beginning August 1st of each year or upon licensure in California (see below).

**Scope:**
UC San Diego Health consists of two medical centers (UC San Diego Medical Center in Hillcrest and the La Jolla Campus consisting of Jacobs Medical Center which includes the John M. and Sally B. Thornton Pavilion and Sulpizio Cardiovascular Center) and associated outpatient clinics. UC San Diego Health is also affiliated with Rady Children’s Hospital-San Diego, the Veterans Affairs San Diego Healthcare System, and the Sharp Memorial Hospital Joint Blood and Marrow Transplant Program. The Health System is affiliated with the UC San Diego School of Medicine and the UC San Diego Skaggs School of Pharmacy and Pharmaceutical Sciences (SSPPS). The Department of Pharmacy provides clinical services at both medical centers.

**Program Purpose:**
PGY2 Program Purpose: PGY2 pharmacy residency programs build on Doctor of Pharmacy (Pharm.D.) education and PGY1 pharmacy residency programs to contribute to the development of clinical pharmacists in specialized areas of practice. PGY2 residencies provide residents with opportunities to function independently as practitioners by conceptualizing and integrating accumulated experience and knowledge and incorporating both into the provision of patient care or other advanced practice settings. Residents who successfully complete an accredited PGY2 pharmacy residency are prepared for advanced patient care, academic, or other specialized positions, along with board certification, if available.

**Program Description:**
UC San Diego Health is a university-affiliated teaching hospital which provides the unique capability to engage each of our residents in direct patient care activities, research, administration and project management, and teaching. The PGY2 Health-System Pharmacy Administration and Leadership (HSPAL) residency program at UC San Diego Health is designed to provide residents with extensive experience in all aspects of management and leadership, while giving insight into key issues confronting the practice of pharmacy in an integrated health-system. Training is provided in various aspects of pharmacy management to develop the resident’s knowledge and skills to become a healthcare leader. Residents will be encouraged, trained, and required to take ownership in designing, implementing, and enhancing pharmacy services to improve patient outcomes; this includes providing evidence-based contributions and recommendations to improve the medication-use process. Emphasis is placed on independent thinking and application of management concepts in the development of progressive health-system services in order to continuously improve quality and patient safety.

Teaching activities may include regular didactic presentations, leading therapeutics conferences for fourth year pharmacy students, involvement with UC San Diego SSPPS courses (e.g., conference leader for third year therapeutics course, and, as warranted, clerkship preceptorship of PGY1 pharmacy practice residents and fourth-year UCSD pharmacy students. The ability to work independently and to supervise pharmacy students and residents will be emphasized. The resident will also be involved in a research project. Scientific writing is strongly emphasized and the preparation and submission of a manuscript suitable for publication will be expected.

Upon completion of residency, UC San Diego PGY2 Health-System Pharmacy Administration and Leadership residents will be competent in the management of pharmacy services, medication-use processes, regulatory compliance, human resources, fiscal responsibility, technology and automation, specialty pharmacy, transitions of care, etc. The program is designed to provide advanced training in both clinical and administrative practice settings. These pharmacists will also gain experience in collaborating with other health care professionals.

**Program Outcomes:**
To achieve these goals, the resident agrees to do the following for the duration of his/her post-graduate pharmacy education training at UC San Diego Health:
- Residents must be committed to the values and mission of UC San Diego Health and the Department of Pharmacy
• Develop and participate in a personal program of self-study and professional growth with the guidance from Pharmacy preceptors, advisors, staff, faculty and the Residency Program Director (RPD)

• Under the supervision of pharmacy preceptors, staff, faculty and the RPD, participate in safe, effective and compassionate patient care

• Participate fully in the educational activities of the residency program and assume responsibility for the teaching of patients, students, pharmacists, and allied health professions

• Participate in institutional programs and activities and adhere to established practices, procedures and policies of the institution

• Participate in Department of Pharmacy committees and system-wide committees as assigned by the Program Director or rotation preceptors

• Develop an understanding of ethical, socioeconomic, medical/legal issues that affect fiscally responsible pharmacy practice

• Perform all duties in accordance with the established practices, procedures and policies of the institution, its programs, clinical departments and other institutions to which the resident is assigned, and the State of California and the California Board of Pharmacy

• Strict adherence to the moonlighting policies of the Pharmacy Residency Program

• Comply with the duty hours and working conditions policies of UC San Diego Health

• Adhere to the rotation and staffing schedules as assigned

• Document all activities in a timely manner

Number of residency positions available: 1 new resident is accepted each year.

Resident Pay and Benefits: Refer to UC San Diego Health Pharmacy Residency website (https://health.ucsd.edu/specialties/pharmacy/residency/Pages/Salary-and-Benefits.aspx) for details on salary and benefits

Requirements:
On-site interviews will be held during late January through early March. This specialty residency program participates in the ASHP Resident Matching Program. All applicants must be enrolled in the Resident Matching Program. To facilitate this enrollment process and for further information, please visit the following website: www.natmatch.com/ashprmp

Requirements of Residents Prior to Starting the Program:
If matched with the UC San Diego Residency Program, matched candidates must have all of the following:

1. Graduated from an ACPE-accredited school of pharmacy with a Doctor of Pharmacy degree

2. Successfully completed an ASHP-accredited PGY1 pharmacy residency.
   a. Upon receipt of application to the program, the RPD will reach out to the PGY1 program director to assess good standing in the program
   b. A signed residency certificate will be required prior to beginning residency.

3. Obtained California pharmacy licensure prior to beginning residency.
   a. The residency is expected to begin on the last Monday of July, or first Monday of August, depending on the Human Resources orientation schedule. However, the resident must have obtained their California pharmacist license prior to beginning residency (absolute deadline to start is November 1st).
   b. If the resident is not licensed by November 1st, they will be dismissed from the residency. The residency offer may be rescinded if the resident does not take the California Board of Pharmacy law exam prior to August 1st or does not pass the California Board of Pharmacy law exam on the first attempt.

Application:
Applications for each year will be due on December 31st of the year prior. Applications should be submitted through PhORCAS and include the following:

1. Letter of intent
2. Current Curriculum Vitae with all experiential completed and anticipated rotations as well as pharmacy work experience.
3. Three electronic references are required. At least 2 of the references should be from preceptors or supervisors who can directly comment on your clinical and practice skills.

Note: Please have recommendation writers complete the electronic reference form within PhORCAS with detailed characteristic and narrative comments. One to two areas of improvement or constructive feedback that the recommender feels the candidate should continue to work on as a PGY2 resident should be identified. No separate letter of recommendation is required.
Program Structure:

Rotations (aka learning experience):
Descriptions of each learning experience can be found in PharmAcademic

- **Orientation (2 weeks)**
- **Longitudinal rotations**
  - Pharmacy Executive Management
  - Pharmacy Operations Administration
  - Business & Financial Management
  - Medication Safety & Regulatory Compliance
  - Formulary Management
  - Research
- **Block rotations**
  - Controlled Substances
  - Specialty Pharmacy Operations
  - Transitions of Care Management

Design and Schedule: The primary residency experience will be longitudinal to maximize resident exposure to management and leadership.

- Strategic Planning
- Pharmacy Operations & Leadership
- Quality Assurance & Medication Safety
- Financial Management
- Pharmacy Practice Model Design
- Informatics
- Clinical Planning and Oversight
- Human Resources Management – Interviewing, Recruitment, Retention, & Performance
- Drug Use Policy and Pharmacoeconomics
- Regulatory Oversight and Management
- Purchasing – drug distribution, supply chain, contracting
- Precepting PGY1 Residents and students
- Participation in various committees
- Staffing in Central and Decentral Pharmacy Services areas
- Special Projects

Staffing:
Staffing will be incorporated into the residency experience with weekend shifts that provide the opportunity for PGY2 residents to cover different areas and patient populations. The staffing component includes both direct patient care activities as well as Administrator-on-call (AOC). The PGY2 HSPA resident is required to staff 16 weekends (which includes 1 minor holiday weekend PLUS 1 major holiday (Thanksgiving, Christmas, or New Year’s)). To help provide more formative feedback, residents are expected to seek feedback from at least one staff member each weekend they staff. The feedback will be solicited via an online survey which can be found on the Pharmacy's intranet page.

Assessment Strategy – PharmAcademic:
The PGY2 Health-System Pharmacy Administration Residency Program uses the ASHP on-line evaluation tool called PharmAcademic, which is available for all ASHP-accredited pharmacy residency programs. This system, which is technologically supported by the McCreadie Group, supports the ASHP Residency Learning System (RLS).

Residents who are matched with this PGY2 specialty program are entered into PharmAcademic prior to their arrival in August. The incoming resident completes two pre-residency questionnaires that help the Residency Program Director (RPD) design a residency year that is tailored to the specific needs and interests of the resident:

- ASHP Standard Entering Interests Form
- Goal-Based Entering Interests Form

Residents’ schedules and assigned RLS Goals are entered into PharmAcademic. We have chosen to use the PharmAcademic evaluation tools for our Learning Experiences. For each Learning experience, the following Assessments are completed:
- Preceptor Assessment of Resident: Summative (for each Learning experience)
- Resident Self-Assessment: Summative-self (for each Learning experience)
- Resident Assessment of the Learning Experience
  - Resident assessment of Preceptor
  - Resident assessment of Learning Experience

Preceptors and residents are encouraged to exchange in on-going, daily verbal feedback throughout each rotation experience. Six-week block rotations have a mid-point summative evaluation as well. The Resident and Preceptors are trained and reminded throughout the year to complete evaluations in a thorough (quantitatively and qualitatively) and timely manner. To this end, evaluations may be used, not only as assessment tools, but as tools that Preceptors may turn to for help in guiding Residents to improve, grow and achieve the residency programs and the residents’ goals and objectives for the residency year. The RPD reviews all evaluations and solicits verbal feedback from preceptors and residents to provide guidance to help the resident maximize the residency experience.

The resident discusses their program goals and interests quarterly (Quarterly Update and Customized Training Plan) with the RPD Form to evaluate their progress in meeting the residency goals and to set or modify goals for the remaining six months of the residency program. Residents may meet as needed as their interests change throughout the year. The resident may request schedule modifications throughout the residency year and the RPD will make all efforts to accommodate these requests. Assessment tools will be adjusted as changes are made.

The Resident complete the ASHP PharmAcademic exit evaluation. Residents also are requested to complete a year-long evaluation of the Residency Program.

The results of these year-end Program evaluations are reviewed by the RPD for potential merit and potential action plans are developed in an effort to achieve continuous quality improvement.

---

**Assessment Overview (PGY2 Health System Pharmacy Administration)**

*It is the resident’s responsibility to initiate the evaluation process with each rotation preceptor prior to the end of each learning experience and to schedule at least quarterly meetings with the residency director.*

<table>
<thead>
<tr>
<th>Learning Experience</th>
<th>Frequency</th>
<th>Resident Self-Assessment (summative)</th>
<th>Preceptor Assessment of Resident (summative)</th>
<th>Resident Assessment of Preceptor and Rotation</th>
<th>RPD Assessment of Resident (Quarterly eval)</th>
<th>RPD Snapshot of Resident</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orientation</td>
<td>Per rotation</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Longitudinal Core Rotations</td>
<td>Quarterly</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Block Rotations</td>
<td>Per rotation</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electives</td>
<td>Per rotation</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grand Rounds</td>
<td>Per experience</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinical Forum</td>
<td>Per experience</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Journal Club</td>
<td>Per experience</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research</td>
<td>Quarterly</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
PGY2 Health System Pharmacy Administration Competency Areas, Goals and Objectives:

- Educational Outcome: broad categories of the residency graduates’ capabilities.
  - Outcome R1: Design, implement, and manage a safe and effective medication-use system.
  - Outcome R2: Apply contemporary quality methodology to the management of pharmacy services.
  - Outcome R3: Lead and manage the health system pharmacy’s human resources.
  - Outcome R4: Manage the health system pharmacy financial performance with the context of the broader health system.
  - Outcome R5: Leverage technology and automated systems to optimize the medication-use system.
  - Outcome R6: Demonstrate personal leadership qualities and business acumen essential to operate effectively within the health system and advance the profession and practice of pharmacy.

- Educational Goals: Goals listed under each outcome are broad sweeping statements of abilities.

- Educational Objectives: Resident achievement of educational goals is determined by assessment of the resident’s ability to perform the associated educational objective below each educational goal.

- The resident is encouraged to read detailed information about each goal at the ASHP website (click on Health System Pharmacy Administration (PGY2))
  [https://www.ashp.org/Professional-Development/Residency-Information/Residency-Program-Directors/Residency-Accreditation/PGY2-Competency-Areas](https://www.ashp.org/Professional-Development/Residency-Information/Residency-Program-Directors/Residency-Accreditation/PGY2-Competency-Areas)

- For information about Goals and Objectives Taught/Taught and Evaluated in Learning Experiences, please visiting PharmAcademic, go the ‘Reports’ tab, and click on ‘Goals and Objectives Taught/Taught and Evaluated in Learning Experiences’.

Local/Regional/National Meetings:
The residents will have the opportunity to attend various professional meetings throughout the year. The annual travel stipend is variable, based on funding. In the past, residents have received a set stipend for the year which they can use at their discretion for registration, travel, accommodations, etc. The cost of attending UC Collaborative Annual Pharmacy Leadership Conference (or an equivalent conference) will be deducted from the travel stipend, along with any other conferences the resident chooses to attend. Residents are encouraged to attend a specialty meeting (e.g. Society of Critical Care Medicine Annual Congress). Attendance at UC Collaborative Annual Pharmacy Leadership Conference (or an equivalent conference) to present their resident project is mandatory.

PGY2 Health System Pharmacy Administration Residency Requirements for Completion/Graduation:

- Successful completion, all learning experience all learning experience objectives marked satisfactory progress (SP), ACH or achieved for residency (ACHR) by the final evaluation, of all learning experiences. Any expectations of the residents that are not met or learning objectives with needs improvement (N/I) from an on-demand or scheduled evaluation will result in a meeting between the learning experience preceptor, RPD, and resident and a plan of correction will be formulated. Failure to complete the plan of correction, may result in disciplinary action.

- ≥90% of RLS goals marked “Achieved for the Residency” by the end of the year (as evaluated by individual rotation preceptors or by the RPD upon final review of the resident’s progress).

- Completion of required presentations: 1 Tech Talk, 1 Clinical Forum, 1 Grand Rounds

- Residents will be required to complete a Research Primer Course at the beginning of the residency year and demonstrate competence as defined by the Research Council. If necessary, a remediation plan will be designed for residents who do not demonstrate competence.

- Completion of a residency project; including presentation at a suitable conference/meeting and completion of a project ‘write-up’ in a manuscript suitable for publication (does not need to be submitted for publication)

- Submission of a manuscript suitable for publication

- Participation in facilitating a Therapeutics conference for P3 students

### Table: Operations, Resident Baseline Skills and Knowledge, Program Evaluation

<table>
<thead>
<tr>
<th></th>
<th>Quarterly</th>
<th>✓</th>
<th>✓</th>
<th>✓</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operations</td>
<td>Quarterly</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Resident Baseline</td>
<td>Quarterly</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Skills and Knowledge</td>
<td>Quarterly</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Program Evaluation</td>
<td>Quarterly</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>
- Twelve months minimum is allotted to successfully complete the core requirements. If the above requirements are not met in full, the residency certificate may be withheld at the discretion of the residency director.

The structure of the program is longitudinal and project based throughout the year. A primary preceptor will be identified for the PGY2 resident in each learning experience. The resident will participate as an active member of the pharmacy administration team and will have input on key hospital initiatives that affect the medication-use process. The resident will assume staffing and clinical responsibilities approximately 2-3 days per month which may include assuming the responsibility of department administrator.
The UC San Diego Health Department of Pharmacy offers a one-year specialty residency in pharmacy informatics beginning approximately August 1st of each year (see “Requirements” below).

**Scope:**
The UC San Diego Health (UCSDH) Information Services department serves all UCSDH hospitals and clinics, plus multiple independent clinics throughout the San Diego area. UCSDH collaborates with UC Irvine Health to co-manage the shared electronic health record system. The Medication Processes team, part of UCSD Information Services, partners closely with the UCSD Pharmacy department, nursing, physicians, and others, to continually maintain and optimize the electronic health record software, to promote safe and efficient ordering, dispensing, and administration of medications. This includes inpatient and outpatient operations, perioperative workflows, pharmacy automation, revenue cycle, and more.

**Purpose:**
PGY2 pharmacy residency programs build on Doctor of Pharmacy (Pharm.D.) education and PGY1 pharmacy residency programs to contribute to the development of clinical pharmacists in specialized areas of practice. PGY2 residencies provide residents with opportunities to function independently as practitioners by conceptualizing and integrating accumulated experience and knowledge and incorporating both into the provision of patient care or other advanced practice settings. Residents who successfully complete an accredited PGY2 pharmacy residency are prepared for advanced patient care, academic, or other specialized positions, along with board certification, if available.

**Program Description:**
The UC San Diego Health PGY2 Pharmacy Informatics Residency program equips its graduates with the skills and experience to fulfill the role of a specialist in pharmacy informatics, or to function as a general source of informatics knowledge, skills, and abilities needed for pharmacy information technology, automation, and data management. Combined with clinical and operational experience, graduates will be prepared to understand and analyze operational and clinical needs, propose and implement solutions that improve patient care, and monitor and report outcomes related to those solutions.

PGY2 residents will function as members of the Medication Processes team within the Information Services department. As a member of this team, residents are responsible for successfully completing Epic training. The resident will resolve requests and incidents related to the EHR, complete optimization projects, perform system updates, participate in committees such as Clinical Decision Support and Medication Alerts, perform user training and education as needed, help precept students and residents, participate in the on-call rotation, complete at least one major project suitable for presentation at an Epic conference, fulfill staffing responsibilities in order to further develop clinical and operational experience, and to serve as a front-line liaison to pharmacy users. Non-EHR informatics experience gained may include helping manage infusion pumps, automatic dispensing stations, and retail pharmacy systems. Residents will learn to manage multiple simultaneous work efforts, all with competing priorities and different stakeholders.

**Number of residency positions available:** One new resident is accepted each year.

**Resident Pay and Benefits:** Refer to UC San Diego Health Pharmacy Residency website (https://health.ucsd.edu/specialties/pharmacy/residency/Pages/Salary-and-Benefits.aspx) for details on salary and benefits

**Requirements of Residents Prior to Starting the Program:**
If matched with the UC San Diego Residency Program, matched candidates must have all of the following:
1. Graduated from an ACPE-accredited school of pharmacy with a Doctor of Pharmacy degree
2. Successfully completed an ASHP-accredited PGY1 pharmacy residency.
   a. Upon receipt of application to the program, the RPD will reach out to the PGY1 program director to assess good standing in the program
b. A signed residency certificate will be required prior to beginning residency.

3. Obtained California pharmacy licensure prior to beginning residency.
   a. The residency is expected to begin on the last Monday of July, or first Monday of August, depending on the Human Resources orientation schedule. However, the resident must have obtained their California pharmacist license prior to beginning residency (absolute deadline to start is November 1st).
   b. If the resident is not licensed by November 1st, they will be dismissed from the residency. The residency offer may be rescinded if the resident does not take the California Board of Pharmacy law exam prior to August 1st or does not pass the California Board of Pharmacy law exam on the first attempt.

Application:
All applicants must be enrolled in the Resident Matching Program. To facilitate this enrollment process and for further information, please visit the following website: www.natmatch.com/ashprmp. Applications will be accepted when PhORCAS opens and due by December 31st. Applications should be submitted through PhORCAS and include the following:
1. Letter of intent:
2. Current Curriculum Vitae with all experiential completed and anticipated learning experiences as well as pharmacy and non-pharmacy work experience.
3. Three electronic references are required. At least two of the references should be from preceptors or supervisors who can directly comment on your clinical practice skills.
   Note: Please have recommendation writers complete the electronic reference form within Phorcas with detailed characteristic and narrative comments. One to two areas of improvement or constructive feedback that the recommender feels the candidate should continue to work on as a PGY2 resident should be identified. No separate letter of recommendation is required.

Interviews will be held late January through early March of the year for which candidates are applying.

Program Structure Academic Year:
Descriptions of each learning experience can be found in PharmAcademic

- Orientation and staffing training – 2-4 weeks.
- Epic proficiency training – 6-9 weeks, concurrent with staffing training
- Scheduled (block) learning experiences
  - EHR Core I – 8-10 weeks
  - EHR Core II – 8-10 weeks
  - EHR with CDS Focus – 8 weeks
  - EHR with Amb Care Focus – 10 weeks
- Longitudinal learning experiences
  - Staffing, On-Call, and Duty Hours (12 months)
  - Research and Analytics (12 months)
  - Leadership (10 months)
  - Pharmacy Automation (10 months)
  - Medication Safety (10 months)
- Elective learning experiences
  - Oncology (Beacon) – longitudinal (6 months)

Major Project:
As part of the longitudinal learning experience, the resident will have project weeks protected up to 50% from other work. This is to facilitate completion of major milestones. The resident must complete a research project to be presented at the UC Collaborative Annual Pharmacy Leadership Conference. A Resident Research Primer Course has been developed by the UC San Diego Health Research Council to coach residents through the various aspects of the research process. PGY2 critical care residents who have not previously completed the Research Primer Course are required to attend.

