



**PGY2-INFECTIOUS DISEASES PHARMACY RESIDENCY PROGRAM
2021-22**

Last Updated 7/12/21

GENERAL INFORMATION

The University of California Irvine Medical Center offers one Post-Graduate Year Two Pharmacy Resident in Infectious Diseases position which is on candidate status for accreditation by ASHP and is sponsored by UC Irvine Medical Center.

Period of Appointment: July 12, 2021 (New Employee Orientation) through July 15, 2022

Salary: Approximately \$53,949 annually

Application Deadline: January 4, 2021

Health Insurance: Medical, dental, and vision coverage through UC Irvine sponsored plans

Vacation: 21 days accrued over the year. To maximize residency training, residents will be allowed 2 weeks of paid vacation leave for the residency year

Paid Professional Leave: Two weeks (10 working days) are allowed to attend professional meetings (Infectious Diseases Society of America's annual meeting, ASHP Mid-Year and UC Pharmacy Leadership Collaborative Conference)

LEARNING EXPERIENCE DESCRIPTIONS

UC Irvine Medical Center offers a few Infectious Diseases Specialty Rotations, in addition to general rotations. A brief description of learning experiences that the PGY2-ID resident will participate is included in this document. For general learning experiences that both PGY1 and PGY2 residents participate, additional information is found in PharmAcademic®.

ORIENTATION (Required: 2 weeks)

The incoming PGY2-ID pharmacy resident will complete the new employee orientation for the organization, meet the pharmacy leaders and preceptors, and complete required pharmacy departmental competencies including training in the electronic medical record. The residency program director will orient the resident to the PGY2-ID program, learning experience descriptions, the calendar of learning experiences, expectations of the resident, residency policies, and, requirements for successful completion of the residency during this learning experience.

Preceptor: Helen S. Lee, PharmD, BCPS-AQ ID, BCIDP

INFECTIOUS DISEASES (Required)

The PGY2-ID pharmacy resident will actively participate as an integral member of interdisciplinary ID consult team caring for adult patients with infections and gradually assume responsibility for their pharmaceutical care

and serve as the ultimate resource for information about anti-Infectives and for decision making affecting the care of these patients. The resident will participate in managing infectious diseases for patients in various areas such as general medicine, critical care, oncology, surgical or HIV/AIDS patients. The resident will have the opportunity to precept third- or fourth-year pharmacy students and or PGY1 pharmacy residents. The resident is expected to gradually increase in the level of independence over the course of the residency year and the sequence of the ID Consult for Adult Learning Experiences will promote the progressive independence.

- **Infectious Diseases 1** (6 weeks): this is the first and introductory learning experience during which the PGY2-ID resident will get acquainted with the organization's electronic medical record system and workflow of Infectious Diseases Consult Service. The residency program director (RPD) will provide direct instruction on core topics as needed, modeling during multi-disciplinary rounds and coaching the resident to start assuming the responsibility of the care of patients with Infections.
- **Infectious Diseases 2A** (8 weeks): this is an intermediate learning experience with an emphasis on APPE student precepting. The RPD continues to provide direct instruction as needed, modeling during multidisciplinary rounds during the first half, coaching the resident to assume the responsibility of the care of at least half of the patients staffed by ID consult service. The resident will have hands-on experience precepting students by providing topic discussions and modeling the role of ID pharmacist/ID resident pharmacist for the students.
- **Infectious Diseases 2B** (8 weeks): this is an intermediate learning experience with an emphasis on Infection Prevention Practices. The RPD prioritizes on coaching and facilitating the resident's provision of patient care activities on patients staffed by ID consult service. The resident will have an opportunity to collaborate with the Epidemiology and Infection Prevention (EIP) Team through weekly work meetings and collaborate with the EIP team on infection prevention policies and/or strategies to prevent transmission of infections as opportunities are identified.
- **Infectious Diseases 3** (6 weeks): this is the final and independent learning experience for the resident to assume the comprehensive role of Infectious Diseases Pharmacist and Antimicrobial Stewardship Pharmacist. The RPD prioritizes on facilitation of the resident's provision of patient care activities on patients staffed by ID consult service and respond inquiries by pharmacists and other health care providers. The resident will carry the Infectious Diseases Pharmacist' pager during this learning experience.

