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 System Department of Pharmacy and the UCSD Skaggs School of Pharmacy and Pharmaceutical Sciences offers a one-year pharmacy practice residency in Ambulatory Care pharmacy practice beginning July 1st.

Scope:
UC San Diego Health Medical Center consists of three acute care hospitals and associated outpatient clinics. 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 internal 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.

Teaching activities include Grand Rounds, involvement with UCSD Skaggs School of Pharmacy and Pharmaceutical Sciences (e.g. conference leader for P4 Ambulatory Care students), and multiple different opportunities for interdisciplinary teaching. The ability to work independently and to supervise pharmacy students will be expected. The resident will also be involved in a research project where scientific writing is strongly emphasized and both the preparation and submission of a manuscript suitable for publication will be expected.

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.

House Officer Details:
The annual stipend is currently $50,500. Benefits include medical, dental, and vision insurance. In addition, vacation, sick and professional leave are provided. Please visit the UC San Diego Health Pharmacy Residency webpage for more information about duty hours, leave, benefits, position description, terms of dismissal, and more. Click on the House Officer Policy and Procedure Document: 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 of the following:
1. Graduating from ACPE-Accredited (at least Candidate status) Pharmacy School or currently licensed pharmacist eligible to be licensed in CA
2. United States Citizen or alien lawfully admitted for permanent residence in the United States (Alien Registration Card/USCIS I-55 Status, i.e. “Green Card”); no Visa sponsoring requirement
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 in late November. 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, strengths and personality traits will help make you a successful resident in the UCSD PGY1 Am Care Residency Program.
   b. Describe your career goals and how they fit within the framework of the UCSD PGY1 Am Care Residency Program.
2. Current Curriculum Vitae
3. Three electronic letters of recommendation (if 4 letters are submitted, one will be randomly dropped from scoring).
4. Official pharmacy school transcript

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

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 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 PIC; 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

Program Structure:

<table>
<thead>
<tr>
<th>Rotations / Electives</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orientation / Training</td>
<td>2-3 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>
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<tr>
<td>Diabetes Self-Management Education (DSME) Clinic</td>
<td>5 weeks</td>
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<tr>
<td>Solid Organ Transplant</td>
<td>5 weeks</td>
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<tr>
<td>Anticoagulation Clinic</td>
<td>5 weeks</td>
</tr>
<tr>
<td>Family Medicine Clinic</td>
<td>5 weeks</td>
</tr>
<tr>
<td>Ambulatory Care Student Case Conferences</td>
<td>3-month longitudinal</td>
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<tr>
<td>Student-Run Free Clinic</td>
<td>3-month longitudinal</td>
</tr>
<tr>
<td>Specialty Pharmacy</td>
<td>3-month longitudinal</td>
</tr>
<tr>
<td>Operations</td>
<td>12-month longitudinal (20 total weekends)</td>
</tr>
<tr>
<td>Electives</td>
<td>3 blocks of 5 weeks each</td>
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Core Rotations
PGY1 Ambulatory Care residents will gain the skills necessary to function as the primary Ambulatory Care Pharmacist during their required core rotations (Anticoagulation, Solid Organ Transplant, Diabetes Self-Management Education (DSME) Clinic, TOC Heart Failure, Family Medicine, and Administration). During direct patient-care rotations the pharmacist will be expected to handle all aspects of the pharmacotheuristic 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 (TOC), 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 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 again. 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).

- Abdominal Transplant and Hepatobiliary, Inpatient
- Academia
- Administration, Inpatient
- Bone Marrow Transplant
- Burn ICU
- Cardiology
- Cardio-thoracic Transplant/Ventricular Assist Devices (CTTx/VAD)
- Dialysis/CKD Clinic
- Emergency Department
- Family Medicine (extended)
- Geriatrics Clinic
- Infectious Diseases
- Inflammatory Bowel Disease
- Informatics
- Investigational Drug Service
- La Jolla ICU
- Medical ICU
- Medicine, Hillcrest
- Medicine, Thornton
- Moore’s Cancer Center Clinics and Infusion Center (prerequisites: BMT or ONC)
- Medication Therapy Management
- Neonatal ICU
- Neuro-critical Care ICU
- Neurology Clinic
- Oncology
- Owen Clinic (Antiretrovirals)
- Palliative Care

Longitudinal Clinic Experience
The resident will have four (4) 3-month longitudinal learning experiences in which to participate throughout the year. Participation in the Refill Clinic, Student-run Free Clinic, and Ambulatory Care Conferences are required; therefore, one elective longitudinal experience is 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 resident will receive 13 paid days for holidays and 12 sick days for the academic year. Vacation time will be in accordance with GME rules and will be defined as 20 days of vacation PLUS 5 days for professional leave to attend meetings or conferences.

Research Project
The resident will be responsible for conducting 1 research project throughout the academic year that will be completed and presented at the Western States Conference or an equivalent 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 SSPPS APPE Students
Residents, under the guidance of the pharmacist preceptor, will provide preceptorship for SSPPS 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 SSPPS IPPE Students
Residents may be assigned SSPPS 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 (Block)</td>
<td>Final</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Anticoagulation (Longitudinal)</td>
<td>Final</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Antiretroviral (Owen Clinic)</td>
<td>Final</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Family Medicine (Block)</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>
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</tr>
<tr>
<td>P4 Am Care Conference</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>Solid Organ Transplant</td>
<td>Final</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Specialty Pharmacy</td>
<td>Quarterly</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>
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</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 visiting PharmAcademic, go the ‘Reports’ tab, and click on ‘Goals and Objectives Taught/Taught and Evaluated in Learning Experiences’.

**PGY1 Ambulatory Care Residency Requirements for Completion/Graduation:**
- Candidates must meet eligibility requirements before interviewing and being matched
- Successfully licensed as a pharmacist in the State of California within 90 days of the start date of the residency (see notes above regarding exceptions)
- Successful completion of all rotations
- Successful completion of Residency Council Seminar Series
- Achievement of 90% or more of RLS objectives
- Provision of one Grand Rounds, one Journal Club, one Morbidity and Mortality conference, one Family Medicine resident in-service, one “Tech-talk”, one Outreach presentation to the community
- Completion of residency project with presentation at the Vizient meeting
- Preparation of the residency project in manuscript format with final approval by the Research Council Chair or designee
- Regular attendance at and participation in and completion of the SDPRL Teaching Certificate Program (PGY1)
- Membership in the California Society of Health Systems Pharmacists and the American Society of Health-System Pharmacists

**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 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 Program Director
- All Program requirements of the resident must be completed within one year post-residency to have the Certificate of Completion conferred