Committees and Meetings:
As required by various learning experiences, the resident may participate in several committees throughout the year including Medication Alerts, Safe Medication Practices, Transitions of Care, Pain Management, Order Sets, and Clinical Decision Support.

**Staffing:**
The PGY2 resident will be required to work 16 weekends per year, a combination of pharmacy staffing (10 weekends) and call for the Medication Processes team (6 weeks). This will include 1 minor holiday AND 1 major holiday (Thanksgiving, Christmas, or New Year’s). To help provide more formative feedback, residents are expected to seek feedback from at least one staff member each weekend they staff. Feedback will be solicited via an online survey.

The PGY2 resident will be required to cover call for the Medication Process team for six one-week periods during the academic year. This involves triaging and responding to incidents assigned to the Medication Processes team during that week.

**Vacation:**
All vacation requests should be documented with a leave adjustment form, emailed to the RPD or coordinator [here](https://ishare.ucsd.edu/sites/RX/HR%20documents/Leave_Adjustment_Form.pdf) before the time is taken.

**Teaching:**
Effective education opportunities which will be evaluated and will include grand rounds, journal clubs (1 required during residency), in-services (as possible or as designated in the learning experience description), and teaching opportunities.

- **Grand Rounds:** The resident will deliver a 1-hour CE lecture to the pharmacy staff regarding a topic in informatics. Grand Rounds presentations need to be presented to the project preceptor at least two weeks in advance for feedback and comments. Failure to do so will result in delay of the presentation. A full ‘run-through’ presentation must be scheduled at least one week in advance of the planned presentation in order to provide a seamless educational lecture. Please refer to Appendix J in the Residency Manual for more information and evaluation strategies. An on-demand PharmAcademic evaluation will be used to track Grand Rounds completion.

- **Informatics Journal Clubs:** Residents are required to present one journal club presentation during the year at our monthly Informatics journal club. Journal Club presentations need to be presented to the project preceptor at least one week in advance for feedback and comments. An on-demand PharmAcademic evaluation will be used to track journal clubs.

- **In-services:** When needed, residents will provide in-services to pharmacy and other staff, related to new system functionality. More information can be found in learning experience descriptions (see PharmAcademic).

- **School of Pharmacy course lectures:** Residents will prepare and give a lecture to, or provide other instruction for, students in Therapeutics, Informatics, or other courses.

**Local/Regional/National Meetings:**
The residents will have the opportunity to professional meetings. The annual travel stipend is variable, based on funding. In the past, residents have received a set stipend for the year which they can use at their discretion for registration, travel, accommodations, etc. The cost of attending UC Collaborative Annual Pharmacy Leadership Conference (or an equivalent conference) will be deducted from the travel stipend, along with any other conferences the resident chooses to attend. Residents are encouraged to attend a specialty meeting (e.g. Epic XGM). Attendance at UC Collaborative Annual Pharmacy Leadership Conference (or an equivalent conference) to present their resident project is mandatory.

**Assessment Strategy – PharmAcademic:**
The PGY2 Pharmacy Informatics Residency Program uses the ASHP on-line evaluation tool PharmAcademic, which is available for all ASHP-accredited pharmacy residency programs. This system, which is technologically supported by the McCreadie Group, supports the ASHP Residency Learning System (RLS).

Residents who are matched with this PGY2 specialty program are entered into PharmAcademic prior to starting the residency. The incoming resident completes two pre-residency questionnaires that help the Residency Program Director (RPD) design a residency year that is tailored to the specific needs and interests of the resident:

- **ASHP Entering Interests Form**
Entering Objective-Based Self-Evaluation

The RPD uses the ASHP Entering Interest Form and Entering Objective-Based Self-Evaluation form to create residents' customized training plan. The Residency Requirement Checklist and Customized Training Plan will be discussed and modified (as necessary) through a collaborative effort between the RPD and resident. In addition, the resident may request schedule modifications throughout the residency year and the RPD will make all efforts to accommodate these requests. Assessment tools will be adjusted as changes are made. The RPD will share changes to the Residency Requirement Checklist and Customized Training Plan via PharmAcademic automatic emails to scheduled preceptors.

Residents' schedules are entered into PharmAcademic. For each learning experience, the following assessments are completed:

- Preceptor Assessment of Resident: Summative (for each learning experience)
- Resident Self-Assessment: Summative-self (for each scheduled block learning experience)
- Resident Assessment of the Learning Experience
  - Resident assessment of Preceptor(s)
  - Resident assessment of learning experience

Preceptors and residents are encouraged to exchange in on-going, daily verbal feedback throughout each learning experience. Residents are expected to provide constructive feedback to the preceptor in their PharmAcademic evaluation at the end of the learning experience. This feedback, along with Preceptor self-evaluation is helpful in developing worthwhile and relevant preceptor development programming. The Resident and Preceptors are trained and reminded throughout the year to complete evaluations in a thorough (quantitatively and qualitatively) and timely manner (within 7 days of learning experience end). To this end, evaluations may be used, not only as assessment tools, but as tools that preceptors may turn to for help in guiding residents to improve, grow and achieve the residency programs and the residents’ goals and objectives for the residency year. The RPD reviews all evaluations and solicits verbal feedback from preceptors and residents to provide guidance to help the resident maximize the residency experience.

Residents are asked to complete a program evaluation during the 3rd quarter. Feedback will be discussed at the PGY2 Pharmacy Informatics RAC meeting and agreed upon changes will be incorporated into the next academic year structure. Additionally, residents will be required to complete an exit Objective-Based Residency Self-Evaluation.

PGY2 Competency Areas, Goals and Objectives (2017 Standard):

- Competency Areas: broad categories of the residency graduates’ capabilities.
  - R1: Informatics Fundamentals: Standards and Best Practices
  - R2: Information Technology and Automation
  - R3: Clinical Decision Support
  - R4: Data Analytics
  - R5: Project Management
  - R6: Teaching, Education, Dissemination of Knowledge, and Evaluation of Learning Activities
  - R7: Leadership and Management

- Educational Goals: Goals listed under each outcome are broad sweeping statements of abilities.
- Educational Objectives: Resident achievement of educational goals is determined by assessment of the resident’s ability to perform the associated educational objective below each educational goal.
- The resident is encouraged to read detailed information about each goal at the ASHP website (click on Informatics – Effective 2017) https://www.ashp.org/Professional-Development/Residency-Information/Residency-Program-Directors/Residency-Accreditation/PGY2-Competency-Areas
- For information about Goals and Objectives Taught/Taught and Evaluated in Learning Experiences, please visiting PharmAcademic, go to the ‘Reports’ tab, and click on ‘Goals and Objectives Taught/Taught and Evaluated in Learning Experiences’.

PGY2 Pharmacy Informatics Residency Requirements for Completion/Graduation:

- Must be licensed as a Pharmacist in the State of California prior to the start date of the PGY2 Residency
Appointment offer will be rescinded if the resident:
  - is not licensed by November 1st
  - does not take the California Board of Pharmacy law exam prior to August 1st
  - fails on the first attempt

- Complete all evaluations in PharmAcademic*
- Complete Residency Project
  - Abstract
  - Platform Presentation
  - Manuscript suitable for publication - does not have to be submitted or accepted.
- Staff 10 weekends
- Grand Rounds presentation
- Research Primer course
- Journal Club presentation
- Teaching opportunity
- Cover on-call for 6 weekends
- Obtain Epic Willow Inpatient Proficiency within 75 days of start date
- Successful completion of all learning experiences **
- Minimum of 90% of residency required objectives marked ‘Achieved for residency (“ACHR”)’ with 100% of Competency Area R1: Patient Care "ACHR"

*Successful completion requires co-signature of RPD in PharmAcademic

**Successful completion: all learning experience objectives marked satisfactory progress (SP), ACH or achieved for residency (ACHR) by the final evaluation, of all learning experiences. Any expectations of the residents that are not met or learning objectives with needs improvement (N/I) from an on-demand or scheduled evaluation will result in a meeting between the learning experience preceptor, RPD, and resident and a plan of correction will be formulated. Failure to complete the plan of correction, may result in disciplinary action, up to and including dismissal.

Note: All Program requirements of the Trainee must be completed within three months post-residency to have the Certificate of Completion conferred.
Appendix K

Guidelines for Pharmacy Presentations

Presentations provide an opportunity for residents to refine their teaching style, disseminate important information, create educational materials, and manage deadlines while multitasking other responsibilities. Skills learned here will be valuable in almost all careers as a pharmacist.

Residents are required to give educational presentations to a variety of health care professionals throughout their residency year. Details of most presentations are listed below. On-demand learning opportunities, which are not described below, may arise throughout the year and the preceptor or RPD will explain each opportunity to the resident. At minimum, each presentation should identify the name of the resident and preceptor or RPD, as appropriate; date of the presentation; email contact information for the resident and preceptor/RPD; and two to three keywords for the presentation. Whenever possible, residents should avoid trade names and undefined abbreviations in their presentations.

Each resident is expected to complete the Education Calendar located on iShare and upload presentations in PharmAcademic, as instructed by the RPD.

- File names for all presentations should include the following items: Title_Type of Presentation_Name_Date.
  - For example: Impact of Moderate Hyperchloremia Outcomes in ICH Patients Treated with CI Hypertonic Saline_Journal Club_Benny Yau_2017.12.12

Each presentation should include the following information:

- Identify the presenter (full name and credentials)
- Date of the presentation
- Email contact information for the presenter; if a resident is presenting, the name and email of their preceptor should also be included
- Residency program (if resident is presenting)
- 2-3 keywords that describe what the presentation is about

General Helpful Hints:

- Be familiar with all applicable information but only present pertinent information to convey your take-home learning points
  - For patient-based presentations (clinical forum or M&M), this may include: important patient background information, medication list, pertinent labs, clinical progress, discharge plan.
  - For didactic discussions (journal club or grand rounds) be familiar with: important background information, previous studies conducted, anticipated publications, current standard of practice
- Get the experts involved when preparing the presentation
- Encourage audience participation that is appropriate for the format. Ask questions to generate discussion or provoke critical thinking.

Pharmacy Presentations consists of the following formats: Grand Rounds, Journal Club, Morbidity and Mortality (M&M), Nursing In-Service, and Clinical Forums.

Grand Rounds
Journal Club
M&M
Nursing In-Service
Clinical Forums
Grand Rounds Continuing Education Series

A Grand Rounds topic can be on any controversial disease state treatment approach, therapeutic dilemma, new drug/indication, or critical evaluation of new guidelines. Literature evaluation is a required component of the presentation. Pharmacists and pharmacy technicians can receive CAPE-accredited CE’s for attending your Grand Rounds.

IMPORTANT POINTS

- The live CE program is available to all pharmacy departments in the UC Collaborative. It is expected that you will prepare a high-quality presentation.
- Adhere to the timeline and submit all documents/files on time. You are responsible for submitting a timeline to your preceptor and adhering to deadlines. Be respectful of your preceptors’ time and allow ample time for them to provide feedback at all stages of the program development.
- Start early and be in communication with the CE committee, RPD, and content preceptor about your progress.
- A change to the live presentation date will not be considered unless it is in the event of illness or other unavoidable circumstances. Change requests must be approved by the CE chair and your RPD. Inadequate preparation is not an acceptable reason for postponement.
- The presentation title must be submitted on time (4 weeks prior to the presentation). If this date is missed, participants may not receive CE credit.
- Prior to the live presentation, ensure that all required documents are uploaded onto the iShare calendar entry.
- The live presentation and presentation recording must be at least 50 minutes long.
- Be familiar with navigating the audio/video technology used during the presentation.

CONTACTS

- Lillian Udom, PharmD (Chair and Hillcrest contact): ludomphonkul@health.ucsd.edu
- Christina Le, PharmD (La Jolla contact): chl087@health.ucsd.edu
- Chris Smith (PGY1 Residency Coordinator): cjs002@health.ucsd.edu
- Marcie Lepkowsky-Harvey, PharmD (PGY1 Acute Care RPD): marciel@health.ucsd.edu
- Shanna Block, PharmD (BCOP review programs only): sblock@health.ucsd.edu

PREPARATION TIMELINE

Contact content preceptors as soon as possible to assure their availability. Note that the Presentation Outline is due to the preceptor at least 10 weeks prior to the presentation date.

You are responsible for constructing a timeline that works for you and your preceptor. Submit the proposed timeline to your potential preceptor and assure that they are available to review your work within the timeline and due dates.
When creating a timeline, be mindful of the submission deadlines outlined below for all documents, assuring adequate time for preceptor review and revisions prior to submission to the Committee. All documents (except for CV) should be reviewed by preceptors prior to submission to the CE Committee. Although the timeline should reflect the needs of the presenter and preceptor, all due dates for submissions are firm.

All documents must be approved by your content preceptor prior to submission to the CE Committee, except for CV.

<table>
<thead>
<tr>
<th>At least 12 weeks prior</th>
<th>At least 10 weeks prior</th>
<th>At least 8 weeks prior</th>
<th>At least 4 weeks prior</th>
</tr>
</thead>
<tbody>
<tr>
<td>Due date: <strong>/</strong>/____</td>
<td>Due date: <strong>/</strong>/____</td>
<td>Due date: <strong>/</strong>/____</td>
<td>Due date: <strong>/</strong>/____</td>
</tr>
<tr>
<td>□ Identify topic and preceptor</td>
<td>□ DUE: Submit presentation outline to preceptor for review. Include general structure and key studies.</td>
<td>□ DUE: Submit presentation outline to CE committee</td>
<td></td>
</tr>
<tr>
<td>□ Start research and prepare presentation outline</td>
<td>□ DUE: Submit Course Description to preceptor for review</td>
<td>□ DUE: Submit Course Description to CE Committee</td>
<td></td>
</tr>
<tr>
<td>□ DUE: Submit finalized timeline to RPD/preceptor once finalized via Docusign: <a href="https://www.docusign.net/Member/PowerFormSigning.aspx?PowerFormId=3dad410f-c6b8-49fd-9b38-0104451f4f9e&amp;env=na1&amp;acct=6371e373-11ff-4359-aa24-bf2ccbdcc944&amp;v=2">https://www.docusign.net/Member/PowerFormSigning.aspx?PowerFormId=3dad410f-c6b8-49fd-9b38-0104451f4f9e&amp;env=na1&amp;acct=6371e373-11ff-4359-aa24-bf2ccbdcc944&amp;v=2</a></td>
<td>□ <em>Submit documents only after incorporation of preceptor feedback and completion of revisions</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>□ Reserve presentation slot on the ishare Pharmacy Education Activities Calendar</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Deadline may be extended based on CE Committee confirmation.*
| At least 1 week prior | □ DUE: Complete slide revisions. Submit to preceptor  
□ Obtain QR code from Chris or Christina  
□ DUE: Submit coversheet and CV to CE Committee – also post to calendar |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Due date:<strong>/</strong>/____</td>
<td></td>
</tr>
</tbody>
</table>

| At least 1 day prior | □ DUE: Slides (FINAL) to CE Committee – also post to calendar**  
□ DUE: Presentation recording to CE Committee |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Due date:<strong>/</strong>/____</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Day of presentation</th>
<th>□ Ensure all fields are completed on calendar entry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Due date:<strong>/</strong>/____</td>
<td></td>
</tr>
</tbody>
</table>

- ** ensure 1st slide includes: title, presenter name/email, preceptor name/email
REQUIRED DOCUMENTS

- Coversheet
- Slide Presentation
- Slide presentation with voice recording formatted to be downloadable to YouTube (mp4). The CE committee is responsible for posting. This should be completed prior to the live presentation. **Assure that the recording is at least 50 minutes long.**
- Current CV, including pharmacist licensure (if obtained)

Coversheet Components

- Course description
  - A three-sentence description including background information, statement of the problem addressed, and a statement of what the program will address
- Educational Goals Statement
  - A “goal statement” provides the reason the course is being taught. The following is an example of a goal statement (please note the general nature of this statement):
  - EXAMPLE: Describe the physiological changes that may occur during a myocardial infarction.
- Educational Objectives
  - “Objectives” expand on the goal statement by detailing participant performance, conditions of learning, and methods for measuring learning.
  - EXAMPLE: List five signs of congestive heart failure.
- Assessment Questions
  - **Have at least one question for each objective, minimum of 5 total**
  - A minimum of 3 questions must be multiple choice. The rest may be true/false.
  - Questions should be listed in the same order as the objectives
  - Include slides containing the questions and discuss the correct answer as part of the presentation
- Reference
  - List full citations for all references used

Slides

- Avoid text-heavy slides (many lines, small font)
- Minimize text-only slides, especially several in a row
- Obscure patient identity; never use the patient’s name, initials or medical record number in a presentation; this is a clear HIPAA violation. Dispose of all patient-identifying materials in the Confidential Documents Trash waste bins
- Include pertinent citations on all slides
- Include page numbers
- Remember to incorporate Assessment Questions into the presentation
Faculty Biographies (CV)

- Faculty biographies should be detailed and indicate suitable expertise in the field addressed by the continuing education program to merit instructorship.
- Please be sure that it is updated, reflecting pharmacy school graduation, training, and licensure

OTHER INFORMATION

Tips on a successful presentation

- Select a subject that is current and of interest to the audience. The topic/question must be focused and applicable to pharmacists’ practice. Straight-forward topics lacking depth do not attract an audience.
- Keep your preceptor involved in developing the content and the presentation
- Be enthusiastic about your topic; this is the most important attribute of a good presentation! If you’re not enthusiastic about your topic, your audience certainly won’t be either.
- Think about your hook. Pose a question or describe the dilemma.
- Use each slide as a jumping-off point for discussion, not as the complete thought. Do NOT just read your slides! This is the surest way to sabotage your talk.
- Be sure all components on the slide are visible from the audience member’s seat
- Arrange a little diversion such as a change in format or audience participation (consider inserting your test questions) about every 15 minutes
- Familiarize yourself with the features of Zoom/AV setup before your presentation day

Handling questions from the audience

- Have the audience save questions until the end of your presentation
- Before responding, repeat the question to assure everyone heard the question
- If you don’t know the answer, don’t make one up; refer to an expert that may be in the audience, or offer to investigate the question for a later response
- Thank the audience, your preceptor and the CE committee

Moderator/Preceptor

- Identify a pharmacist to help develop content and the presentation
- CE Committee members will also provide feedback on suggested content
- A moderator from the committee will be either in person or online to assist with technical issues at the live presentation

Evaluation

- The CE committee will provide the evaluation tool (Qualtrics survey)
Sample Cover Sheet for Grand Rounds

Title Here
Speaker Name, PharmD
Speaker Credential (ie PGY1 Acute Care Pharmacy Practice Resident, UC San Diego Health)

UC San Diego Health Department of Pharmacy
Dates (include all presentation dates)

Course Description: Three sentence description of the topic (see example)
Vancomycin is a glycopeptide antibiotic that is widely used in the treatment of gram positive infections as well as for empiric coverage when the cause of infection is unknown. While it is understood that vancomycin can be nephrotoxic at supratherapeutic doses, it is less clear what other factors may contribute to the development of AKI in these patients. This course will review current literature to evaluate the degree to which concomitant antibiotics, differing dosing strategies, and selection of pharmacokinetic monitoring methods may affect the rates of acute kidney injury in patients receiving vancomycin.

Goals: Broad Statement (see example)
To identify factors contributing to the development of vancomycin-induced AKI and to discuss monitoring and dosing strategies to reduce risk.

Objectives: Use more description verbiage and action words to identify key discussion points (see example)
1. List 4 risk factors associated with developing acute kidney injury (AKI) while on vancomycin
2. Describe the role and feasibility of AUIC monitoring in clinical practice
3. Compare and contrast the differences between intermittent infusion and continuous infusion of vancomycin and their impact on nephrotoxicity
4. Explain how pharmacists can play a key role in reducing the risk of vancomycin induced nephrotoxicity

Test Questions: Create 5-7 questions. Each objective identified should have at least one test questions associated with it. Minimum is five (5) questions, up to two (2) may be T/F (see example)
1. Which of the following is NOT a risk factor for developing vancomycin-induced nephrotoxicity?
   a. Total daily vancomycin dose > 4g
   b. Duration of therapy > 7 days
   c. High serum trough levels > 15 mg/L
   d. Concomitant use of meropenem

2. True/False: The broth micro-dilution method of determining minimum inhibitory concentration (MIC) is more sensitive than the E-test method.

3. According to published literature, the likely area under the curve (AUC) threshold for nephrotoxicity is:
a. >500  
b. >700  
c. >1100  
d. >1500

4. The 2009 IDSA/ASHP recommends targeting which of the following parameters for serious infections?
   a. Vancomycin peaks > 40 mg/L  
b. Vancomycin troughs = 15 – 20 mg/L  
c. AUC/MIC > 300  
d. Time > MIC = 90%

5. True/False: Vancomycin troughs > 15 mg/L are always required to achieve an AUC/MIC > 400

**Answers:**
1. D  
2. False  
3. B  
4. B  
5. False
Journal Club

Overview

Journal Club is generally on Tuesdays at 2PM. Resident(s) will present an article that they have chosen and has been approved by an advisor. The summary of the article will be brief in nature (generally <15 minutes) allowing for active discussion of the Population, Intervention, Endpoints, Statistics (PIES) analysis and conclusions in the remaining time. A handout is required, with a complete PIES analysis for the presenter’s version (the audience version should have a blank PIES analysis page which they will fill out independently). Information on what PIES analysis is and how to complete one can be found on iShare (Pharmacy Presentations -> Journal Club or Journal Club Folder on iShare).