Preceptor: Helen S. Lee, PharmD, BCPS-AQ ID, BCIDP

CLINICAL MICROBIOLOGY (required; 2 weeks)

The PGY2-ID pharmacy resident will be trained in the fundamentals of diagnostic clinical microbiology. The experience consists of active participation in the laboratory diagnosis of bacterial, mycobacterial, fungal, parasitic, and viral infections and educational activities through lectures and small group discussions. The PGY2-ID pharmacy resident is usually paired up with a PGY4-ID Medical Fellow for this learning experience.

Primary Preceptor: Cassiana Bittencourt, MD

Supporting Preceptor: Helen S. Lee, Pharm.D.

ANTIMICROBIAL STEWARDSHIP PRACTICES

(Longitudinal, required; 10 months)

The PGY2-ID pharmacy resident will have opportunities to work closely with the Antimicrobial Stewardship medical director and the RPD in various stewardship efforts in order to ensure judicious use of antimicrobial agents. The resident will participate in various stewardship strategies including, but not limited to: blood culture review using rapid diagnostic technologies, prospective review and feedback, tracking of antimicrobial use, developing/updating of clinical guidelines for infectious diseases, antimicrobial formulary management and conducting medication utilization reviews. The resident will have at least 2 weeks of focused learning experience under the direct supervision of the Antimicrobial Stewardship medical director to perform prospective review and to review requests for restricted anti-infective agents. The resident will support Antimicrobial Stewardship Subcommittee meetings by conducting relevant literature review and preparing

written summaries on requested topics and guidance documents on appropriate antimicrobial usage by indication etc.

Preceptor: Steven Park, MD, PhD and Helen S. Lee, PharmD

CRITICAL CARE

NOTE: ONE CRITICAL CARE LEARNING EXPERIENCE IS REQUIRED

CRITICAL CARE-NEUROCRITICAL (elective; 3 weeks)

This required learning experience is designed to provide the PGY2-ID pharmacy resident with the opportunity to further develop his/her knowledge and expertise in the management of critically ill patients with infections. This will be achieved through rounding with the neurocritical care team, active participation in the management of patients, and performing medication order interventions with emphasis on antimicrobial therapy. Much emphasis will be placed on developing the resident's thought process. Residents will be challenged to critically evaluate drug regimens and to act both reactively and proactively to drug issues.

Common disease states encountered within the Neuroscience ICU include, but are not limited to: status epilepticus, intracranial hemorrhage, ischemic stroke, cerebral vasospasm, spinal cord injury, brain tumors, and infection (meningitis/ventriculitis, pneumonia, Clostridium difficile, etc.). General critical care-related topics that will be covered include: management of pain, agitation and delirium, sepsis, intensive insulin therapy, stress ulcer prophylaxis, and anticoagulation reversal.

Preceptor: Mira Bakas, Pharm.D., BCCCP

CRITICAL CARE- MEDICAL (elective; 3 weeks)

This elective learning experience is designed to provide the PGY2-ID pharmacy resident with the opportunity to further develop his/her knowledge and expertise in the management of critically ill patients with infections. MICU is managed by the pulmonary medicine division with attending physicians board-certified in critical care and pulmonology. The MICU is a closed unit so the critical care service manages all admissions. The rounding team includes the attending physician, 2 residents (2nd/3rd year), 2 interns, a clinical pharmacist and medical students. Case manager, social worker, respiratory therapist and bedside nurse may also participate in patient care rounds. The PGY2-ID resident is responsible for identifying and resolving medication therapy issues with emphasis on antimicrobial therapy for patients and will work toward assuming care of all patients in the unit throughout the rotation.

Preceptor: Lan Vu, Pharm.D., BCPS

CRITICAL CARE-SURGICAL (elective; 3 weeks)

This elective learning experience is designed to provide the PGY2-ID pharmacy resident with the opportunity to further develop his/her knowledge and expertise in the management of critical ill surgical or trauma patients with infections. In following critically-ill trauma patients and through direct interaction with physicians, nurses, and other members of the interdisciplinary team, residents will witness and gain valuable insight into the clinical use of drugs in particular antimicrobial agents and both their efficacy/toxicity. Much emphasis will be placed on developing the resident's thought-process, and residents will be challenged to critically evaluate drug regimens and to act both reactively and proactively to drug issues.