The residents will work with the RPD and their preceptors on journal club presentations. Attendance is mandatory, unless patient care activities prohibit or otherwise directed by resident’s RPD.

Contacts

Craig Stevens, PharmD: c2stevens@health.ucsd.edu

Procedure

Presenters MUST (PGY1)/are encouraged to (PGY2) select a faculty/preceptor advisor (content specialist) who will discuss the article and analysis with them ahead of the presentation date. The preferred subject matter for journal articles is medications and pharmacotherapy. The preferred journal format is a randomized controlled trial; however case reports and retrospective review articles may be considered. Please check with your preceptor if you have any doubts or reservations regarding your article.

A suggested article list can be found on iShare (Journal Club Folder, as described above). The resident should also refer to a list of suggested journals:

- Annals of Internal Medicine
- Annals of Pharmacotherapy
- Clinical Infectious Diseases
- Chest
- Circulation
- Critical Care Medicine
- Journal of Pediatrics
- Journal of the American Medical Association
- New England Journal of Medicine
- Pharmacotherapy
- Other, specific to specialty and/or interest

Presentation format:

Background (~5 min)

- Review of pertinent background information and studies
- Why this article is worth discussing
Overview (~5-10 min)

- Presentation of the author’s hypothesis and null hypothesis
- Report study methods, inclusion and exclusion criteria, endpoints
- State statistical methods used for analysis
- Describe results and author’s conclusions

Analysis (remainder of time)

- Facilitate active discussion of the study’s strengths and weaknesses, using the PIES format
- State your own conclusion
- Discuss the study’s applicability and describe its potential impact at UC San Diego Health

Timeline

| At least 3 weeks prior | Select article and advisor (content specialist). An advisor may be selected from personal experience or the Special Interest Directory on iShare |
| At least 2 weeks prior | Schedule a time within the next week to meet with your advisor to discuss the article |
| At least 1 week prior | Review pertinent literature (index trial and background trials) |
| Day of presentation and follow up | Add journal club (and required information) to iShare Pharmacy Activities Calendar |

| At least 3 weeks prior | Give advisor a copy of your completed journal club handout and analysis |
| At least 2 weeks prior | Follow up with your advisor over the next week regarding suggested edits and to discuss any questions you have regarding the article |
| At least 1 week prior | Email your advisor and journal club moderator (if assigned) and RPD a copy of your final journal club handout including PIES analysis |
| Day of presentation and follow up | Attach a copy of the PDF of the selected article and your journal club handout (without PIES analysis) to the iShare calendar using naming standards. |

- Have a great presentation!
- Upload PIES analysis and number of attendees to iShare calendar
Morbidity and Mortality

Overview

Morbidity and Mortality (M&M) Conferences provide a forum for open discussion of patient safety problems. The intent of the M&M conference is to inform frontline providers about adverse events that occur at the health system and to engage their input in system improvements, thereby encouraging reporting and promoting systems-based thinking. Preparing an M&M conference provides an opportunity to discuss many of the most interesting and challenging cases. A well-organized M&M conference creates a lasting impression for the attendees. Most importantly, these conferences can ultimately improve the care of the patients who entrust us with their care.

UC San Diego promotes a culture of safety by:

- Displaying a commitment to create and support safe systems
- Providing an atmosphere in which individuals feel free to identify and describe known safety threats and errors without fear of unjust blame or reprisal
- Examining known safety threats and errors with openness, honesty, and respect for individuals and the complexity of organizations and systems
- Not holding individuals personally accountable for system flaws over which they have no control
- Minimizing hierarchies so that staff at all levels feels able to respectfully question the contributions of other disciplines to error-prone processes

This culture of safety emphasizes "learning rather than blame"; errors are used as the basis for improvement.

Contacts

Sally Rafie, PharmD: srafie@health.ucsd.edu

Procedure

Case Selection:

The Medication Safety Pharmacist Specialist, Dr. Sally Rafie, will help residents select cases for presentation with appreciable morbidity or mortality [actual harm (i.e., death, other complication) or potential harm]. These cases will be selected from UC San Diego’s iReport system. Other cases may be suggested for consideration, but must also be reported directly into the iReport system.

Upon case selection, please add to the Pharmacy Activities Calendar. Once completed, the presentation should be attached to the Pharmacy Activities Calendar. Please ensure identifiable patient information has been taken out the presentation.

Case presentation should be 20-30 minutes, including discussion and questions.

The presentation should be prepared using PowerPoint. Prepare objectives that can be used to structure the presentation. The slide show should be complete and presented to the preceptor at least one week before the scheduled conference date. A one-page handout may be provided.

The first part of the presentation is to describe the case as it presented from the pharmacists perspective and was initially evaluated, to include:

- Identification
- Chief Complaint
- Brief history of the present illness
- Significant past medical history and medications
- Appropriate family, social, developmental, and diet histories
- Physical examination, Laboratory studies, Radiology studies
Helpful tips:

- Provide enough information to generate discussion; remember not to give key information or the diagnosis/decisions away; rather, ask the audience to commit to a course of action (by show of hands) at key junctures of the case (e.g. “how many of you would ____ at this point?”)
- Request audience input regarding diagnostic studies and therapy decisions; initially show medication lists or lab results without interpreting them; later, you may go back to point out abnormalities after the audience has committed to a course of action using their own interpretations

The second half of the case should discuss the hospital course, describe the evaluation and decision-making. The format of this presentation is NOT to provide a didactic lecture on the presented topic.

Helpful Tips:

- Teaching points should be brief and pertinent to pharmacy practice
- Emphasize solutions to improve future care; if there was a bad outcome, it is important not to place blame on the individuals involved but present cases anonymously to enhance teaching;
  - Focus on system problems that contribute to the medical error eliminating personal embarrassment
  - It is useful to discuss the many unique aspects of our practice environment that predispose to medical mistakes, including:
    - multi-tasking
    - frequent interruptions during shifts
    - inadequate communication and continuity during shift change
    - varying availability of diagnostic studies
    - patient volume

You may include a discussion of your thought process including interpretation of policies and evidence-based guidelines used. Other things to include in your presentation:

- Emphasis of clinical reasoning behind actions
- Literature reviewed in context and references

A one-page hand-out or synopsis may be used at the discretion of Dr. Rafie; cover the epidemiology, differential diagnoses, and management; cite any recent or “landmark” articles regarding the diagnosis or treatment and have copies of the article for attendees (distribution of key articles via pdf files electronically saves a lot of paper and copying time)

**Moderator**

A clinical pharmacist will serve as the preceptor and moderate the conference as needed.

**It is paramount that you invite other healthcare providers (i.e., physicians, nurses, etc.) that have been involved in the case.**

**Evaluation**

The resident is responsible for bringing 20 evaluation forms [found on Sharepoint] preprinted with name/ title/date or provide electronically. Attendance records will be kept and an evaluation form will be filled out by each conference attendee. A copy of the evaluations should be given to your RPD.
Related Reading

- Using Patient Safety Morbidity and Mortality Conferences to Promote Transparency and a Culture of Safety in The Joint Commission Journal on Quality and Patient Safety
- The Joint Commission Framework for a Root Cause Analysis and Action Plan

Timeline

| At least 2 weeks prior __/__/____ | □ Select case  
□ Add required elements to the iShare Pharmacy Activities Calendar |
|-----------------------------------|-------------------------------------------------------------|
| Day of presentation and follow up __/__/____ | □ Have a great presentation!  
□ Update iShare calendar with final presentation, number of attendees, other elements |
Clinical Forum

Overview

Clinical Forums provide an opportunity for open discussion of unique or interesting patient problems. The intent of the clinical forum is to inform frontline providers about clinical questions or problems that have taken time and effort to answer. The presentation provides an opportunity to discuss interesting and challenging points of a particular case. A well-organized clinical forum creates a lasting impression for the attendees. Most importantly, these conferences can ultimately improve the care of the patients who entrust us with their care.

Objectives

- To discuss patient outcomes for the purpose of educating staff, residents, and students
- Review relevant literature, guidelines, and other pertinent medication resources.
- Modify judgement and assessment of the clinical situation to improve outcomes on future occurrences

Contacts

Juan Toledo, PharmD: jatoledo@health.ucsd.edu
Peach Azimi, PharmD: pazimi@health.ucsd.edu

Procedure

Case Selection: Select a patient case which presented a novel clinical situation. The case presentation should be 20-30 minutes, including discussion and questions. The presentation should be prepared using PowerPoint.

The resident should prepare audience learning objectives that can be used to structure the presentation. The slide deck should be complete and presented to the preceptor at least one week before the scheduled conference date. A one-page handout may be provided. Attach presentation (in PDF form) to the Pharmacy Activities Calendar. Each file should be named per the naming standards.

The first part of the presentation is to describe the case as it was initially presented and evaluated, and should include:

- Identification
- Chief Complaint
- Brief history of present illness
- Significant (to the case only) past medical history (including family history, social history)
- Significant (to the case only) medication and diet history
- Significant (to the case only) physical exam, Laboratory studies, Radiology studies

The second half of the case should discuss the hospital course and describe the evaluation and decision making.

- You may include a discussion of your thought process including interpretation of policies and evidence-based guidelines used.

Other things to include in your presentation:

- Emphasis of clinical reasoning from case
- Contextual literature review (appropriately referenced)

Moderator
• A clinical pharmacist will serve as the preceptor and moderate the conference, as needed. The clinical pharmacist will send out an email reminder to the pharmacy staff at least a day in advance. The clinical pharmacist will also set up online broadcasting for the presenter.

Evaluation

• The resident is responsible for bringing 20 evaluation forms [found on Sharepoint] preprinted with name/title/date. Attendance records will be kept and an evaluation form will be filled out by each conference attendee. A copy of the evaluations should be given to the RPD.

Location

• Typically, Clinical Forum occurs Thursday at 2pm in the 11th floor conference room and in the 3rd floor conference room on the 3rd Thursday of the month (both at Hillcrest). The forums may also occur in LJ location TBA.

Timeline

| At least 2 weeks prior  
__/__/____ | □ Select a case, topic, title and enter in information into the iShare Pharmacy Activities Calendar |
| At least 1 week prior  
__/__/____ | □ Submit slide deck to clinical preceptor for review  
□ Attach finalized presentation to iShare calendar |
| Day of presentation  
and follow up  
__/__/____ | □ Have a great presentation!  
□ Ensure all fields are completed in iShare calendar, including number of (physical) attendees |
Nursing In-Services

Overview

Nursing in-services are assigned for several learning experiences throughout the year. Residents will work with the preceptor on nursing in-service presentations.

Contacts

Rotation Preceptor

Procedure

Residents are strongly encouraged to seek guidance from a nursing colleague(s)/pharmacy preceptor(s) for selection of relevant topics. The preferred subject matter should be nursing facing and focus on basic pharmacotherapy, medication administration, and adverse reactions.

Following the presentation, the resident, in coordination with their preceptor, are encouraged to send their finalized one-page education document to the Pharmacy Education Council for cataloging and upload to the Pharmacy Department’s Pulse page.

Residents are highly encouraged to use UC San Diego Health branded templates (can be found on Pulse).

Presentation format: PowerPoint

- Strongly consider screen shots of actions in the EMR you expect the nurses to do following your presentation; consider working with nursing colleagues to access nursing view of EMR if appropriate

One-page education

- Title
- Background
- Impact and relevance of the subject
- Goals and expectations from this education
- Footer: name, contact information, date

Timeline

<table>
<thead>
<tr>
<th>Day of presentation and follow up</th>
<th>Have a great presentation!</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>/</strong>/____</td>
<td>□ Add event to pharmacy activities calendar with number of attendees for purposes of tracking educational events provided by our department</td>
</tr>
</tbody>
</table>
Appendix L

San Diego Pharmacy Residency Leadership (SDPRL) Program Overview

Purpose:

The SDPRL is designed to develop and cultivate the pharmacy resident’s teaching and leadership skills by introducing them to contemporary health professional education topics and discussions while assisting in development of a personal teaching philosophy. Residents will attend teaching seminars, provide formal teaching experiences in clinical rotational settings, deliver one-on-one precepting and mentorship, and facilitate small group discussions and learning, to develop and refine their professional teaching and mentorship skills. Participants will receive education and guidance from experienced preceptors and leaders in the San Diego area to develop, support and encourage their life-long experience as pharmacy educators.

Over the course of the residency year participants will document their SDPRL learning and teaching activities in an electronic Teaching Portfolio. This Teaching Portfolio will include a Teaching Activity Log, which lists the resident’s educational activities, copies of pertinent content from each teaching experience, and evaluations of the resident’s teaching and facilitation skills. Participants will update and maintain their curriculum vitae (CV) in their Teaching Portfolio for the year. Participants will also develop an initial and final (end of the year) personal Teaching Philosophy which will be maintained in the Teaching Portfolio. As the participant learns and grows over the course of the program it is expected that his/her Teaching Philosophy will develop and change.

At the conclusion of the program, each participant will submit a Teaching Portfolio to the participant’s RPD to verify completion of all elements. Deficiencies will be addressed, and a plan of resolution set forth. The Teaching Portfolio will include:

- CV
- Statement of personal Teaching Philosophy (initial and final)
- Teaching Activity Log
- Completed assignments from each Teaching Module
- Copies of all teaching work (handouts, cases/case keys, PPt’s…)
- Evaluations of teaching experiences

Objectives:

At the conclusion of the Program, the participant will have:

- Developed a personal Teaching Philosophy
- Developed and maintained a Teaching Portfolio
- Maintained a Teaching Activities Log
- Prepared and delivered a minimum of five (5) small group presentations, at least one of which must include physician attendees
- Facilitated one quarter of Therapeutics Conference (Acute Care) or P4 Am Care Student Conference (Am Care)
- Prepared and delivered a minimum of one (1) Journal Club presentation
- Prepared a delivered a minimum of one (1) Morbidity and Mortality (M&M) presentation
• Prepared and delivered a minimum of one (1) Outreach presentation (may be waived due to COVID-19)
• Prepared and delivered a minimum of one (1) Tech-Talk presentation
• Prepared and delivered a minimum of one (1) Nursing in-service (Acute Care) or Family Medicine Resident Physician didactic session (Am Care)
• Facilitated a minimum of one (1) OSCE session
• Earned a Certificate of Completion by fulfilling all SDPRL and UC San Diego Health teaching requirements

To earn a Certificate of Completion at the end of the Program, participants must meet the following requirements:

• Attend all SDPRL teaching and leadership seminar sessions
  • If residents are unable to attend a session, they must work with the SDPRL facilitators and Residency Program Director (RPD) to complete a make-up assignment and reflection
• Create and maintain a personal Teaching Philosophy
• Create and maintain a Teaching Portfolio
• Complete the minimum number of assigned teaching activities as described above

Schedule of Activities:
The SDRPL schedule for the year will be shared with residents at the beginning of the training year. The schedule of activities will include dates of the required learning sessions, activity title, session leaders, and location. The schedule may change throughout the year depending on facilitator availability or other extenuating circumstances. Sessions may be in person or virtual.

Active Learning:
Participants will learn and are expected to practice Active Learning techniques and apply these to the Program assignments, learning and teaching activities. This may include but is not limited to problem solving, facilitation, case presentations and discussion, class polling, quizzing, and reflections.

Teaching Activities Log:
Participants will maintain a Teaching Activity log which summarizes all learning and teaching activities and tracks the composition of the audience, venue, date and topic. The following template may be used by the resident and RPD to assist in completing the activities for the SDPRL.

<table>
<thead>
<tr>
<th>Date</th>
<th>Activity</th>
<th>Title</th>
<th>Duration</th>
<th>Audience (# each of students, residents, technicians, preceptors/pharmacists, physicians, nurses, other)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Grand Rounds</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Journal Club</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>M&amp;M</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nursing In-service</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tech-Talk</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Appendix L Teaching Certificate Program Overview, page 2
<table>
<thead>
<tr>
<th>Outreach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small Group</td>
</tr>
<tr>
<td>Presentation/inservice</td>
</tr>
<tr>
<td>Therapeutics Conf/</td>
</tr>
<tr>
<td>Am Care Conf</td>
</tr>
<tr>
<td>(Case topics)</td>
</tr>
<tr>
<td>Additional/Other</td>
</tr>
<tr>
<td>Activity Type (# Required)</td>
</tr>
<tr>
<td>---------------------------</td>
</tr>
<tr>
<td>Outreach: Patient Directed Group Teaching (1)</td>
</tr>
<tr>
<td>Small Group Teaching (5)</td>
</tr>
<tr>
<td>M&amp;M (1)</td>
</tr>
<tr>
<td>Small Group Facilitation (1 quarter Therapeutics Conference or P4 Am Care Student Conferences)</td>
</tr>
<tr>
<td>Event Description</td>
</tr>
<tr>
<td>-------------------</td>
</tr>
<tr>
<td>Patient Case (included in Therapeutics Conference, for Acute Care program only)</td>
</tr>
<tr>
<td>Large Group Formal Presentation (1)</td>
</tr>
<tr>
<td>Journal Club (1)</td>
</tr>
<tr>
<td>Student Precepting (as assigned)</td>
</tr>
<tr>
<td>OSCE (1)</td>
</tr>
</tbody>
</table>

**NOTES:**

1. This is not an inclusive list; other audiences and teaching examples may qualify; please obtain approval from your RPD.
Appendix M

UC San Diego Health’s Preceptor Handbook for PGY1 and PGY2 Residency Programs

1. Preceptors’ Responsibilities
   Preceptors are expected to contribute to the success of residents and the program by:
   A. Providing learning experiences in accordance with ASHP Pharmacy Residency Standards
   B. Actively participating in the residency program’s continuous quality improvement processes
   C. Demonstrating practice expertise in the area precepted
   D. Demonstrating commitment to advancing the residency program, pharmacy services, and the preceptor’s own practice
   E. Updating their Academic and Professional Record, annually
   F. Updating the learning experience description, annually.
      1. Please contact RPD to coordinate updating in PharmAcademic,
      2. Utilizing the program-specific Competency Areas, Goals and Objectives (CAGOs)
   G. Participating in the program-specific RAC; as evidenced by review of monthly Residency Executive Committee (REC) collated email of program specific RAC outcomes
   H. Additional activities may include:
      1. Recognition in the area of pharmacy practice for which you serve as a preceptor, e.g. BCPS, FASHP
      2. Publications
      3. Providing education (in-services, clinical forums, grand rounds, lectures, etc.)
      4. Continually updating learning experiences
      5. Providing effective and meaningful feedback
      6. Precepting grand rounds, clinical forums, and journal clubs
      7. Participating in intra- and interdepartmental committees

2. Resident Orientation to Learning Experiences
   A. Orientation should occur at the beginning of the learning experience, ideally on the first day, and should include the following components
      1. Learning experience description overview
         a. General Description of the practice area covered during the learning experience, including Introduction to staff and work area
         b. Role of the pharmacist in the practice area
         c. Expectations of the resident
         d. List of potential topic discussions and required readings
         e. Objectives that will be taught and evaluated
         f. Required activities during the learning experience, including a resident’s expected progression consistent with the length and schedule of the learning experience
         g. Description of the evaluation process
         h. The daily activities specific to the practice area and learning experience that will support each objective
            i. Specific activities/projects related to the learning experience and associated timelines
      2. Review of
         a. Resident’s feedback from previous learning experiences and their relation to the present learning experience
         b. Resident’s strengths and weaknesses, goals
         c. Resident’s previous experience in the practice area during APPE or other learning experiences
         d. Resident’s specific interest areas
         e. When necessary, the resident’s customized training plan to identify specific objectives not yet achieved
      3. Scheduling (i.e., hours/schedule, calendar with deadlines and meetings)
      4. How preceptor will evaluate the resident and how the resident will be trained for self-evaluation skills
      5. Expectations and assignments for the resident when the primary preceptor is not scheduled to staff

3. Precepting the Learning Experience (Core Standards of Residency Preceptors)
   During the learning experience preceptors should:
   A. Provide the resident with clear and complete descriptions of learning experience objectives, activities, and expectations.
   B. Review resident’s goals for learning experience at the start of the experience and throughout as the resident becomes more comfortable in the learning environment.
   C. Clarify the priorities of daily activities.
D. Indicate to the resident the days/times when you will not be available and assign a contact person when you are not available.

E. Review resident’s role and assignments to the pharmacist serving as the contact person in the preceptor’s absence.

F. Establish a list of topics for the learning experience. Readings for these topics may be assigned or the preceptor may ask the resident to select the references. If discussion of the topic is needed, this should be communicated and scheduled with the resident and the preceptor.

G. Clarify for the resident when it is necessary to contact other pharmacists before making recommendations to physicians or other health care providers.

H. Meet with the resident on an ongoing basis for a discussion of patients, projects, topics, and to provide performance feedback.

I. Complete evaluations as required. (See Part 5. Evaluation and Feedback)

J. Ensure the resident completes and presents any required presentations, journal clubs, or projects before the end of the learning experience. If a project or presentation will be continued into another learning experience, coordinate the activities with the following preceptor to ensure the assignment will not interfere with the next learning experience.

K. Handoff the resident’s progress with the next preceptor on the resident’s schedule.

4. Preceptor Roles

A. Preceptors should appropriately select the appropriate preceptor role for each situation to ensure resident learning (see Table 1). The ASHP Pharmacy Residency Standards considers this a critical factor in the success of the residency program.

B. Over the course of the learning experience or day, the preceptor may need to pick and choose a different preceptor role depending on the resident’s past experience or baseline knowledge.

<table>
<thead>
<tr>
<th>Preceptor Role</th>
<th>Technique</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Instruction</td>
<td>Direct learners to content specific to their practice problems</td>
</tr>
<tr>
<td></td>
<td>Teach how a new piece of content relates to other pieces</td>
</tr>
<tr>
<td></td>
<td>Introduce new content in the context of solving a direct patient care problem</td>
</tr>
<tr>
<td>Modeling</td>
<td>Teach strategies to help clarify problems</td>
</tr>
<tr>
<td></td>
<td>Teach the patterns that characterize different categories of direct patient care practice problems</td>
</tr>
<tr>
<td></td>
<td>Explain out loud what you are thinking as you solve a problem</td>
</tr>
<tr>
<td>Coaching</td>
<td>Give learners opportunities to practice solving direct patient care practice problems coupled with feedback on their use of strategies</td>
</tr>
<tr>
<td></td>
<td>Provide sufficient problem-solving practice to build speed</td>
</tr>
<tr>
<td></td>
<td>Ask learners to explain out loud what they are thinking as they solve a problem</td>
</tr>
<tr>
<td>Facilitating</td>
<td>Teach learners to evaluate their own work</td>
</tr>
</tbody>
</table>

5. Evaluation and Feedback

A. The ASHP Pharmacy Residency Standards emphasize that "preceptors must provide on-going feedback to residents about how they are progressing and how they can continue to improve that is frequent, immediate, specific, and constructive.”
B. It's important to meet the learners at their level. Table 2 provides examples of conversation openers to provide feedback to residents.

Table 2. Conversation Openers for Providing Feedback to the Learner

<table>
<thead>
<tr>
<th>Example Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are your thoughts about your interaction with _____?</td>
</tr>
<tr>
<td>What was your rationale for suggesting _______?</td>
</tr>
<tr>
<td>How do you think you did on ______?</td>
</tr>
<tr>
<td>What was the most challenging experience that you had today?</td>
</tr>
<tr>
<td>Can you describe one activity or patient interaction that you performed today that made you feel proud?</td>
</tr>
</tbody>
</table>

C. Components of feedback
1. When giving feedback to learners or residents, it should be:
   a. As specific as possible, in terms of behaviors performed
      1. Statements such as; “you did great!” fail to describe behaviors they should mimic in the future.
      2. Instead try: “Timing your interventions with the resident before rounds started resulted in a higher percentage of accepted medication changes. That’s a good strategy to get things done with the medicine team.”
   b. Understood by the learner (i.e., are you making “suggestions” or mandating actions; do they understand your points?)
   c. Focused on the few most important things that need to be changed
   d. Timely (scheduled on regular basis; ASAP after a problem)
   e. In an appropriate location
   f. Designed to help the learner to develop and improve
   g. Not personally demeaning when critical
2. It is important for preceptors to focus on the items that went well and those that could be improved in a constructive conversation (see Table 3)

Table 3: A Model Conversation for Constructive Feedback

<table>
<thead>
<tr>
<th>Example Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Is this a convenient time for me to give you some feedback?”</td>
</tr>
<tr>
<td>“Let’s talk about_________”</td>
</tr>
<tr>
<td>How do you think it went?” (Listen to self-assessment)</td>
</tr>
<tr>
<td>“You did a great job on ________” (Give specific examples of strengths)</td>
</tr>
<tr>
<td>“And you could do a better job on _____” (Cite weaknesses; no “But”)</td>
</tr>
<tr>
<td>“Next time, I would like you to try_____” (Give helpful ideas)</td>
</tr>
<tr>
<td>“Could you summarize the main ideas from our discussions?” (Check for understanding)</td>
</tr>
<tr>
<td>“Let’s meet again______. Keep working on_______” (Closure for session)</td>
</tr>
</tbody>
</table>

6. Preceptor Tools
A. Use these eight tasks/tips to help facilitate learning (See Table 4)

Table 4: Eight Tasks/Tips to Help Facilitate Learning

<table>
<thead>
<tr>
<th>Question/Task</th>
<th>Tips</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discuss goals and expectations with the learner.</td>
<td>Have an orientation or debrief</td>
</tr>
<tr>
<td>Create a supportive learning environment.</td>
<td>Show enthusiasm for the subject matter and for teaching.</td>
</tr>
<tr>
<td>Motivate the learner.</td>
<td>Select tasks where learners can succeed at new skills.</td>
</tr>
<tr>
<td>Help the learner identify what is important in the situation.</td>
<td>Identify important details to focus the learner’s attention.</td>
</tr>
</tbody>
</table>
Use questions to stimulate memory and previous learning.

Supervise active practice and hands-on experience.

Generalize to the broader learning process.

Provide ongoing feedback and promote self-assessment.

Consider using Socratic dialogue

During interaction with the multi-disciplinary team, patient, or other, supervise and provide feedback to the resident.

Use "what if" problems to extend beyond cases seen.

Give prompt and constructive feedback to enhance growth.

B. Short on Time?

It's easy to feel like precepting is time-consuming. When you are short on time, try the “One-Minute Preceptor” Model in Table 3.

<table>
<thead>
<tr>
<th>Aspects of the model</th>
<th>How to apply the model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Get a commitment.</td>
<td>Ask: What is going on?</td>
</tr>
<tr>
<td>Probe for evidence</td>
<td>Ask: Why?</td>
</tr>
<tr>
<td>Teach one general point.</td>
<td>Instruct: Describe rationale for task or question.</td>
</tr>
<tr>
<td>Correct errors and make recommendations.</td>
<td>Coach: What could be done differently or modified</td>
</tr>
<tr>
<td>Reinforce positive behaviors.</td>
<td>Model:</td>
</tr>
<tr>
<td>Conclude with a plan.</td>
<td>Facilitate: Tell me how it goes when you try again.</td>
</tr>
</tbody>
</table>

C. Stimulate resident-led learning using Socratic dialogue

<table>
<thead>
<tr>
<th>5 Concepts to consider when implementing Socratic dialogue in your precepting practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Allow the resident or learner to gain or maintain comfort when being challenged in discussion – productive discomfort</td>
</tr>
<tr>
<td>2. Allow for ‘guessing’ in a safe space with the Preceptor; away from direct patient care</td>
</tr>
<tr>
<td>3. Pull back the curtain on what we are learning, why we are learning, and how this honest humility between the Preceptor and Resident develops their future practice</td>
</tr>
<tr>
<td>4. As Preceptors, we can’t learn the material for our learners, they must struggle. The ‘Righting’ reflex by giving them the right answer. Telling information doesn’t mean they’ve learned it.</td>
</tr>
<tr>
<td>5. Demystify what critical thinking is as a preceptor; have humility and allow learners to see you learn along side of them. ‘Fail forward’ with the resident.</td>
</tr>
</tbody>
</table>

Ref: Lindsay Davis, Pharm.D., Educator Essentials: Five key concepts to consider when implementing Socratic dialogue in your precepting practice.

7. Evaluation and Feedback

A. Preceptor Evaluation of the Resident

1. Provide regular, day-to-day, criteria-based feedback to give the resident information on which to shape his or her task performance. Consider “feed forward” evaluations where comments on performance are given during and immediately following a task instead of at the end of the learning experience or task (i.e., feedback).

2. Do end-of-learning experience summative evaluations by the end of learning experience and quarterly for longitudinal rotations. All evaluations for a learning experience are due within seven (7) days after the last day of the rotation.

3. A narrative commentary for each educational goal must be provided on the summative evaluation. The commentary should include an assessment of the resident’s performance, and recommendations for improvement. Please provide specific examples of how the resident accomplished specific activities.

4. Use the Activities and Criteria Links for each objective in PharmAcademic to assist and guide your comments for summative evaluations.

5. Monitor and facilitate growth in resident self-assessment skills (Resident is required to complete a self-assessment activity as assigned by each learning experience).

6. Preceptor must discuss all written evaluations with the resident. Ideally, this discussion should occur prior to submitting into PharmAcademic near the end of the learning experience.
7. The resident will complete the learning experience evaluation and preceptor evaluation. The preceptor should expect comments from the resident at least 1-2 things that can be done to improve the learning experience and/or precepting. Failure for the resident to include these types of comments on the evaluations may result in the evaluation being sent back to the resident for edit.

8. The evaluating preceptor will communicate with the oncoming preceptor any deficiencies or areas of weaknesses as well as areas that the resident performs well.

9. Preceptor, resident, and RPD must sign all evaluations.

B. Resident Evaluation of the Preceptor
   1. Throughout the learning experience, the preceptor should seek ongoing feedback from the resident about the learning experience and preceptor’s approach to the resident’s learning.
   2. Preceptors should make time for reciprocal feedback from residents on a regular and recurring basis.

8. Preceptor Selection and Development
   A. Staff pharmacists may self-identify desire to become a preceptor to the RPD. The RPDs or RAC members may identify staff pharmacists who they wish to become preceptors. Potential preceptors will be assessed by the RPD and RAC for their eligibility to become a preceptor based on the following criteria, as designated by ASHP Pharmacy Residency Standards.
   B. PGY1 Programs: Potential may be eligible if they have
      1. Completed an ASHP-accredited PGY1 residency followed by a minimum of one year of pharmacy practice experience; OR
      2. Completed an ASHP-accredited PGY1 residency followed by an ASHP-accredited PGY2 residency and a minimum of six months of pharmacy practice experience; OR
      3. Without completion of an ASHP-accredited residency, have three or more years of pharmacy practice experience.
      4. For the PGY1 programs, eligible preceptors will be identified as described above (Section 1. Preceptor Responsibilities). It is up to the discretion of the RPD to review the potential Preceptor’s Academic and Professional Record (APR) with the program’s RAC. Upon agreement of the RPD and RAC for eligibility, the pharmacist may be considered a Preceptor. If the RPD or RAC determine more training is needed, a mentor will be assigned and a Preceptor in Training plan will be developed (see Table 6. Preceptor in Training Plan).
   C. PGY2 Programs: Potential preceptors may be eligible if they have
      1. Completed an ASHP-accredited PGY2 residency followed by a minimum of one year of pharmacy practice in the advanced practice area; OR
      2. Without completion of an ASHP-accredited PGY2 residency, have three or more years of practice in the advanced practice area
      3. For the PGY2 programs, eligible preceptors will be identified as described above (Section 1. Preceptor Responsibilities). It is up to the RPD to review the potential Preceptor’s Academic and Professional Record (APR) with the program’s RAC. Upon agreement of the RPD and RAC for eligibility, the pharmacist may be considered a Preceptor. If the RPD or RAC determine more training is needed, a mentor will be assigned and a Preceptor in Training plan will be developed (see Table 6. Preceptor in Training Plan).
   D. Preceptor in Training
      1. The mentor will review orientation material and witness the trainee orienting at least one resident. The mentor will provide feedback based on the observation.
      2. All evaluations will be cosigned by the mentor with feedback regarding content and discussion of verbal feedback that the trainee provided during the rotation.
      3. The preceptor trainee will lead a topic discussion with a resident and witnessed by the mentor. The mentor should provide feedback on what went well and what could have gone better.
      4. The trainee will discuss their precepting philosophy and learning experience plan with the mentor, including reviewing the activities listed in the learning experience description and evaluating the resident on their success in mastering the activities related to the required goals/objectives of the learning experience.
      5. The mentor and trainee may benefit from discussing how to deal with topics such as training multiple learners with different learning styles and skills simultaneously, how to deal with residents (or students) who are not performing well, how to complete evaluations, how to evaluate the resident’s performance on presentations and journal clubs.
      6. Once the trainee has successfully completed all required activities, the RPD and RAC will determine when the trainee is eligible to become a primary preceptor.

Table 6. Preceptor in Training Plan
Select appropriate strategy, method, and technique to correspond to resident’s learning needs.
<table>
<thead>
<tr>
<th>Preceptor in Training Task</th>
<th>Mentor assesses trainees’ ability to:</th>
<th>Mentor sign-off</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orient a resident to a learning experience</td>
<td>Direct learners to content specific to their practice problems</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Teach how a new piece of content relates to other pieces</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Introduce new content in the context of solving a direct patient care problem</td>
<td></td>
</tr>
<tr>
<td>Modeling</td>
<td>Teach strategies to help clarify problems</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Teach the patterns that characterize different categories of direct patient care practice problems</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Explain out loud what you are thinking as you solve a problem</td>
<td></td>
</tr>
<tr>
<td>Coaching</td>
<td>Give learners opportunities to practice solving direct patient care practice problems coupled with feedback on their use of strategies</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Provide sufficient problem-solving practice to build speed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ask learners to explain out loud what they are thinking as they solve a problem</td>
<td></td>
</tr>
<tr>
<td>Facilitating</td>
<td>Teach learners to evaluate their own work</td>
<td></td>
</tr>
</tbody>
</table>

9. Preceptor Development Plan for the Residency Programs

A. General Information:
1. Preceptors are encouraged to attend program specific RAC and share precepting challenges and success
2. Preceptors are encouraged to read and apply monthly Preceptor Pearls to their practice. Previous Preceptor Pearls can be found on [https://ishare.ucsd.edu/sites/rx/preceptors](https://ishare.ucsd.edu/sites/rx/preceptors)
3. Preceptors are encouraged to seek recognition in the area of pharmacy practice for which they serve as a preceptor (e.g. board certification, Fellow status, credentialing or privileging granted by UCSDH)
4. Preceptors are encouraged to seek scholarly activities such as (resident/student) research projects, publication, giving lectures to multidisciplinary groups, and more
5. Preceptors are encouraged to actively participate in local, state or national pharmacy (or discipline dependent) organizations
6. Helpful sites for Preceptor Development include:
   1. Pharmacist Letter: [www.pharmacistletter.com](http://www.pharmacistletter.com)
   2. ASHP Preceptor Skills Center: [https://www.ashp.org/Pharmacy-Practice/Resource-Centers/Preceptor-Toolkit?loginreturnUrl=SSOCheckOnly](https://www.ashp.org/Pharmacy-Practice/Resource-Centers/Preceptor-Toolkit?loginreturnUrl=SSOCheckOnly)
   3. The Habits of Preceptors Rubric
B. On an annual basis, RPDs should review preceptor feedback from residents, discuss that feedback with the preceptor and develop a plan for ongoing individual preceptor development. The Residency Executive Committee (REC) will coordinate the appropriate RPD to review the preceptor development plan for those preceptors who work with multiple resident programs.

C. Ongoing preceptor development
   1. On a monthly basis, the REC will disseminate ‘Preceptor Pearls’ to UCSDH Pharmacy Preceptors. Preceptors will be expected to complete a one question survey verifying acknowledgement of the Preceptor Pearls. The REC will review acknowledgement and receipt of the Preceptor Pearls monthly and follow up with preceptors who have not completed the pearl.
   2. Annually, two lectures Pharmacy Department lectures will be dedicated to precepting topics. The topics will be centered on ‘wellness/burnout’ and one other pertinent topic identified annually by UCSDH Pharmacy Preceptors survey.
   3. Annually, UCSDH preceptors will participate in the UC Collaborative Preceptor Development series. Four-five presentations, activities, workshops and/or discussions are provided by the University of California System Pharmacist preceptors throughout the residency year and will address topics determined by an annual needs assessment (Qualtrics survey to all UC preceptors). CE credit will be available to those who attend and complete an evaluation. Residents will attend.
# Appendix N

## Pharmacy Residency Programs

### Research Manual (2022-2023)

#### Research Council Members

<table>
<thead>
<tr>
<th>Name</th>
<th>Email</th>
<th>Research Council Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lucas Hill, PharmD, BCACP</td>
<td><a href="mailto:luhill@health.ucsd.edu">luhill@health.ucsd.edu</a></td>
<td>1</td>
</tr>
<tr>
<td>Shannon Balcombe, PharmD, BCPS</td>
<td><a href="mailto:sbalcombe@health.ucsd.edu">sbalcombe@health.ucsd.edu</a></td>
<td>1</td>
</tr>
<tr>
<td>Jade Kozuch, PharmD, BCPS</td>
<td><a href="mailto:jkozuch@health.ucsd.edu">jkozuch@health.ucsd.edu</a></td>
<td>1</td>
</tr>
<tr>
<td>Justin Bouw, PharmD, BCACP, CDE</td>
<td><a href="mailto:jbouw@health.ucsd.edu">jbouw@health.ucsd.edu</a></td>
<td>1</td>
</tr>
<tr>
<td>Christina Le, PharmD, BCPS</td>
<td><a href="mailto:chl087@health.ucsd.edu">chl087@health.ucsd.edu</a></td>
<td>2</td>
</tr>
<tr>
<td>Craig Stevens, PharmD, BCPS [chair]</td>
<td><a href="mailto:c2stevens@health.ucsd.edu">c2stevens@health.ucsd.edu</a></td>
<td>2</td>
</tr>
<tr>
<td>Dmitri Lerner, PharmD, BCCCP</td>
<td><a href="mailto:dlerner@health.ucsd.edu">dlerner@health.ucsd.edu</a></td>
<td>2</td>
</tr>
<tr>
<td>Andrew Willeford, PharmD, PhD</td>
<td><a href="mailto:awilleford@health.ucsd.edu">awilleford@health.ucsd.edu</a></td>
<td>2</td>
</tr>
<tr>
<td>Marcie Lepkowsky, BCGP</td>
<td><a href="mailto:marciel@health.ucsd.edu">marciel@health.ucsd.edu</a></td>
<td>3</td>
</tr>
<tr>
<td>Kelly Lee, PharmD, MAS, BCPP</td>
<td><a href="mailto:kellylee@health.ucsd.edu">kellylee@health.ucsd.edu</a></td>
<td>3</td>
</tr>
<tr>
<td>Phil Anderson, PharmD</td>
<td><a href="mailto:phanderson@ucsd.edu">phanderson@ucsd.edu</a></td>
<td>3</td>
</tr>
<tr>
<td>Douglas Humber, PharmD</td>
<td><a href="mailto:dmhumber@health.ucsd.edu">dmhumber@health.ucsd.edu</a></td>
<td>3</td>
</tr>
<tr>
<td>Alicia Lichvar, PharmD</td>
<td><a href="mailto:alichvar@health.ucsd.edu">alichvar@health.ucsd.edu</a></td>
<td>3</td>
</tr>
<tr>
<td>Jennifer Mai, PharmD, BCPS</td>
<td><a href="mailto:jhmai@health.ucsd.edu">jhmai@health.ucsd.edu</a></td>
<td>4</td>
</tr>
<tr>
<td>Nimish Patel, PharmD, PhD, AAHIVP</td>
<td><a href="mailto:nipatel@health.ucsd.edu">nipatel@health.ucsd.edu</a></td>
<td>4</td>
</tr>
<tr>
<td>Janine Martino, PharmD, BCOP</td>
<td><a href="mailto:jmartino@health.ucsd.edu">jmartino@health.ucsd.edu</a></td>
<td>4</td>
</tr>
<tr>
<td>Nina Haste, PharmD, PhD, BCPS-AQ ID, BCIDP</td>
<td><a href="mailto:nhaste@health.ucsd.edu">nhaste@health.ucsd.edu</a></td>
<td>4</td>
</tr>
<tr>
<td>Helen Berhane, PharmD</td>
<td><a href="mailto:hberhane@health.ucsd.edu">hberhane@health.ucsd.edu</a></td>
<td>4</td>
</tr>
</tbody>
</table>
Research Requirements for Residency Programs

Each resident is expected to design and complete one major project under the guidance of a project preceptor during the resident year. Per residency program requirements, the resident project will be completed in addition to the medication-use evaluation (as delineated in the required competency areas, goals, and objectives per program). By the completion of the resident project, the resident should be able to achieve the ASHP learning objectives 2.2.1-2.2.6. Projects are presented at the UC Collaborative Annual Pharmacy Leadership Forum, or at a program-specific specialty meeting or conference of the RPD’s choice. The residency project is intended to help refine the resident’s skills in the areas of problem-solving, task prioritization, organization, research, study design, and data collection.