Preceptor: Steven Atallah, Pharm.D., BCCCP

Emergency Medicine (elective; 3 weeks)

The Emergency Medicine elective experience will provide the PGY2-ID resident with exposure to managing infectious diseases in a wide variety of emergent patients. The resident will be actively involved with the interdisciplinary Emergency Department team which includes attending physicians, ED specific residents, nurses, and pharmacists. Specific activities include daily pre-rounding, medication profile review of all active medications, monitoring of lab and

drug therapy, management of symptoms, participation in ongoing research activities, and active participation in all adult and pediatric resuscitations. The resident will be expected to execute bedside clinical decision making, emergent medication preparation, and provide both basic and advanced life support. The learning experience will be ID focused and designed around the residents' own interests.

Preceptor: Stephen Lee, Pharm.D., BCPS, BCCCP

ID/HIV CLINIC (Longitudinal, required; 3 months)

The PGY2-ID pharmacy resident will complete a three-day training in HIV/AIDS care through Pacific AIDS Education and Training Center at UC Irvine. Subsequently, the resident will have the opportunity to provide pharmaceutical care to individuals affected by HIV/AIDS in ambulatory care clinics. The lead preceptors for this learning experience are non-pharmacist preceptors; therefore, it is designed to take place during the second half of the residency year.

The division of Infectious Disease here at UC Irvine Health maintains an outpatient clinic located adjacent to the medical center. Patients are referred to this clinic for the management of complicated infections, including HIV. Learners in this clinic may include infectious disease fellows, internal medicine residents and students. The attending physicians in the clinic are internal medicine teaching program faculty members who have fellowship training in infectious diseases.

Primary Preceptor: Catherine Diamond, MD

Supporting Preceptor: Helen S. Lee, Pharm.D.

ONCOLOGY (required; 3 weeks)

The PGY2-ID Pharmacy Resident will have the opportunity to work with the oncology team to optimize pharmaceutical care of inpatients on this service. Typical expectations of residents include the following: working up approximately 5-10 oncology patients each day, interacting with the nurse practitioners, physician assistants, nurses, physicians, and oncologists to identify and resolve medication-related problems for these patients, attending rounds every morning, discussions with the preceptors on a variety of oncology topics, formal patient presentations to the preceptor and responding to drug information requests from the providers. The primary emphasis will be the management of inpatient oncology patients with infections or at risk for infections. The resident will provide and document therapeutic drug monitoring services for patients on the oncology team receiving drugs requiring monitoring including vancomycin and aminoglycosides.

Preceptor: Benjamin Lee, Pharm.D., BCPS, BCCCP, BCOP

TRANSPLANTATION

Inpatient (required; 3 weeks)

Clinics (required: at least 2 months)

The transplant rotation is a required learning experience that will focus on kidney and pancreas transplantation. Both an inpatient block rotation and ambulatory longitudinal rotation are offered.

The inpatient block rotation will expose the PGY2-ID pharmacy resident to immediate post-transplant care and acute post-transplant complications including transplant rejection and infection. The PGY2-ID pharmacy resident is responsible for attending daily rounds and identifying and resolving medication therapy for patients with the emphasis in management of infections in this immunocompromised patient population. The resident may participate in providing medication teaching to the patient prior to discharge, emphasizing the importance of medication compliance of antimicrobial agents for treatment of prophylaxis in this immunocompromised patient population. The resident will attend weekly selection committee meetings and surgical grand rounds when appropriate.

The resident will attend Transplant Clinics one half day per week to follow up on post-transplant patients, assess compliance and educate patients on new medications with focus on antimicrobial agents.

Preceptor: Cynthia Chan, Pharm.D., BCPS

STAFFING (required; approximately 10 months)

The PGY2-ID resident will staff every 3rd weekend to fulfill pharmacists' shifts after completing the initial orientation and training in IV room and Unit Dose areas. The resident will have the opportunity to learn and practice medication order reviews and dispensing processes. In IV room, the PGY2-ID resident will get acquainted with the sterile compounding and dispensing processes of parenteral medications including antimicrobial agents. The goal is for the PGY2-ID resident to understand the perspective of the staff pharmacist through participation in staffing functions, to function effectively in the staff pharmacist role and to formulate pharmaceutical care plans for patients with infections consistent with the institution's pharmacy practices on clinical learning experiences. The resident will initially be assigned to distribution shifts in IV room and Unit Dose areas with the task to complete the antimicrobial stewardship activity of positive blood cultures review and interventions. The resident will also be assigned to fulfill clinical shifts providing pharmaceutical care such as therapeutic drug monitoring of antimicrobial agents and anticoagulation per pharmacy in conjunction with distribution activities.

Preceptor: Robert Eastin, Pharm.D.