The following components are required for fulfillment of the research component of the residency program:

- Achievement of established objectives and associated learning activities set forth by the American Society of Health-System Pharmacists (ASHP) to the satisfaction of the primary research preceptor and RPD
- Abstract submission at a national, regional, and/or local conference, as decided by RPD (corresponding to individual program graduation requirements)
- Poster presentation at a national, regional, and/or local conference, as decided by the RPD (corresponding to individual program graduation requirements) CF
- Platform presentation at a national, regional, and/or local conference, as decided by the RPD (corresponding to individual program graduation requirements)
- Completion of a manuscript suitable for publication, submitted to the preceptor(s), Research Council Chair and RPD
- Completion of the Research Primer Series

ASHP Goals and Objectives and Associated Learning Activities

Each quarter, through completion of the residency project, the resident will be evaluated on their performance for the program-specific activities corresponding to the learning objectives. Objectives and associated learning activities for PGY1 and PGY2 residents may differ for each program.
Expectations and Responsibilities

Residents

All residents are expected to:

- Read the Residency Research Manual in its entirety and refer to its content throughout the year as questions related to research arise
- Schedule and meet with preceptors on a regular basis and review quarterly evaluations via PharmAcademic
- **Complete required Collaborative Institutional Training Initiative (CITI) training**
  - Under “Select Your Organization Affiliation”, type “University of California, San Diego”, then follow prompts to complete “Curriculum Group: Biomedical Research - Basic/Refresher (Stage 1 - Basic Course)”
- **Compile a project/research plan for their project**
- [projects needing IRB] **Complete IRB submission for primary preceptor review and final submission, as applicable**
- Review “**How to Get Pharmacy Data**” presentation to determine best method of obtaining data
  - If applicable: complete a [data request questionnaire](#) and upload via [Service Now](#) request
- Develop a data collection tool that includes a detailed [data dictionary](#)
- Collect and analyze data for their project/research consistent with their project/research plan
- Work with preceptors and/or the consulted epidemiologist/biostatistician to design and complete statistical analysis, when needed
- If access to statistical software (STATA/R/SPSS/etc) is needed, fill out [this form](#) for either remote or in-person (Geisel library-GIS lab) access
- Submit related abstracts and register for all conferences attended (must be reviewed by preceptor and all research group members prior to submission)
- Develop and present posters and/or platform presentation(s) for all required national, regional and/or local conferences
- Complete a [manuscript suitable for publication](#) using AJHP formatting/instructions OR instructions specific to the journal to which you intend to submit, and make appropriate revisions based on feedback
- Adhere to all project timelines and coordinate among all project stakeholders
- Escalate logistical issues regarding the research project to the research preceptor(s), Research Council and/or RPD, when appropriate
- Complete [year-end research form via Qualtrics](#)
- At the end of the residency year, upload all final documents to PharmAcademic and research folder with appropriate title
- Provide feedback to the Research Council for process improvement of the research experience

Preceptors

All preceptors are expected to:

- Submit a research idea utilizing the [submission form](#) and present the idea to residents during research orientation
- Complete quarterly evaluations on [PharmAcademic](#) based on the stated ASHP objectives and learning
activities for the research experience

- Complete quarterly progress report in PharmAcademic
- Provide guidance and technical expertise to the resident in designing and executing the project
- Complete required Collaborative Institutional Training Initiative (CITI) training prior to IRB submission
  - Under “Select Your Organization Affiliation”, type “University of California, San Diego”, then follow prompts to complete “Curriculum Group: Biomedical Research - Basic/Refresher (Stage 1 - Basic Course)”
- Oversee development of the project/research plan and submission of IRB or ACQUIRE applications
- Assist and/or oversee the resident in data collection, data analysis, and project completion (abstract, poster, manuscript, and other presentations), as needed
- Meet with the resident on a regular basis, recommended no less than monthly during project development, to discuss progress of the project
- Prior to submission to the Research Council or any meeting, review and evaluate all required protocols, presentations, abstracts, posters, and manuscripts
- Escalate logistical issues regarding the research project or the resident’s performance to the Research Council and/or RPD, when appropriate
- Provide feedback to the Research Council for process improvement of the research experience

Research Council Members

All Research Council members are expected to:

- Attend and participate in at least 50% of Research Council meetings (barring special circumstances)
- Participate in the research idea submission evaluation and approval process
- Participate in research check-ins (fall and spring), review abstracts, and review manuscript within the designated timeframe
- Participate in coordination and evaluation of the Research Primer Course
- Provide feedback to the Research Council for process improvement of the research experience

Research Council Chair

Although not directly accountable for individual research projects, the Research Council Chair, with the assistance of the Research Council, is responsible for oversight of all residency research-related activities, including, but not limited to:

- Organize Research Council meetings, provide a meeting agenda, compile meeting minutes, and take attendance
- Organize resident research-related presentations (e.g., research protocol, platform presentation practice)
- Provide updates regarding resident progress and/or changes in the resident research process to the Residency Advisory Council (RAC) and the Department of Pharmacy, as necessary
- Coordinate research-related learning activities and/or workshops
- Provide any additional guidance on research project activities (e.g. presentations, conference abstract guidelines) or reminders for deadlines to the residents as necessary
- Attend or assign Research Council member(s) and/or preceptors to attend national, regional, and/or local conferences (e.g., University of California Collaborative)
- Implement suggested process improvements based on Research Council, preceptor, and resident feedback
Research Primer Series

The Research Council Primer series is required for all residents who have not previously completed the course. PGY2 residents who have previously completed the course are still required to complete the competencies within 24 hours of scheduled primer. Attendance at Research Primers may be optional for PGY2s who completed the Research Primer course as a PGY1, as noted in the Resident Research Project Timeline. Certain primer meetings will be associated with a competency (see timeline). Passing score on competencies is considered 80%. Competencies/feedback link can be found on the Research Council Teams. Unless otherwise noted, all Research Primer meetings will occur from 5-7pm. Attendance is required and in-person attendance is strongly encouraged. If remote attendance is required, the resident shall actively participate with their camera on.

Overview of the Research Process

Submission of Research Ideas and Selection of Research Projects

Research ideas may be submitted to the Research Council by any member of the Department of Pharmacy at any time throughout the year. Whoever submits the research idea will have the opportunity to become the primary preceptor for the research project or suggest another primary preceptor. The Research Council will review all submissions for appropriateness and provide feedback or suggestions related to how to strengthen the project. Project ideas will be distributed to the residents during research orientation. PGY1 residents will be responsible for selecting their research project by July 30th of the residency year. PGY2 residents should work with their RPD to select research projects prior to, or upon starting the program. Any deviations in these dates will be at the discretion of the corresponding RPD. Refer to the residency research project timeline for an overview of major due dates and responsibilities.

Development of a Project/Research Plan

In coordination with their research preceptor(s) and team, the resident will develop a research plan. The resident should work with their preceptor(s) to complete the Pharmacy Resident Project/Research Plan for submission to the Research Council and RPD. The Project/Research Plan flow is very similar to a manuscript and the resident is encouraged to use this plan when formulating their manuscript throughout the year. The final project/research plan will be presented to the Research Council during the fall for feedback. The Residency Project Plan Evaluation Tool will be used to review the plan and provide feedback to the resident and preceptor(s).

Pharmacy Resident Project/Research Plan Components

- A summary of the overall project
  - All members of the research team and their roles
    - The roles of the research team will correlate with the author order if the team decides to seek publication. It is highly recommended roles and author order are discussed at the beginning of the project.
  - The research question
    - What is the specific aim(s) which the objective(s) are meant to accomplish? This should align with your hypothesis.
    - Consider using PICO/FINER worksheet to develop question
  - The project/research objective(s)
    - Use SMART criteria to define the project objective. SMART criteria were developed by George Duran in 1981 as a way to define management goals and objectives. It is a useful tool to guide
project development.

- **Specific:** What will be accomplished? What actions will you take?
- **Measureable:** How will we know when it’s done?
- **Achievable:** Is the project/research doable? Do you have the necessary skills and resources?
- **Relevant:** How does the project/research align with broader goals? Why is the result important?
- **Time-bound:** What is the time frame for accomplishing the project/research?

**Background**

- **Background/literature review**
  - Utilize the results of your PICO/FINER worksheet to describe why is this research/project important and how does it fit into the broader context of what is already known?
- **Purpose**
  - Summarize your objectives into one sentence.

**Methods**

- **Study design**
- **Inclusion criteria**
- **Exclusion criteria:** please note, you should not list the opposite of the inclusion criteria here. For example, if you are including patients aged 18 year and older, you do not need to specify that you are excluding patients under the age of 18
- **Patient identification**
- **Data management**
- **Data collection**
- **Study endpoints including your primary and secondary (where applicable) endpoints which should answer your research question**
- **Planned statistical analysis. It is highly recommend that the resident and preceptors describe the type of variable used for the primary endpoint (e.g., normally or non-normally distributed; nominal, continuous) and chose the appropriate statistical test using the decision tree in the selected representative statistical tests**

**Discussion**

- **Known limitations before starting the project**

**References**

- All references should be formatted for the intended journal for submission. The default journal for UCSDH residents is AJHP. Any other journal may be selected by research preceptors/groups.
- The UCSD Library has excellent resources to assist residents and preceptors in appropriate citation. Please visit their website for more details. Please note, most journals will require American Medical Association (AMA) citation style. This guide is available on the UCSD Library site, but must be accessed via a UCSD networked computer.

**IRB or ACQUIRE Submission**

Submission of the final protocol to the Human Resources Protection Program (HRPP), aka IRB, is project dependent. If the resident and preceptor are unsure if protocol submission is required they are first encouraged to reach out to the HRPP office (https://irb.ucsd.edu) and then to the Research Council chair for further guidance. Please note, the Pharmacy Residency Project/Research Plan and IRB application are not the same. The aim of an IRB application is to ensure ethical research. The aim of the Pharmacy Residency Project/Research Plan is to plan out the project details.

Alternatively, projects focused on quality should route their submissions through the UCSDH ACQUIRE Committee. The Revised 06/2022
ACQUIRE (Aligning and Coordinating Quality Improvement, Research and Evaluation) Committee evaluates QI/PI project proposals at UCSDH for specific needs, including

- Excusal from Institutional Review Board (IRB)/Human Research Protections Program (HRPP) oversight when not deemed to be human subjects research (HSR)
- Granting of Maintenance of Certification (MOC) Part IV credit for eligible board-certified physicians (and Performance Improvement CME for physician assistants).

**Obtaining Data and Data Collection**

The resident will complete a data request questionnaire and upload via Service Now. Data may also be obtained via other means, at the discretion of the project preceptor and/or RPD. Options include the Vizient, Epic Slicer/Dicer, and other databases the research team has access to. Review the “How to Get Pharmacy Data” presentation to determine best method of obtaining data.

The resident will be responsible for data collection utilizing a data collection tool (e.g., REDCap or Microsoft Excel). The resident and preceptor should develop a data dictionary at the beginning of the project. Microsoft Excel spreadsheets and electronic data collection sheets must be encrypted with a password if they contain protected health information. Paper data collection sheets should be stored in a locked cabinet with access limited to members of the research team. REDCap is a password-protected software that also allows one to import or export data from/to Microsoft Excel.

At UC San Diego Health, the Altman Clinical and Translational Research Institute (ACTRI) houses a wide variety of research resources, including clinical and translational research training, biostatistics services, and access to RedCap. Pharmacy residents are encouraged to use ACTRI resources whenever possible. The website is available at https://medschool.ucsd.edu/research/ACTRI/pages/default.aspx

**Statistical Support**

Each year the resident will be allotted up to 2 hours of time with a statistical consultant. Typically, the resident should plan for 1 hour at the beginning of the year, after the research plan is in a nearly-finalized draft stage followed by 1 hour at the end of the year to plan for statistical analysis. Residents and preceptors should be ready with questions about their pre-determined statistical plan. Preceptors will be required to attend meetings with the statistical consultants.

A statistical test decision tree will assist research groups in determining which tests may be appropriate. The UCSD Statistical Support Service group availability and timeliness may vary throughout the year depending on workload. All preceptors and residents should have a contingency plan in place to manually complete all required data collection and statistical analysis prior to established deadlines without the aid of the UCSD Statistical Support Service.

UCSD has a variety of statistical software available for research use. Software such as SAS, Minitab, SPSS, and STATA can all be found on Blink. For access to statistical software (STATA/R/SPSS/etc) via remote log-in or in-person access in the Geisel Library GIS lab, fill out this form.

**Presentation of Research Results at National, Regional, and Local Conferences**

PGY1 residents will provide a poster presentation of preliminary results of their project at the Vizient University Health System Consortium Pharmacy Network Resident/Fellow Poster Session at the ASHP Midyear Clinical Meeting. Links to
selected meetings can be found at on the Abstracts, Posters, Presentations page. PGY2 residents should consult with their RPD for Vizient requirements. Residents will also provide a platform presentation of preliminary or final results of their project at the UC Pharmacy Collaborative, or other conference at RPD’s discretion. The Research Council will schedule a Spring Research Check-In and evaluate the final presentation at UC Collaborative Pharmacy Conference (or other, at PGY2 RPDs discretion) utilizing a standard evaluation tool.

Manuscripts and Publication

Residents will be responsible for writing a manuscript suitable for publication describing the design and results of their project. Manuscript requirements should be discussed with the preceptor for potential publication opportunities. If a specific journal is not selected by the resident or preceptor, the manuscript should be formatted as an original research article according to the Author Instructions for the AJHP. All final manuscripts for the purposes of residency completion will need to have journal formatting and no tracked changes as agreed upon by the research team. Please refer to the manuscript evaluation tool for more details on how the manuscript will be reviewed by the Research Council.

Submission of Final Documents to PharmAcademic and Research Council Folder

Residents, in conjunction with their preceptor(s), will be responsible for uploading final versions of project/research-related documents to PharmAcademic and their Research Council folder. Documents should be uploaded and submitted in PDF format. Documents required to be uploaded to PharmAcademic and their Research Council folder at the time of the due date for the corresponding quarterly evaluation are outlined in Table 3.

<table>
<thead>
<tr>
<th>Due Date</th>
<th>Document (PDF Format)</th>
<th>Document Title Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Quarter</td>
<td>CITI Training completion certificate</td>
<td>LAST_FIRST_CITI_CERT</td>
</tr>
<tr>
<td></td>
<td>PICO/FINER worksheet</td>
<td>LAST_FIRST_PICO</td>
</tr>
<tr>
<td></td>
<td>Project plan and data dictionary (submit as a single document)</td>
<td>LAST_FIRST_PROJECTPLAN</td>
</tr>
<tr>
<td></td>
<td>Vizient abstract</td>
<td>LAST_FIRST_VIZIENT_ABSTRACT</td>
</tr>
<tr>
<td></td>
<td>Vizient poster</td>
<td>LAST_FIRST_VIZIENT_POSTER</td>
</tr>
<tr>
<td>Second Quarter</td>
<td>UC Collab abstract</td>
<td>LAST_FIRST_UCC_ABSTRACT</td>
</tr>
<tr>
<td></td>
<td>UC Collab presentation slides</td>
<td>LAST_FIRST_UCC_SLIDES</td>
</tr>
<tr>
<td>Third Quarter</td>
<td>Manuscript</td>
<td>LAST_FIRST_MANUSCRIPT TRACKED</td>
</tr>
<tr>
<td></td>
<td>Data Dictionary</td>
<td>LAST_FIRST_DATADICTIONARY</td>
</tr>
<tr>
<td>Final Quarter</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# Residency Research Project Timeline

<table>
<thead>
<tr>
<th>Month</th>
<th>Longitudinal Research Project Deadlines</th>
</tr>
</thead>
</table>
| **Jul** | PGY1 Research orientation and research idea presentation (Date: 6/30/22, 8-10am)  
Select research project (Date: 7/29/22)  
Begin literature review, PICO/FINER worksheet, protocol draft  
Complete CITI training (7/29/22) |
| | **Research Primer Meeting Longitudinal Session: Biostatistics in Research**  
- **Date:** None, on your own time, longitudinal  
- **Faculty:** UCSD Trauma and Burn Service recorded lectures  
- **Interactive session:** Pre-reading required (found on Teams)  
  - **Reading:**  
    - Overview of biostatistics used in clinical research  
    - Preparing for the first meeting with a statistician  
  - **Resident should be review all components of lecture series prior to their first meeting with the UCSD Statistical Support Service.**  
- **Meeting is required for all residents** |
| | **Research Primer Meeting #1 (PGY1): general overview, developing a research plan (go over our specific research plan), building upon existing evidence, developing research questions**  
- **Date:** 7/5/22, 5-7pm, location to be determined  
- **Faculty:** Dr. Craig Stevens  
- **Interactive session:** Pre-reading required (found on Teams)  
  - **Reading:**  
    - Developing and executing an effective research plan (competency)  
    - Building upon existing evidence to shape future research endeavors (competency)  
    - Developing great research questions (competency)  
  - **Resident Should be ready to discuss: critique of pre-reading materials** |
| **Aug** | PGY2 Research orientation (Date: 8/1/22)  
Begin drafting project/research plan  
Submit epidemiologist/biostatistician and/or data analyst consultation request, if needed |
| | **Research Primer Meeting #1 (PGY2): general overview, developing a research plan (go over our specific research plan), building upon existing evidence, developing research questions**  
- **Date:** Recorded presentation, come to faculty with questions  
- **Complete by 8/5/22**  
- **Faculty:** Dr. Craig Stevens  
- **Interactive session:** Pre-reading required (found on Teams)  
  - **Reading:**  
    - Developing and executing an effective research plan (competency)  
    - Building upon existing evidence to shape future research endeavors (competency)  
    - Developing great research questions (competency)  
  - **Resident Should be ready to discuss: critique of pre-reading materials**  
- **Meeting is optional for PGY2s who completed as PGY1. Competencies are required for all residents.** |
| | **Research Primer Meeting #2: Overview of clinical research design**  
- **Date:** 8/8/22, 5-7pm, location to be determined  
- **Faculty:** Dr. Craig Stevens  
- **Interactive session:** Pre-reading required (found on Teams)  
  - **Reading:** Overview of clinical research design (competency)  
  - **Resident should be ready to discuss: research objectives, primary outcomes and research question**  
- **Meeting is optional for PGY2s who completed as PGY1. Competencies are required for all residents.** |
<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
</tr>
</thead>
</table>
| 8/15/22    | Research Primer Meeting #3: How to submit an effective IRB application. Data storage and security  
  **Date:** 8/15/22, 5-7 pm, location to be determined  
  **Faculty:** Dr. Janine Martino  
  **Interactive session:** Pre-reading required (found on Teams)  
  o Reading: Working with an institutional review board (competency)  
  o Resident should be ready to discuss: Q/A with IRB staff. Residents should have IRB draft with them and be ready with specific questions  
  **Meeting is optional for PGY2s who completed as PGY1. Competencies are required for all residents.**  

| 8/22/22    | Research Primer Meeting #4: Intervention design, implementation and evaluation; validity and reliability measurements; bias; focus on methods of manuscript  
  **Date:** 8/22/22, 5-7pm, location to be determined  
  **Faculty:** Dr. Lucas Hill  
  **Interactive session:** Pre-reading required (found on Teams)  
  o Reading:  
     Validity and reliability measurement instruments used in research (competency)  
     Intervention design, implementation and evaluation (competency)  
     Bias: considerations for research practice (competency)Working with an institutional review board (competency)  
  o Resident should be ready to discuss: Focus groups discuss topics related to particular resident projects  
  **Meeting is optional for PGY2s who completed as PGY1. Competencies are required for all residents.**  

| Sep        | Vizient Poster Session registration and abstract submission opens (date: TBD)  
  Begin drafting Vizient poster and abstract (abstract not due at time of registration)  
  Consider scheduling time with epidemiologist/biostatistician to review statistical plan and plan statistical analysis prior to Fall Research Check-in  
  Upload and submit first quarter required documents  

| 9/6/22     | Research Primer Meeting #5: Excel; building a data dictionary, collecting data efficiently; basic Excel statistics  
  **Date:** 9/6/22, 5-7pm, location to be determined  
  **Faculty:** Dr. Wan-Ting Huang  
  **Interactive session:**  
  o Each resident submits specific questions following pre-recorded questions and go over together as group  
  **Prior to meeting: pre-work is required. Will be sent via email from Dr. Huang**  
  **Meeting is required for all residents.**  

| Sep        | Fall Research Check-in  
  **Date:** TBD  
  Resident will be required to submit the following materials to the Research Council  
  o Project/Research Plan  
  o Data Collection Tool with Data Dictionary  
  o Mapping tool  
  o Initial draft presentation (background, methods, empty results)  

| Oct        | Submit protocol for IRB/ACQUIRE review  
  Begin drafting background/methods of manuscript  
  Finalize data collection tool  

| Oct        | Research Primer Meeting #6: Abstract and Poster Construction  
  **Date:** 10/3/22, 5-7pm, location to be determined  
  **Faculty:** Dr. Craig Stevens and Dr. Nina Haste  
  **Interactive session:**
Residents should bring drafts of current abstracts for Vizient (or other pertinent meeting) and will be discussed in group setting.
- Meeting is optional for PGY2s who completed as PGY1. Competencies are required for all residents.

| Nov | Vizient Poster Session registration and abstract submission deadline (Date: TBD) |
|     | Finalize Vizient poster Continue drafting background, objectives, and methods for manuscript and final presentation |
|     | Vizient Poster Practice (tentative) |

Dec
- Vizient Poster Session/ASHP Midyear Clinical Meeting (Date: TBD)
- Data collection
  - Upload and submit second quarter required documents

Jan
- Continue with data collection

Feb
- Begin drafting abstract for UC Pharmacy Collaborative Conference
- Continue with data collection

Mar
- Begin drafting results/discussion of manuscript
- Abstract to be reviewed by research group and one member of Research Council prior to submission
  - Abstract due (3/20/23) to research group and Research Council for review
- Finish data collection
- Research Primer Meeting #7: Writing manuscripts, citing work appropriately, plagiarism and how to effectively present data (table/figures construction)
  - Date: 3/7/23, 5-7pm, location to be determined
  - Faculty: Dr. Craig Stevens
  - Interactive session. Bring your manuscript and build the discussion section
  - Meeting is optional for PGY2s who completed as PGY1

Apr
- Continue working on manuscript
- Begin drafting platform presentations for UC Pharmacy Collaborative Conference
  - Spring research check-in. Required materials (Date: TBD)
    - Updated draft presentation with background, methods, results, draft discussion
    - Upload and submit third quarter required documents
  - Practice Presentations (Date: TBA)

May
- Submit final slides for UC Pharmacy Collaborative Conference (Date: TBD)
  - Submit manuscript to research preceptors for review (Date: 5/1/23 for PGY1)
    - Work with research preceptors to update and finalize manuscript in preparation for Research Council submission
    - Submit updated manuscript to Research Council (Date: 5/22/23 for PGY1)
    - Submit manuscript with track changes (from work with research preceptors) to RPD (Date: 5/22/23 for PGY1)
  - Upload to Teams website
  - UC Pharmacy Collaborative Conference (Date: TBD)

Jun
- Submit manuscript response to reviewers to Research Council, if needed (6/12/23 for PGY1)
- Submit final IRB report and close out study (if applicable)
  - Upload and submit final required documents
# Residency Project/Research Plan Template

## Title:

## Resident:

## Project Advisor:

## Research Council Group:

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Specific aim(s) is (are) the objective(s) of your research – what you want to accomplish. Specific aim(s) should be driven by your hypothesis.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objectives</td>
<td>1.</td>
</tr>
<tr>
<td></td>
<td>2.</td>
</tr>
<tr>
<td></td>
<td>3.</td>
</tr>
</tbody>
</table>

### Background

<table>
<thead>
<tr>
<th>Background</th>
<th>What work exists that has led up to your research question? Has anything similar been done before?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purpose</td>
<td>Summarize your objectives into 1 sentence. Most sentences start with “To characterize”, “To evaluate”, etc.</td>
</tr>
</tbody>
</table>

### Methods

<table>
<thead>
<tr>
<th>Study Design</th>
<th>What type of study are you designing? Cohort, case-controlled, case series? How is the study designed to answer your hypothesis and specific aim(s)?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inclusion Criteria</td>
<td></td>
</tr>
<tr>
<td>Exclusion Criteria</td>
<td></td>
</tr>
</tbody>
</table>
| Patient Identification   | • Study time frame/period of time patients are to be collected  
                          | • How will they be identified? ICD-10 codes via electronic medical record, a registry, etc.?  
                          | • How many patients will be targeted/anticipated? |
| Study Endpoints          | Primary Endpoint:  
                          | •  
                          | Secondary Endpoints:  
                          | •  
                          | At what point will you measure outcomes? Any subgroup analyses? |
| Statistical Analysis     |                                                                                                                                 |
| Limitations              |                                                                                                                                 |
| References               |                                                                                                                                 |
**PICO/FINER Worksheet**

**Initial Research Question:**

Further define your initial research question using the PICO components by answering the questions below. (Your defined research question should define the population you are studying, the intervention or exposure, the control or comparison group, and the primary outcome you will measure)

<table>
<thead>
<tr>
<th></th>
<th>What population will your research examine?</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th></th>
<th>What intervention or exposure will be examined?</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th></th>
<th>What will be compared? What is your control or comparison group?</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th></th>
<th>What is the primary outcome you are measuring?</th>
</tr>
</thead>
</table>

**Defined Research Question (based on PICO):**

Conduct a literature search. Analyze your defined research question using the FINER Criteria and create a refined research question. (A good research question should be feasible, interesting, novel, ethical, and relevant)

<table>
<thead>
<tr>
<th></th>
<th>Is this question feasible for me to answer? Consider the resources available to you for the project. These include data, time, personnel, and possibly funds depending on your project.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Is this question interesting? This should be considered from your perspective as an investigator AND the scientific community where you will publish your results.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Is this question novel? After reviewing the literature, consider what the results of your project will add to the understanding of this topic.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Is the question ethical? Consider IRB constructs for autonomy, beneficence, justice, confidentiality, and privacy as applied to your project.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Is the question relevant? After reviewing the literature, consider whether your research will be eligible for publication based on generalizability of the results.</th>
</tr>
</thead>
</table>

**Final Research Question (Refined based on literature and FINER considerations):**

Revised 06/2022
SMART Criteria Worksheet

Define your primary project/research objective(s):

Utilize SMART criteria to define your initial project/research objective(s) idea. The key aspect of using SMART criteria is defining specific and measurable components you will use to meet your purpose. They are either achieved or not.

Example:
The purpose of this project/research is to: measure the number of patients with liver disease on warfarin who achieve an INR<1.4 when prothrombin complex concentrate is used to reverse anticoagulation.

SMART Objective Examples:
- Good: Design a single-center study assessing the ability of prothrombin complex concentrate to achieve of INR<1.4 in patients who have liver disease compared to those without liver disease.
- Not good: Assess the efficacy of prothrombin complex concentrate in adequate reversal of INR in patients with impaired liver function

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>S</td>
<td>Is this objective specific?</td>
</tr>
<tr>
<td>M</td>
<td>Is this objective measurable? Is the objective measurable or are you gathering subjective information? If the information is subjective, it will be important to define how subjective information will be measured to report your results.</td>
</tr>
<tr>
<td>A</td>
<td>Is this objective attainable/actionable? How hard will it be to do the project or is the project realistic and achievable? If the objective relies on chart review you may need to limit the number of patients collected.</td>
</tr>
<tr>
<td>R</td>
<td>Is the objective results-focused? This about why the objective is important; would you care about the results if you were not involved in the project?</td>
</tr>
<tr>
<td>T</td>
<td>Is the objective time-bound. (i.e. can the project be completed in the time-frame of a residency year)</td>
</tr>
</tbody>
</table>

Final Project/Research Objective(s) (Refined based on SMART criteria). If there are primary and secondary objectives, this process should be done for each:
Mapping Purpose, Objectives, Methods, Results

Once the research question, purpose and objectives have been defined, the resident should map each objective to the methods and expected results. The step is optional, but highly recommended and should be done for each objective (i.e. primary and secondary objectives). The mapping should not be included in the final project/research plan, but should be discussed with the project/research group or preceptor(s).

Mapping Tool Example: Map purpose, objective, methods, results

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Assess the efficacy of prothrombin complex concentrate reversing anticoagulation in patients with and without liver disease?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objective</td>
<td>Design a single-center study assessing the ability of prothrombin complex concentrate to achieve of INR&lt;1.4 in patients who have liver disease compared to those without liver disease.</td>
</tr>
</tbody>
</table>
| Methods | 1. Create standard definitions for liver disease and account for hypofibrinogenemia  
2. Identify patients who have an INR measured within 6 hours (+/- 2 hours) before PCC administration  
3. Identify patients who have an INR measured within 6 hours (+/- 2 hours) after PCC administration  
4. Collect concomitant FFP administration  
5. Collect INR 24 hours (+/- 4 hours) post PCC administration |
| Proposed Results | N patients with liver disease (n have INR<1.4; n have INR>/= 1.4)  
N patients without liver disease (n have INR<1.4; n have INR>/= 1.4) |
Background/Literature Review

It is highly recommended to create a literature review table to compile information from previous studies related to your project/research. Identifying study design characteristics of previous studies, such as inclusion/exclusion criteria, variables, outcomes, and limitations, will help you understand what has been studied previously and identify areas for future research. It is recommended to format your references in AMA style part of this process. The PICO/FINER worksheet will help you further define and modify your research question in conjunction with your literature review to create a feasible and relevant study.

Medical Library

The UC San Diego Medicine: Online Clinical Library is available to all UCSDH Pharmacy residents. Frequently used databases such as PubMed and Embase are available on the Clinical Library’s webpage. Additionally, the Clinical Library specifically lists a Pharmacy Librarian who can be contacted for any information the resident is unable to find on their own.

Additionally, the library has style guides for article and book citations. Most pharmacy journals utilize American Medical Association (AMA) style for referencing. The resident will need to access the AMA Style Guide from a UCSDH networked computer.

Each resident is encourage to use a citation manager such as EndNote. Useful resources can be found at the UC San Diego Library website: ‘How to Cite – Tools, Tricks & Tips for Managing Citations: Home.’
Methods

**Study design/Inclusion/Exclusion Criteria**

When completing the Residency Project/Research Plan, the resident will have to clearly state their study design. This is typically the first sentence in the methods section of the final manuscript. The sentence should clearly designate what type of study (i.e. cohort vs case-controlled vs other) has been designed, if the project is retrospective or prospective in nature and how the study is designed to answer the hypothesis and specific research questions/aims.

The inclusion and exclusion criteria are meant to describe how patients were chosen for this study. The inclusion and exclusion criteria should be sufficiently specific so another research group could choose a similar patient population at their institution and compare their results.

**Patient identification**

Patient identification will be important for the reproducibility of the study. The resident should clearly state the time frame studied and how the patients were identified.

**Study endpoints/variables**

Using the mapping tool previously described in this document describe the endpoints which will be used to support the stated objectives. Each stated objective should have an endpoint mapped to the objective and described in the Residency Project/Research Plan. Each endpoint/variable should be described in the Data Dictionary Template. This table should describe all data that is collected and how it will be coded when collected. **Please note, it is important that data variables are defined and coded before data collection begins. Each variable should be collected as a numerical value if using Excel to each in data analysis.**

**Power Analysis, Sample Size Calculation, and Statistical Analysis Resources**

It is often most appropriately to utilize effect sizes from previous studies (when available) to attempt a power analysis and calculate an appropriate sample size. Below are several recommended online calculators:

Online Sample Size Calculator #1: [https://researchmethodsresources.nih.gov/Tools](https://researchmethodsresources.nih.gov/Tools)

Online Sample Size Calculator #2: [http://www.sample-size.net/](http://www.sample-size.net/)

Utilizing the type of variable described in the Data Dictionary Template, refer to the Selected Representative Statistical Test to ascertain the appropriate statistical test for the study.
Data Dictionary Template

The purpose of the data dictionary is to clearly define all variables, including units for continuous variables and numerical coding of categorical variables for statistical analysis.

List all data points that will be collected and provide specific definitions for each data point. For categorical variables (e.g., gender, symptom classification), assign numerical values, if needed, for statistician reference.

### Demographics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Definition</th>
<th>Coding</th>
<th>Type of variable (used for statistical analysis)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Objective Findings (e.g., laboratory values)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Definition</th>
<th>Coding</th>
<th>Type of variable (used for statistical analysis)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Outcomes

<table>
<thead>
<tr>
<th>Variable</th>
<th>Definition</th>
<th>Coding</th>
<th>Type of variable (used for statistical analysis)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Other

<table>
<thead>
<tr>
<th>Variable</th>
<th>Definition</th>
<th>Coding</th>
<th>Type of variable (used for statistical analysis)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Selected Representative Statistical Tests

- **Nominal**
  - Independent samples (Parallel Design)
    - Two groups: no cofounders, Chi-square ($X^2$) or Fisher's exact.
    - One confounder: Mantel-Haenszel.
    - Two or more cofounders: Logistic regression.
  - Three or more groups: no cofounders, $X^2$ [Bonferroni] or Contingency table.
    - One confounder: $X^2$ [Bonferroni].
    - Two or more cofounders: Logistic regression.
  - Dependent (paired) samples
    - Two groups: no cofounders, McNemar's test.
    - One or more groups: no cofounders, Cochran's Q [Bonferroni] or $X^2$ with MCC.
    - One confounder: rare.
    - Two or more cofounders: rare.

- **Ordinal**
  - Independent samples (Parallel Design)
    - Two groups: no cofounders, Wilcoxon rank sum or Mann Whitney U. 1 confounder: 2-way ANOVA ranks.
    - Two or more cofounders: ANOVA ranks.
  - Three or more groups: no cofounders, Kruskal-Wallis ANOVA [MCP or Bonferroni].
    - One confounder: 2-way ANOVA ranks.
    - Two or more cofounders: ANCOVA ranks.
  - Dependent (paired) samples
    - Two groups: no cofounders, Wilcoxon signed rank test.
    - One confounder: 2-way repeated ANOVA ranks.
    - Two or more cofounders: Repeated measures regression.
  - Three or more groups: no cofounders, Friedman ANOVA.
    - One confounder: 2-way repeated ANOVA ranks.
    - Two or more cofounders: Repeated measures regression.

- **Continuous**
  - Independent samples (Parallel Design)
    - Two groups: no cofounders, Student's t-test.
    - One confounder: 2-way ANOVA.
    - Two or more cofounders: ANCOVA.
  - Three or more groups: no cofounders, 1-way ANOVA [MCP].
    - One confounder: 2-way ANOVA.
    - Two or more cofounders: ANCOVA.
  - Dependent (paired) samples
    - Two groups: no cofounders, Paired Student's t-test.
    - One confounder: 2-way repeated ANOVA.
    - Two or more cofounders: Repeated measures regression.
  - Three or more groups: no cofounders, Repeated measures ANOVA [MCP].
    - One confounder: 2-way repeated ANOVA.
    - Two or more cofounders: Repeated measures regression.
Statistical Support

Statistics Support

UCSDH Pharmacy Residents will be able to coordinate with the UCSD SSPPS Statistical Support Services. Each resident will be required to fill out a form detailing their statistical needs. Options for statistical needs include study design, analytic plan, IRB submission, data visualization, and manuscript preparation. After completing this form, one of our consultants will reach out to the resident and preceptor to schedule a meeting. Preceptors are required for the Statistical Support Services meeting.

When filling out the online form, it is important that you provide as much as detail as possible for us to assist you with your project.

Each resident is allowed two hours of statistical support per year. If the resident requires more hours, we will need to acquire special approval.

Notes: Residents are responsible for their own analyses. Services do not include training residents on how to use statistical programs or write codes for statistical analyses.

If you have questions, you can contact us directly at: sspps-pharmstatssupport-l@ucsd.edu

Recommendations for Extending Co-Authorship or Acknowledgment to an Epidemiologist/Biostatistician

When submitting an abstract and/or manuscript, researchers are advised to review the International Committee of Medical Journal Editors (ICMJE) recommendations on “Defining the Role of Authors and Contributors,” available at http://www.icmje.org/recommendations/browse/roles-and-responsibilities/defining-the-role-of-authors-and-contributors.html. Based on these recommendations and the level of assistance required from COHSR/CAHSR staff (see Table 6), consider extending authorship credit (as well as, responsibility and accountability for any published work) or acknowledgement to the statistician and/or data analyst working on your study.

Recommendations for Co-Authorship and Acknowledgement

<table>
<thead>
<tr>
<th>Recommended Credit</th>
<th>Biostatistical services provided</th>
<th>The ICMJE recommends that authorship be based on the following 4 criteria:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acknowledgment when criteria 1 is fulfilled</td>
<td>At a minimum, the biostatistician will assist in data analysis and/or interpretation of your study data</td>
<td>1. Substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work; AND</td>
</tr>
<tr>
<td>Co-authorship when all 4 criteria are fulfilled</td>
<td>Upon request, the biostatistician can assist in drafting sections of your abstract/manuscript (i.e. statistical methods, results section)</td>
<td>2. Drafting the work or revising it critically for important intellectual content; AND</td>
</tr>
<tr>
<td></td>
<td>Upon request, the biostatistician can assist in reviewing your abstract/manuscript for final approval</td>
<td>3. Final approval of the version to be published; AND</td>
</tr>
<tr>
<td>Upon request, the biostatistician can agree to be accountable for data analysis section of the manuscript by answering potential questions of journal editors</td>
<td>4. Agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved</td>
<td></td>
</tr>
</tbody>
</table>
Abstracts, Presentations, and Posters

Abstract and Platform Presentation Resources

Each conference guideline for abstract and platform presentations may vary. Please refer to abstract and presentations guidelines published by the organization holding the conference. Please refer to the UC San Diego Health Branding website for Microsoft Office and PowerPoint templates. Please verify if the PowerPoint template is 16x9 or 4x3.

Important Conferences and Websites

<table>
<thead>
<tr>
<th>Conference</th>
<th>Website</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vizient</td>
<td><a href="https://www.vizientinc.com/">https://www.vizientinc.com/</a></td>
</tr>
<tr>
<td>ASHP Midyear Clinical Meeting</td>
<td><a href="https://www.ashp.org/">https://www.ashp.org/</a></td>
</tr>
<tr>
<td>UC Pharmacy Collaborative Conference</td>
<td><a href="https://www.ucpharmacycollaborative.org/">https://www.ucpharmacycollaborative.org/</a></td>
</tr>
</tbody>
</table>
Residency Research Plan Evaluation Tool

Research Project: ____________________________ Resident

Preceptor(s): ______________________________________________________

Based on your evaluation of the resident protocol, please indicate whether the following criteria are met, and provide any additional comments, if necessary.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Background appropriately summarizes previous work in field, and significance of and rationale for the project is clearly described.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The study has the potential to address one of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Identify and improve upon issues with current patterns of medication use.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Identify and fill a significant knowledge gap in current literature.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Study objectives are clearly stated and adequately address the study question(s).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The study design is clearly described and appropriate given the study question and previous work in the field.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The proposed intervention or procedure is appropriate and feasible for addressing the study question.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The proposed analytical methodology is clear and appropriate, and potential biases are addressed if indicated.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outcomes are measurable and directly relate to study objectives.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adequate study definitions are provided where necessary.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data needs are clearly identified, and data are obtainable from known sources.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Potential obstacles are either minor or are adequately addressed, and the study can be reasonably completed by the end of the residency year.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Additional comments:**
### UC COLLABORATIVE ABSTRACT REVIEW SCORING RUBRIC

<table>
<thead>
<tr>
<th></th>
<th>Poor (0-1)</th>
<th>Acceptable (2-4)</th>
<th>Good (5-7)</th>
<th>Excellent (8-10)</th>
<th>Score 1-10</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Abstract clarity</strong></td>
<td>Difficult to follow; unclear purpose</td>
<td>Slightly disorganized; statement of purpose less clear</td>
<td>Easy to read and well organized; clear statement of purpose</td>
<td>Very well written; clear, concise and justified statement of purpose</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Abstract elements and level of writing</td>
<td>Minor elements are absent or out of place</td>
<td>All elements are present and written at an acceptable level</td>
<td>All elements are present and written at a high level</td>
<td></td>
</tr>
<tr>
<td><strong>Language/flow</strong></td>
<td>Language/flow are difficult to follow; key concepts not addressed</td>
<td>Language/flow are decipherable but requires some revision</td>
<td>Language/flow would benefit from further refinement</td>
<td>Language/flow is logical and effectively delivers message for a broad audience</td>
<td></td>
</tr>
<tr>
<td><strong>Grammatical errors</strong></td>
<td>Many typographical and/or grammatical errors</td>
<td>Few typographical and/or grammatical errors</td>
<td>Negligible typographical and/or grammatical errors</td>
<td>Free of typographical and/or grammatical errors</td>
<td></td>
</tr>
<tr>
<td><strong>Study design</strong></td>
<td>Major design or methodological flaws</td>
<td>Incomplete design, population and analysis; significant clarification necessary</td>
<td>Reasonable design, population and analysis; minimal clarification necessary</td>
<td>Appropriate design, population and analysis</td>
<td></td>
</tr>
<tr>
<td><strong>Reproducibility</strong></td>
<td>Unable to reproduce given flawed methodology</td>
<td>Able to reproduce, however significant clarification necessary to understand study</td>
<td>Able to reproduce with limited clarification</td>
<td>Readily reproducible</td>
<td></td>
</tr>
<tr>
<td><strong>Creativity</strong></td>
<td>Replication of prior work</td>
<td>Potential to focus on novel population and/or design</td>
<td>Some novel aspect in patient population and/or design</td>
<td>Creative, original, unique</td>
<td></td>
</tr>
<tr>
<td><strong>Statistical Analysis</strong></td>
<td>Deficient statistical analysis</td>
<td>Inadequate statistical analysis</td>
<td>Appropriate and complete statistical analysis</td>
<td>Appropriate and complete statistical analysis</td>
<td></td>
</tr>
<tr>
<td><strong>Impact on practice</strong></td>
<td>Unlikely to impact practice</td>
<td>Limited impact on practice</td>
<td>Potential to significantly change or impact practice</td>
<td>Likely to significantly change or impact practice</td>
<td></td>
</tr>
<tr>
<td><strong>Impact (50%)</strong></td>
<td>No appreciable application</td>
<td>Impact is unlikely to extrapolate beyond institutional practice</td>
<td>Impact is likely to extrapolate to other health care providers and external institutions</td>
<td>Impact is likely to extrapolate to other health care providers and external institutions</td>
<td></td>
</tr>
</tbody>
</table>
# UC Pharmacy Collaborative Residency Research Evaluation Tool

**Presenter Name**
Resident Joe/Jane Doe

**Title**
PRESENTATION TITLE

**Evaluator Type**
- Student
- Resident
- Preceptor
- Judge

**Evaluator Site**

## Please rate the following: PRESENTATION CONTENT

<table>
<thead>
<tr>
<th>Learning objectives stated and relevant</th>
<th>Very Effective</th>
<th>Effective</th>
<th>Somewhat Effective</th>
<th>Ineffective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rationale/purpose and background clearly stated</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Methods clearly presented</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Results clearly presented</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conclusions are logical and applicable to pharmacy practice</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Future research or project follow-up defined</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Presentation Content Comments:

## Please rate the following: PRESENTATION SKILLS
<table>
<thead>
<tr>
<th></th>
<th>Very Effective</th>
<th>Effective</th>
<th>Somewhat Effective</th>
<th>Ineffective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speaking skill (volume, clarity, speed)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio visual (technique, readability, clarity)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organization and practice evident</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Appropriate length of presentation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ability to respond to questions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Presentation Skills Comments:**

Thank you for your feedback!
Residency Manuscript Evaluation Tool

Instructions to Reviewers
The UCSDH Research Council will evaluate resident manuscripts to assess suitability for publication. A standard evaluation form will be used to adopt a positive, impartial, but critical attitude toward the manuscript under review, with the aim of promoting effective, accurate, and relevant scientific communication. Criticisms, arguments, and suggestions concerning the paper will be most useful to the author if they are carefully documented with formative feedback.

Research council members may not address deficiencies of style, syntax, or grammar, but any can give in clarifying meaning will be appreciated. Please consider the following aspects when reviewing a manuscript:

- Significance to the target scientific community
- Originality
- Appropriateness of the approach or experimental design
- Appropriateness of the statistical analyses
- Adherence to correct scientific nomenclature
- Appropriate literature citations
- Adequacy of experimental techniques
- Soundness of conclusions and interpretation
- Relevance of discussion
- Organization
- Adequacy of title and abstract
- Appropriateness of figures and tables
- Adequacy of experimental techniques
- Soundness of conclusions and interpretation
- Relevance of discussion
- Organization
- Adequacy of title and abstract
- Appropriateness of figures and tables

Very few papers qualify for an immediate, unconditional acceptance. There are many reasons to reject a paper. In general, if there are incorrect interpretations of data or any organizational or English usage flaws that prevent critical review of the manuscript, then recommend that the manuscript be modified with re-review. If you feel that the deficiencies can be corrected within a reasonable period of time, then recommend modification (e.g., accept with revision).

Overall impression of the manuscript as well as any comments, questions, or suggestions will be transmitted to the residents in a standardized format, as below along with the final recommendation.

Manuscript Title: __________________________________________
Primary Author: __________________________________________
Reviewer: __________________________________________

Overall Impression:

Additional Comments & Questions:

Final Recommendation:
☐ Research Council accepts pending changes requested
☐ Research Council requests revisions that will need to be returned to the Council
Appendix O

PHARMACY RESIDENCY POLICY AND PROCEDURE DOCUMENT

STATEMENT OF COMMITMENT TO GRADUATE PHARMACY EDUCATION

UC San Diego Health (to be referred to as UCSDH) is committed to post-graduate pharmacy education as a principal component of its mission to improve the health of the public. Investing in post-graduate education assures that current residents and future generations of health care professionals are prepared for California’s and the nation’s evolving health care needs. In this context, UCSDH is committed to providing the necessary educational, financial, and human resources required to ensure excellence through the continuum of graduate education.

UCSDH provides a supportive and challenging educational environment in which residents of diverse backgrounds can prepare themselves for careers characterized by commitment to excellence in service through patient care, research, teaching, and lifelong learning. Clinical faculty members and health system practitioners offer pharmacy residents state-of-the-art knowledge, demonstrate the latest developments in patient care, model compassionate and ethical care, and provide guidance and supervision to ensure patient health and safety.

UCSDH furnishes a financially secure and educationally enriched environment for organized residency programs in which pharmacy residents develop personal, ethical, clinical, and professional competence under careful guidance and supervision. Programs will ensure the safe and appropriate care of patients as well as the professional growth and skill development of the resident.

The graduate pharmacy residency programs are designed to provide pharmacy residents with the knowledge, skills, and attitudes that serve as the basis for competent and compassionate clinical practice, scholarly research, and public service. Pharmacy residents are encouraged to develop the capacity for self-evaluation and to sustain a lifetime of responsible and committed practice of pharmacy. The educational program prepares pharmacy residents to continue their own education and to teach their patients, colleagues, and students throughout their working years. UCSDH’s post-graduate pharmacy programs are committed to ensuring that pharmacy residents understand the scientific foundation of pharmacy, apply that knowledge to clinical practice, and extend that knowledge through scholarly research and teaching. Pharmacy residency programs provide the experience necessary for pharmacy residents to master the clinical skills and knowledge needed to evaluate and care for their patients.

UCSDH provides a collaborative environment with a broad array of educational opportunities, including diversity in patient populations, specialty services, technological resources and educational programs.

While the pharmacy residency programs are designed to support the resident in achieving the ASHP Residency Competency Areas, Goals, and Objectives as well as the pharmacy residents’ professional goals for residency, UCSDH is responsible for enforcing a safe and supportive learning environment for all pharmacy residents. The pharmacy residency programs follow the policies and procedures outlined below in alignment with UCSDH and departmental policies and procedures as well as Human Resources’ defined benefits and requirements.
The purpose of this document is to provide a statement of UCSDH policy applicable to all pharmacy residents at UCSDH. Eligible residents are those who

- Have received a Doctor of Pharmacy from an American College of Pharmacy Education (ACPE) accredited school of pharmacy or graduate of an international school of pharmacy and:
  - Hold a current, valid Visa, that extends through the entire residency appointment and does not require sponsorship and
  - Hold a valid, full and unrestricted pharmacist license in the State of California, and
  - Is eligible to participate in the ASHP PhORCAS Application and Matching Program and
- Have been accepted into an organized program at UCSDH for the purpose of obtaining advanced education and training, leading to eligibility for residency certification of completion, and, for PGY2 residents, recognition in a specialty field of pharmacy. To the extent possible, UCSDH shall uniformly and equitably apply the published policies and standards affecting the residents.

For purposes of these policies and procedures, pharmacy residents shall include PGY1 and PGY2 pharmacy residents.

**Onboarding pharmacy residents are required to attest they have read and understand this document by signing and dating this document.**

**POST-GRADUATE PHARMACY RESIDENCY PROGRAMS SPONSORED BY UC SAN DIEGO HEALTH (ASHP Accredited)**

- PGY1 Pharmacy, Acute Care focus
- PGY1 Pharmacy, Ambulatory Care focus
- PGY2 Critical Care Pharmacy
- PGY2 Health System Pharmacy Administration and Leadership
- PGY2 Infectious Diseases Pharmacy
- PGY2 Internal Medicine Pharmacy
- PGY2 Oncology Pharmacy
- PGY2 Pharmacy Informatics
- PGY2 Psychiatric Pharmacy
- PGY2 Solid Organ Transplant Pharmacy
PHARMACY RESIDENT RESPONSIBILITIES – POSITION DESCRIPTION

UCSDH PGY1 PHARMACY RESIDENT POSITION DESCRIPTION

The goal of the graduate pharmacy education training program at UCSDH is to provide pharmacy residents (PGY1 residents) with extensive experience in the art and science of pharmacy and in all aspects of the medication use process so they can achieve excellence in the care and treatment of their patients, research, and teaching. Residents will be encouraged, trained, and required to take ownership of the outcomes of their patients as they provide evidence-based contributions and recommendations in a multidisciplinary team environment of care. Residents completing a UCSDH PGY1 Pharmacy Residency will be competent in the management of medication therapy for various disease states in a variety of health care settings and for diverse patient populations. These pharmacists are trained and educated in teaching modalities for health care professionals, patients, students, and the community. PGY1 pharmacy resident graduates will be eligible to participate in advanced training, such as PGY2 specialty programs, and residents will be eligible to sit for board certification and to practice in the acute and ambulatory care settings. To achieve these goals, the pharmacy resident agrees to do the following for the duration of their residency training at UCSDH:

1. Be committed to the values and mission of UCSDH and the Department of Pharmacy
2. Develop and participate in a personal program of self-study and professional growth with the guidance from pharmacy preceptors, advisors, staff, faculty and the Residency Program Director (RPD)
3. Under the supervision of pharmacy preceptors, staff, faculty and the RPD, participate in safe, effective and compassionate patient care, consistent with the pharmacy resident’s level of education and experience
4. Participate fully in the educational activities of the residency program, including all learning experience requirements assigned, and assume responsibility for the teaching of more junior pharmacists, students, patients and allied health professionals
5. Participate in institutional programs and activities and adhere to established practices, procedures and policies of the institution
6. Participate in committees of the Department of Pharmacy and system-wide committees as assigned by the RPD or rotation preceptors
7. Develop an understanding of ethical, socioeconomic, medical/legal issues that affect fiscally responsible pharmacy practice and patient care
8. Perform all duties in accordance with the established practices, procedures and policies of the institution, its programs, clinical departments to which the resident is assigned as well as the State of California and the California Board of Pharmacy
9. Adhere to the moonlighting policies of the Pharmacy Residency Program
10. Comply with the duty hours and working condition policies of ASHP, UCSDH, and the program in which the resident is appointed
11. Adhere to the learning experience and staffing schedules, as assigned
12. Document patient care activities appropriately and in a timely manner
13. Participate in the PharmAcademic evaluation system, including evaluation of self, preceptors, learning experiences and the Residency Program in a timely manner; in addition, pharmacy residents must seek, participate in, and apply to practice constructive verbal and written feedback that directs their learning
14. Comply with the licensure requirements of the program in which the resident is appointed; PGY1 Pharmacy Residents must have an active and clear California pharmacy intern license prior to the start of their residency, obtain their California pharmacist license within 90 days of the start of the residency appointment and maintain an active and clear pharmacist license throughout the duration of their residency
15. Comply with specific/special onboarding requirements of affiliated institutions to which the pharmacy resident may rotate as part of their training; these requirements may include, but are not limited to, criminal background checks, substance abuse testing, and health screenings
16. Adhere to the policies defined in the UCSDH Pharmacy Residency Policy and Procedure Document for Pharmacist Residents
17. Adhere to the UCSDH use of email policy
UCSD PGY2 PHARMACY RESIDENT POSITION DESCRIPTION

The goal of the graduate pharmacy education training program at UCSDH is to provide pharmacy residents (PGY2 residents) with extensive experience in all aspects of the medication use process so they can achieve excellence in the pharmaceutical care of their patients. Residents will be encouraged, trained and required to take ownership of the outcomes of their patients as they provide evidence-based contributions and recommendations in a multidisciplinary team environment of care. Residents completing the UCSDH PGY2 Pharmacy Residency will build on Doctor of Pharmacy (PharmD) education and PGY1 pharmacy residency programs to contribute to the development of clinical pharmacists in specialized areas of practice. Our PGY2 residencies provide residents with opportunities to function independently as practitioners by conceptualizing and integrating accumulated experiences and knowledge and incorporating both into the provision of patient care in advanced practice settings. Residents who successfully complete an ASHP-accredited PGY2 pharmacy residency are prepared for advanced patient care, academic or other specialized positions, along with board certification, if available. To achieve these goals, the pharmacy resident agrees to do the following performance expectations and other related duties as assigned.

1. Develop and participate in a personal program of self-study and professional growth with the guidance from pharmacy preceptors, advisors, staff, faculty and the Residency Program Director (RPD)
2. Under the supervision of pharmacy preceptors, staff, faculty, and the RPD, participate in safe, effective and compassionate patient care, consistent with the pharmacy resident’s level of education and experience
3. Participate fully in the educational activities of the pharmacy residency program, including all learning experience requirements assigned, and assume responsibility for the teaching of more junior pharmacists, students, and allied healthcare professionals
4. Participate in institutional programs and activities and adhere to established practices, procedures, and policies of the institution
5. Participate in committees of the Department of Pharmacy and hospital committees as assigned by the RPD or learning experience preceptors
6. Develop an understanding of ethical, socioeconomic, and medical/legal issues that affect fiscally responsible pharmacy practice and patient care
7. Perform all duties in accordance with the established practices, procedures, and policies of the institution, its programs, clinical departments to which the resident is assigned
8. Adherence to the moonlighting policies of the Pharmacy Residency Program
9. Comply with the duty hours and working conditions policies of ASHP, UCSDH, and the program in which the resident is appointed
10. Adhere to the learning experience and staffing schedules, as assigned
11. Document patient care activities appropriately and in a timely manner
12. Participate in the PharmAcademic evaluation system, including evaluation of self, preceptors, learning experiences and the Residency Program in a timely manner; in addition, pharmacy residents must seek, participate in, and apply to practice constructive verbal and written feedback that directs their learning
13. Comply with the licensure requirements of the program in which the resident is appointed
14. Comply with specific/special onboarding requirements of affiliated institutions to which the pharmacy resident may rotate as part of their training; these requirements may include, but are not limited to, criminal background checks, substance abuse testing, and health screenings
15. Adhere to the policies defined in the UCSDH Pharmacy Residency Policy and Procedure Document for Pharmacist Residents
16. Adhere to the UCSDH use of email policy
Eligibility Criteria – PGY1 Pharmacy Residents
Applicants for appointment to the post-graduate education training programs sponsored by UCSDH must meet the following criteria:

- Graduate of an ACPE-accredited school of pharmacy; or
- Graduate of an international school of pharmacy who meets the following qualifications:
  - Holds a current, valid Visa, that extends through the entire residency appointment and does not require sponsorship, and
  - Holds a valid, full and unrestricted pharmacist license in the State of California, and
  - Must be eligible to participate in the ASHP PhORCAS Application and Matching Program
- Participates in the PhORCAS electronic application tool
- Participates in the ASHP Resident Matching Program (administered by National Matching Service, Inc)
- Licensed or eligible for licensure as a pharmacist in the state of California (not withstanding requirement for licensing for international SOP graduates above)

All applicants hired by UCSDH will be required to provide and undergo the following:

- Provide proof of United States citizenship or eligibility/authorization to work in the United States through the duration of the appointment year
- Complete a full verification and criminal background screen
- Attend new employee orientation (NEO)

Eligibility Criteria – PGY2 Pharmacy Residents
Applicants for appointment to the post-graduate year 2 (PGY2) education training programs sponsored by UCSDH must meet the following criteria:

- Graduate of an ACPE-accredited school of pharmacy; or
- Graduate of an international school of pharmacy who meets the following qualifications:
  - Holds a current, valid Visa, that extends through the entire residency appointment and does not require sponsorship, and
  - Holds a valid, full and unrestricted pharmacist license in the State of California, and
  - Successfully completed an ASHP-accredited PGY1 pharmacy residency
- Participates in the PhORCAS electronic application tool and Participates in the ASHP Resident Matching Program, OR accepts a position offered through the early commitment process (see below)
- Obtains California pharmacy licensure prior to beginning residency
  - The residency is expected to begin on the last Monday of July, or first Monday of August, depending on the Human Resources orientation schedule. However, the resident must have obtained their California pharmacist license prior to beginning residency (absolute deadline to start is November 1st)
  - If the resident is not licensed by November 1st, they will be dismissed from the residency. The residency offer may be rescinded if the resident does not take the California Board of Pharmacy law exam prior to August 1st or does not pass the California Board of Pharmacy law exam on the first attempt

All applicants hired by UCSDH will be required to provide and undergo the following:

- Provide proof of United States citizenship or eligibility/authorization to work in the United States through the duration of the appointment year
- Complete a full verification and criminal background screen
- Attend NEO

Selection
Programs select for interview from among eligible applicants based on their preparedness and ability to benefit and be successful in the program to which they are applying. Aptitude, academic credentials, personal characteristics, and ability to communicate are considered in the selection. In selecting from among qualified applicants, programs must participate in the PhORCAS electronic application process, participate in an organized interview process, and participate in the ASHP Resident Matching Program. PGY2 programs may elect to participate in the Early Commitment Process whereby a position in a PGY2 program may be committed to a current UCSDH PGY1 resident in advance of the matching process, under the conditions as outlined by the ASHP Resident Matching Program.
12 months, first pay period near July 1st
12 months, first pay period near August 1st

ANNUAL SALARY
PGY1 Residents: $2140.00 Bi-weekly
PGY2 Residents: $2280.00 Bi-weekly

VACATION
Residents accrue up to 15 days of vacation annually. Residents cannot use vacation time until it is accrued. Unpaid, earned vacation time will be paid out to the resident at the end of the residency year if it is not used.

SICK LEAVE
Residents accrue up to 12 days of sick time annually. Residents cannot use sick time until it is accrued. Unpaid, earned sick time will be paid out to the resident at the end of the residency year if it is not used.

COMPENSATORY LEAVE
Residents will receive an equal number of compensatory leave days to match holiday staffing hours at the beginning of the residency year to use for vacation and sick time. It must be used prior to vacation or sick time.

APPOINTMENT DURATION
The PGY1 appointment is to begin on last Monday of June, or first Monday of July, depending on the Human Resources orientation schedule and may continue for 12 months. The PGY2 appointment is to begin on last Monday of July, or first Monday of August, depending on the Human Resources orientation schedule and may continue for 12 months. Your appointment will terminate automatically 12 months after starting unless (a) your appointment is terminated earlier pursuant to the section labeled TERMINATION OF APPOINTMENT AND AT WILL STATUS; or (b) the contract is extended prior to the termination date in writing signed by both parties pursuant to the section labeled RENEWAL OR EXTENSION OF THE CONTRACT. If the contract is extended, it will terminate automatically upon the expiration date of the extension unless terminated earlier pursuant to the section labeled TERMINATION OF APPOINTMENT AND AT WILL STATUS.

DUTIES AND RESPONSIBILITIES
Your duties and responsibilities shall be those set forth in the job description which is incorporated into this document. Additional duties may be assigned to you and the job description may be modified from time to time by management to accommodate changing circumstances and needs. Your duties and responsibilities shall be conducted in accordance with the University’s policies, procedures, and rules as established by management. You agree to perform all the duties set forth in your job description as well as those assigned by management.

HOURS OF WORK
This appointment is at 100 percent of full time. The workweek for this position will be consistent with the ASHP Duty Hours Policy. The University will schedule your hours to accommodate operational needs. During the workweek, you are expected to work your regular schedule and to generally be available as business requires. As an exempt employee, you will not receive overtime compensation, and you will be expected to work the amount of time necessary to perform the assigned duties. This position emphasizes meeting the responsibilities assigned to this position, rather than working a specified number of hours.

COMPENSATION AND BENEFITS
1. Salary
This position is assigned to a payroll title assigned to the appropriate residency year (i.e. PGY1 or PGY2 Post PharmD Pharmacy resident). The salary for this position is described earlier in this document, less applicable withholdings. Any changes in your salary shall be only by written amendment to this contract signed by both parties.

2. **Benefits**
   You shall be eligible for University-sponsored health and welfare benefits and retirement benefits in accordance with the eligibility provisions of the University of California Group Insurance Regulations and the University of California Retirement System plan documents and related regulations. Subject and subordinate to the eligibility provisions, plan documents, and regulations, the parties would anticipate that you would be eligible for Full benefits at the beginning of this agreement, subject to change during its term.

**APPLICATION OF PERSONNEL POLICIES FOR STAFF MEMBERS (PPSM) AND OTHER POLICIES**

These policies may be changed by the University at any time and those changes will be applicable to you. You can find these policies [here](#).

1. **Policies Applicable to All Exempt Professional & Support Staff Contract Appointments**

   The PPSM listed below are incorporated into this agreement.
   
   PPSM 1: General Provisions
   PPSM 2: Definition of Terms
   PPSM 3: Types of Appointment (Contract Appointment only)
   PPSM 21: Selection and Appointment (except Selection)
   PPSM 30: Compensation
   PPSM 34: Incentive and Recognition Award Plans (if eligibility criteria are met)
   PPSM 35: Uniforms and Safety Apparel (if applicable)
   PPSM 62: Corrective Action
   PPSM 63: Investigatory Leave
   PPSM 70: Complaint Resolution (Discrimination complaints only)
   PPSM 80: Staff Personnel Records
   PPSM 81: Reasonable Accommodations
   PPSM 82: Conflict of Interest
   PPSM 83: Death Payments (if eligibility criteria are met)
   PPSM 84: Accommodations for Nursing Mothers
   PPSM 2.210: Absence from Work:
      - Section III.A: General Leave Provisions
      - Section III.B: Vacation Leave (if eligibility criteria are met other than the requirement that the employee hold a career, limited, or floater appointment)
      - Section III.C: Sick Leave (if eligibility criteria are met)
      - Section III.D: Leaves Related to Life Events (except Supplemental Family and Medical Leave; Extended Sick Leave pursuant to Work- Related Injury or Illness; and Personal Leave)
      - Section III.E: Military and Other Service-related Leaves
      - Section III.F: Administrative Leaves (except Professional Development Leave)
      - Section III.G: Other Leaves
      - Section III.H: Holidays (if eligibility criteria are met)

2. No other provisions of PPSM shall apply. PPSM may be revised as needed. Any changes to the provisions referenced above shall be applicable to you and shall be incorporated into this agreement.

3. In addition, current and/or amended University policies of general application shall apply to you. This includes, but is not limited to, the following:
   - Discrimination, Harassment, and Affirmative Action in the Workplace;
• Electronic Communications Policy;
• Patent Policy;
• Policy on Substance Abuse;
• Regents Policy 1111 (Policy on Statement of Ethical Values and Standards of Ethical Conduct);
• Regents Policy 7706 (Reemployment of UC Retired Employees Into Senior Management Group and Staff Positions);
• Reporting Child Abuse and Neglect;
• Sexual Violence and Sexual Harassment;
• Whistleblower Policy (Policy on Reporting and Investigating Allegations of Suspected Improper Governmental Activities); and
• Whistleblower Protection Policy.

4. To the extent that any applicable University policy conflicts with the express terms of this agreement, the terms of this agreement shall apply.

REIMBURSEMENT OF EXPENSES INCURRED BY STAFF MEMBER
With prior University approval, you shall be entitled to reimbursement of expenses (including travel expenses) incurred by you on behalf of the University in the performance of your duties. Reimbursement requests must be submitted in accordance with University policies on travel and expense reimbursement. These policies may be amended by the University at any time and those changes will be applicable to you.

TERMINATION OF APPOINTMENT AND AT WILL STATUS
You are an at-will employee, which means your appointment may be terminated at any time by you or the University, with or without notice, and with or without cause, in a writing served on the other party. Although other terms and conditions can be changed from time to time at the discretion of the University, the at-will status of this agreement cannot be changed, amended, or altered.

Termination is not reviewable under PPSM 70: Complaint Resolution, except for complaints of discrimination.

RENEWAL OR EXTENSION OF THE CONTRACT
You and the University may agree to renew your appointment. In order for the renewal to be effective, you and the University must enter into a new employment agreement that sets forth the terms to the new agreement. In the alternative, the duration of the existing contract may be extended by mutual written agreement. The written extension must specify the new end date.

Non-renewal and non-extension of your contract are not reviewable under PPSM 70: Complaint Resolution, except for complaints of discrimination.

GENERAL PROVISIONS
Except for any other agreements set forth in the University of California State Oath of Allegiance, Patent Policy, and Patent Acknowledgement, this contract constitutes the entire agreement between the parties and supersedes any other prior agreements and any other representations made to you about the terms and conditions of your employment, whether written or oral. The terms of this agreement, except the at-will status, may be modified only by subsequent written agreement signed by both parties. In the event that any part of this agreement is declared or rendered invalid by court decision or statute, the remaining provisions of the agreement shall remain in full force and effect. California law shall govern the interpretation and construction of this agreement.

OTHER CONDITIONS FOR EFFECTIVE CONTRACT
This employment contract is not effective until you have completed all University payroll/personnel processing necessary to become a University contract employee. This includes, but is not limited to,
the federal requirement that you provide to the University documentary evidence of your eligibility to work in the United States.

---

**UC SAN DIEGO RESIDENT DUTY HOURS AND WORKING ENVIRONMENT POLICY**

UCSDH follows the duty hour policy set forth by ASHP. Please visit the [ASHP website](#) for policy details.

**Moonlighting**
- Residents are not permitted to moonlight
- Moonlighting that disrupts a residents program in any way that is not resolved will result in disciplinary action up to and including dismissal

**Supervisory Back-Up**
Appropriate preceptor/faculty and/or supervisory resident backup will be provided for every pharmacy resident for consultation, education and supervision

**Pharmacy Resident Fatigue**
Faculty, staff, and pharmacy residents shall be educated to recognize the signs of fatigue and to utilize alertness management and fatigue mitigation strategies. Residents not fit for duty will be sent home by their preceptor, manager, or RDP, as appropriate

**Grievance**
Each program’s policies and procedures shall include grievance procedures in relation to duty hours.
- Pharmacy residents may bring forward issues regarding duty hours to their RPD, chief resident, or the Chief Pharmacy Officer
- Pharmacy residents may also bring his/her concerns regarding duty hour implementation directly to the Campus Ombudsperson, UCSD Office of the Ombuds; such interaction is held in strict confidence

**Working Environment**
Pharmacy residents are provided a safe and secure working environment with adequate desk space and bathroom facilities. Security Services staff provides escorts to Medical Center locations 24 hours a day/7 days a week. To request an escort, call security at 619-543-3762. If you do not wish to use our escort service, but are walking to your vehicle or to a Medical Center location after hours, please consider using the “buddy system” and walk with another person.
HOLIDAYS

The University provides paid time off for holidays for eligible employees. To find the dates that they will be observed, please visit https://blink.ucsd.edu/HR/benefits/time-off/holidays

- A pharmacy resident may observe a special or religious holiday, provided that the work schedule permits and provided that the time off is charged to vacation or is without pay
- Holiday staffing shall be assigned by the RPD or designee and the following may be considered: continuity of patient care, opportunity for unique educational experience, supervision or education of others or other special requirements of the pharmacy resident’s particular level of training, licensing restrictions
- Pharmacy resident holiday pay is incorporated into their yearly stipend
- PGY1 pharmacy residents work one holiday weekend that spans four days
- PGY1 Acute Care pharmacy residents work two holiday weekends that spans three days
- PGY1 Ambulatory Care pharmacy residents work one holiday weekend that spans three days
- PGY2 pharmacy residents work one holiday weekend that spans four days and one holiday that spans three days
LEAVE POLICY

Vacation
- Residents accrue vacation based on multiple factors including number of eligible hours in the quarterly (every four weeks) cycle for a total of 13 accrual cycles in a year, policy or bargaining contract, and years of qualifying UC employment. For residents, this amounts to up to 15 vacation days annually.
- Residents cannot use vacation time until it is accrued. Unpaid, earned vacation time will be paid out to the resident at the end of the residency year if it is not used.
- Vacation leave shall be requested by the pharmacy resident in writing using the Department of Pharmacy Leave / Adjustment Approval Form and must be approved by the Residency Program Director (RPD) or designee and the pharmacy resident's learning experience preceptor(s); the Leave Approval Form must be signed by the preceptor and submitted to the RPD at least 2 weeks prior to the scheduled date; Leave Approval Forms will be submitted to the Residency Coordinator for tracking.
- Vacation may be scheduled and granted in full or may be split depending upon the requirements of the training program and the written requests of the pharmacy resident.
- To the extent allowed by the training requirements of the program, vacation leave will be granted in accordance with the pharmacy resident's requests.
- Changes in the leave schedule may be initiated by the RPD when required by department activities or needs; the RPD shall endeavor to give advance notice of any change.
- Pharmacy residents wishing to make a change in the posted leave schedule must submit a written request; approval of such requests is subject to the staffing requirements of the residency program, the department and the discretion of the RPD or designee and the learning experience preceptor.
- Minimum attendance of 80% days on any block learning experiences is required for residents (PGY1 and PGY2), unless noted at the discretion of the RPD for special circumstances.
- Make-up time may be required to meet the educational objectives and certification requirements of the residency program.
- A maximum of one missed session per 3 month longitudinal half-day learning experience and two missed sessions per 6 month longitudinal half-day learning experience is allowed.
- Leave must be taken during the period of appointment.
- Vacation during the last two weeks of the appointment year is permitted only if ALL graduation requirements have been successfully completed and at the discretion of the RPD.

Professional/Educational Leave
- With the approval of the RPD, pharmacy residents may be granted up to ten work days of leave with pay to assist in recruitment efforts or to pursue scholarly activities pursuant to their education curriculum.
- If additional time off beyond ten work days is necessary to support recruitment efforts or scholarly activity, pharmacy residents must submit vacation requests as noted above.
- Time not taken may not be carried over from one appointment to another (PGY1 to PGY2; resident to staff pharmacist) and will be forfeited.

Sick Leave
- Residents accrue sick time based on multiple factors including number of eligible hours in the quarterly (every four weeks) cycle for a total of 13 accrual cycles in a year and policy or bargaining contract. For residents, this amounts to up to 12 sick days annually. Pharmacy residents cannot use sick time until it is accrued. Unpaid, earned sick time will be paid out to the resident at the end of the residency year if it is not used.
- Each pharmacy resident will notify his/her RPD, learning experience preceptor and/or the staffing shift supervisor (if applicable) prior to the start of the learning experience or staffing shift; notification after the start of a shift may be considered an unexcused absence and subject to disciplinary action.
• The pharmacy resident must provide the RPD with physician records to document illnesses lasting three or more days
• The pharmacy resident must provide the RPD with physician records to document illnesses that necessitates the pharmacy resident missing any of the Therapeutics Conference longitudinal learning experience
• The pharmacy resident must provide the RPD with physician records to document illnesses that necessitates the pharmacy resident missing more than 1 session per 3 month longitudinal learning experience or 2 sessions per six month longitudinal learning experience
• Sick leave is not to be used as vacation
• Make-up time may be required to meet the educational objectives and certification requirements of the training program

Other Leave
Leave for other purposes will follow University policies laid out in UCOP PPSM 2.210. Make-up time may be required to meet the educational objectives and certification requirements of the Training Program. Time allowed for extended leave will be made up by extending the residency program to ensure 12 months of residency training. The pharmacy resident should discuss make-up requirements with their RPD, if possible, prior to taking extended leave. If extended leave results in the requirement for additional training in order to satisfy the program, the pay status for the additional training time will be determined by the RPD under advice from the Chief Pharmacy Officer, if possible, prior to the approval of leave.

RESIDENT USE OF EMAIL

The special nature of pharmacy residency programs requires ongoing communication between the residents, the training programs, administrators and others at UCSDH and affiliated institutions.

The policy of the Department of Pharmacy requires that pharmacy residents be available by email. Pharmacy residents are required to have and use a UCSDH email account that is provided at no cost. Pharmacy residents are expected to check their email at reasonably frequent intervals unless they are on approved leave. Pharmacy residents must comply with UCSDH policies and state and federal laws that apply to email.

RECORDS POLICY

The University maintains as confidential the records of each pharmacy resident and the consent of the individual is required before access to records is allowed except where permitted or required by law, or where directly or routinely required in the administration of the training program. A pharmacy resident may inspect his/her records in accordance with current privacy legislation and University policy.

EVALUATION / ASSESSMENT/ ADVANCEMENT

The knowledge, skills, professional growth and progress of each pharmacy resident, including professional conduct, shall be evaluated by the teaching preceptors for each Learning Experience and will be reviewed by the RPD. Appropriate criteria and procedures must be used. PharmAcademic, the web-based evaluation tool provided by ASHP, will be utilized. Other evaluation tools/programs will be utilized, as appropriate. Evaluation shall be provided to and discussed with the pharmacy resident in a timely manner. Pharmacy residents may refer to Learning Experience Descriptions for assessment strategies.

The RPD shall design a Customized Development Plan (CDP) for each resident which will be discussed and updated with the resident quarterly. The initial CDP will be based on evaluation of the incoming resident’s experience, interests and career plans, and will be discussed with the pharmacy resident within 30 days of starting the program. The CDP will track the pharmacy resident’s progress towards achieving any agreed-upon
graduation requirements. Appropriate and necessary modifications to the CDP will be documented and reflect
the resident’s needs and changing interests. The CDP will include the pharmacy resident’s schedule and note
modifications made to the pharmacy resident’s schedule based on feedback and evolving needs.

Pharmacy residents will participate in the annual confidential review of the program, learning experiences,
conferences, teaching opportunities, and RPD, and are encouraged to offer recommendations for their
residency program improvement throughout the residency year.

The RPD and the pharmacy resident will complete the final Development Plan at the completion of the
residency and as part of resident closeout. If the resident has met the graduation requirements, the evaluation
will verify that the pharmacy resident has demonstrated sufficient professional ability to practice independently.
The final evaluation shall be made part of the resident's PharmAcademic record.

SPECIAL REQUIREMENTS FOR PHARMACY RESIDENTS

California Intern Pharmacist And Pharmacist License

The UCSDH Pharmacy Residency PGY1 programs require all pharmacy residents to have obtained their
California intern pharmacist license prior to beginning their appointment.

UC San Diego Health requires PGY1 Pharmacy Residents to be successfully licensed as a pharmacist by the
California Board of Pharmacy within 90 days of the start date of the residency; failure to be a licensed
pharmacist in California within 90 days of the start date of the residency will result in automatic resignation or
implementation of a corrective action plan at the discretion of the RPD and upon advice from the RAC and
Chief Pharmacy Officer; the Corrective Action Plan is written by the Resident’s RPD and must be adhered to
by the Resident; the Corrective Action Plan may include, but is not limited to, changes in rotation and staffing
schedules, and a paid or unpaid extension of the residency year.

Once licensed, pharmacy residents must maintain a full and unrestricted license in order to continue their
appointment. Should a resident’s license be placed on probation, his/her continuation in training will be at the
discretion of the RPD and the Chief Pharmacy Officer. Appointments will not be made for any candidate or
pharmacy resident who is on probation from the California State Board of Pharmacy.

UC San Diego Health PGY2 Pharmacy programs require all pharmacy residents to have obtained their
California pharmacist license prior to the start of the Residency Program. Failure to obtain licensure in the
State of California by November 1st will result in automatic withdrawal of the PGY2 appointment offer.
CRIMINAL BACKGROUND CHECK POLICY

Completion of a satisfactory Criminal Background Check (CBC) will be a requirement for all newly appointed pharmacist residents in training sponsored by UCSDH. Thereafter, the ability to obtain and maintain licensure will serve as evidence of an ongoing satisfactory CBC.

Procedures
1. Contracts sent by UCSDH Human Resources will include a statement about the requirement of a satisfactory CBC and completion of an attestation questionnaire as a condition of employment
2. CBC’s will be performed by a reputable company through the usual business contracting arrangements
3. Matched pharmacists-in-training will be asked to provide appropriate authorization, with the pertinent identifying information necessary to initiate the check
4. Those undergoing the CBC will have an opportunity before any information in released to UCSD to review the data for accuracy
5. The following databases would be searched:
   a. Social Security number validation
   b. Analyzed Social Security number search
   c. County criminal records search
   d. Nation criminal file search
   e. National sexual offender database search
   f. Sanctions Base search
5. CBC reports for new pharmacist residents will be reviewed by the RPD, RAC and the Chief Pharmacy Officer, who will make a decision about entry into the program; there is no appeal to this decision
6. CBC reports for current pharmacist resident (UCSDH PGY1 residents accepted for a UCSDH PGY2 residency) will be reviewed by the RPD, RAC and the Chief Pharmacy Officer, who will make a decision about continuation in the program; should a decision of termination be made, the appeal mechanism specified in UCSDH's Pharmacy Residency Policy and Procedure Document will apply

Training At Affiliated Pharmacy Training Sites
Additional screening and procedural requirements may be mandated by affiliated institutions while pharmacy residents are rotating through those sites as a part of their pharmacy residency training at UCSDH.
RESIDENTS EXPERIENCING HARRASSMENT AND DISCRIMINATION

As noted by the Office for the Prevention of Harassment and Discrimination (OPDH), the University of California, in accordance with applicable Federal and State law and University policy, does not discriminate on the basis of race, color, national origin, religion, sex, gender identity, pregnancy,¹ physical or mental disability, medical condition (cancer related or genetic characteristics), ancestry, marital status, age, sexual orientation, citizenship, or service in the uniformed services.² The University also prohibits sexual harassment. This nondiscrimination policy covers admission, access, and treatment in University programs and activities.

OPHD provides assistance to students, faculty and staff regarding reports of bias, harassment and discrimination. OPHD is the Title IX office at UC San Diego. Our mission is to educate the entire UC San Diego community about these issues and to assist with the prevention and resolution of these issues in a fair and responsible manner. In collaboration with other UC San Diego resources, OPHD promotes an environment in which all members of the UC San Diego community can work, learn and live in an atmosphere free from all forms of bias, harassment and discrimination.

OPHD supports UC San Diego's Principles of Community, and our mission reflects the University's commitment to maintaining “a climate of fairness, cooperation, and professionalism.” We join others at UC San Diego in embracing “diversity, equity, and inclusion as essential ingredients of academic excellence in higher education.”

For information on how to report an incident of sexual violence, visit Sexual Violence Prevention & Response. UC San Diego is committed to the highest standards of civility and respect toward all as reflected in the UC San Diego Principles of Community. The university rejects acts of harassment and discrimination, works to resolve concerns, and investigates known facts to determine if university policies have been violated.

Why Report?
Filing a report helps the university maintain a safe environment that supports the educational mission of the institution. In addition, unreported bias incidents can perpetuate continued bias and erode the campus climate.

Ways to Report
Report suspected bias incidents to the OPHD office in the following ways:
Online — OPHD Web Form (Available at any time)
Email — Send a report to ophd@ucsd.edu (Available at any time)
By Phone — (858) 534-8298
If you are experiencing an emergency, please contact 911 or UCSD Police at (858) 534-HELP. You may also contact confidential CARE at the Sexual Assault Resource Center for immediate support, counseling and advocacy. CARE is available to UCSD students, staff, faculty, patients, and others who experience sexual violence in the context of a University program. Contacting CARE does not constitute a report to the University.

What to Include in Your Report
Keep any evidence, including photographs, written notes, documents and contact information for witnesses or other persons involved with the incident. File a report as soon as possible after the incident occurs to preserve the accuracy of information.
Note: A lack of "hard evidence" or significant time lapse since an incident occurred should not discourage you from filing a bias report but may limit what actions can be taken.

Who Can Report
Any member of the community can use this form to report bias incidents involving members of the UC San Diego community or third parties.
Report hate crimes to UC San Diego Police.
Phone: (858) 534-4357
Fax: (858) 534-6192
Campus location: Campus Services Complex — Building B (map)
If you wish to remain anonymous, you may omit your name and contact information on the form. However, anonymous reports can make follow-up more difficult or unsuccessful. For the community's greater good, you're encouraged to include your contact information. If you are fulfilling your Responsible Employee mandated reporting requirement, you may not fill out this form anonymously.

Responsible Employees
As a Responsible Employee, you must contact OPHD as soon as possible when you learn that any UCSD student, staff, faculty, or patient has potentially experienced an incident of sexual violence or sexual harassment. Share whatever information you have, including the names of any individuals involved, their contact information, and any details of the incident you have.

As a Responsible Employee, you should report directly to OPHD, even if you are unsure that the incident actually occurred or unsure whether it constitutes sexual harassment or sexual violence. You should not investigate the report, and should not try to intervene or resolve the issue.

The Title IX officer will assess the information you provide and will work with the appropriate people to determine next steps.

While information must be provided to OPHD, responsible employees should not discuss the case with other people who do not have a legitimate need to know.

What to Expect Once You Have Filed a Report
If you provide contact information, an OPHD staff member will contact you to determine an appropriate response. If you choose to remain anonymous, the university will follow up on the incident as reasonably feasible, based on the information provided.

Resources
Learn more about the definitions of bias, harassment and discrimination
Support/resources
Relevant policies

UCSDH Pharmacy Residents also have access to the UCSD Ombuds Office (Non-reporting office offering confidential services)

The UC San Diego Office of the Ombuds provides confidential, neutral, and informal dispute resolution services for the UC San Diego community.
We are available to assist faculty, staff, students, non-Senate academics, postdoctoral trainees, and employees of UC San Diego Health System (UC San Diego Medical Center and related facilities) who seek guidance with the resolution of academic or administrative issues and disputes. Its services supplement, but do not replace, other administrative processes at the University.

We work to facilitate communication and assist parties in reaching mutually acceptable agreements in order to find fair and equitable resolutions to concerns that arise at the university.

Without disclosing confidential communications, we report general trends of issues and provides feedback throughout the organization, and advocates systems change when appropriate.

The ombuds office functions independently with respect to case handling and issue management and reports to Ethics and Compliance in the Chancellor’s office for administrative and budgetary purposes but not regarding the substance of matters discussed in the office. Its services supplement other administrative processes and formal grievance procedures available at the University. When providing services, the ombuds staff adheres to The International Ombudsman Association Code of Ethics and Standards of Practice which may be found on our website.

To make an appointment, please call 858-534-0777.

---

**EDUCATIONAL ENVIRONMENT CONducive TO OPEN EXCHANGE OF IDEAS**

UC San Diego Health assures an educational environment in which pharmacy residents may raise and resolve issues without fear of intimidation or retaliation by administration, faculty and/or staff through the following organizational system.

Members of the pharmacy residency program may bring forward issues regarding their working environment and their educational programs in a confidential and protected manner at any time to the RPD, RAC, Chief Pharmacy Officer.

Pharmacy residents are also encouraged to discuss issues that require attention or resolution regarding their educational experience with their Chief Residents, RPDs and with the Chief Pharmacy Officer.
Residency Manual Review Attestation

The Residency Manual will be reviewed on an annual basis, or as otherwise needed, by the Residency Program Directors, Residency Advisory Committee Chairs and the Chief Pharmacist.

Electronically Approved:

Marcie Lepkowsky, PharmD, BCGP
Director, PGY1 Pharmacy, Acute Care Focus Residency Program

Justin Bouw, PharmD, BCACP, CDE
Director, PGY1 Pharmacy, Ambulatory Care Focus Residency Program

Nina Haste, PharmD PhD, BCPS AQ-ID, BCIDP
Director, PGY2 Infectious Diseases Pharmacy Residency Program

Wan-Ting Huang, PharmD, BCCCP
Director, PGY2 Critical Care Pharmacy Residency Program

Shanna Block, PharmD, BCOP
Director PGY2 Oncology Pharmacy Residency Program

Mark Mariski, PharmD, BCPS
Director, PGY2 Solid Organ Transplant Pharmacy Residency Program

Trina Huynh, PharmD, BCPS
Director, PGY2 Internal Medicine Pharmacy Residency Program

Kelly Lee, PharmD, MAS, BCPP, FCCP
Director, PGY2 Psychiatric Pharmacy Residency Program

Nancy Yam, PharmD, MHA, BCPS
Director, PGY2 Health System Pharmacy Administration and Leadership Residency Program

Thomas Hatch, PharmD
Director, PGY2 Pharmacy Informatics

Charles E. Daniels, RPh, PhD
Chief Pharmacist, UC San Diego Health System
Associate Dean, Skaggs School of Pharmacy and Pharmaceutical Sciences

Please return the signed copy of this page to your Residency Program Director for inclusion in the Resident file.

I have read and understand the contents of the Residency Manual

________________________________ / _______________________________ / _________________
(printed name)                                                            (signature)                                                            (date)