

**Residency Spotlight: University of Colorado Health and
University of Colorado Skaggs School of Pharmacy and Pharmaceutical Sciences
PGY2 Infectious Diseases Pharmacy Residency**

University of Colorado Health (UCHealth) is an integrated, not-for-profit, 11-hospital health care system with hospitals and clinics located throughout Colorado, southern Wyoming, and western Nebraska. Pharmacy residency practice sites at UCHealth include University of Colorado Hospital (UCH), Memorial Hospital, and Poudre Valley Hospital. UCH, the health system's largest, most comprehensive hospital, is a tertiary care academic medical, referral, and level I trauma center located on the Anschutz Medical Campus in Aurora, Colorado, with over 700 inpatient beds. UCH has almost 30 years of excellence in pharmacy residency training (ASHP accredited in 1990), with around 80 full-time pharmacists, and is ranked in the top 25 hospitals overall in the country and as No. 1 in Colorado by *U.S. News & World Report*. UCH serves as the primary teaching hospital for the University of Colorado schools of medicine, pharmacy, nursing, and dentistry and is made up of two inpatient pavilions, an outpatient pavilion, the Anschutz Cancer Pavilion, and the Rocky Mountain Lions Eye Institute. The University of Colorado Skaggs School of Pharmacy and Pharmaceutical Sciences (SSPPS), also located on the Anschutz Medical Campus, is ranked in the top 25 pharmacy schools in the country and in the top five pharmacy schools for National Institutes of Health funding.

Currently, UCH/SSPPS has 19 pharmacy residents, several fellows, and 10 unique training programs:

PGY1 Pharmacy Residency (6 positions)

PGY1 Community Pharmacy Practice (3 positions)

PGY2 Infectious Diseases (1 position)

PGY2 Critical Care (2 positions)

PGY2 Emergency Medicine (1 position)

PGY2 Oncology (2 positions)

PGY2 Ambulatory Care (4 positions)

*Fellowships: Critical Care/Infectious Diseases, Neurology, Outcomes Research in Ambulatory Care

**The number of positions varies from year to year.*

The PGY2 infectious diseases (ID) residency training environment at UCH/SSPPS incorporates techniques that allow for resident development in several core ID areas, including clinical application in inpatient and outpatient care, microbiology, operational activities, and scholarly and educational opportunities. The program is truly individualized to meet the PGY2 resident's interests and needs.

Required clinical rotations of the PGY2 ID program include 2 months with the general ID consult service, 2 months with the transplant ID consult service, 2 weeks to 1 month with the orthopedic surgical ID consult service, and 1 month each with bone marrow transplantation, the HIV/AIDS outpatient clinic, and the hepatology/hepatitis outpatient clinic. One month of medical intensive care unit is encouraged unless the resident has already obtained experience in this area. In addition, longitudinal experiences are required in antimicrobial stewardship, the microbiological laboratory, and the outpatient ID clinic (HIV/AIDS, hepatitis, travel medicine, and chronic ID management). Elective experiences available include ID at other affiliated hospitals, adult cystic fibrosis, outpatient antimicrobial therapy, pediatric ID, and research. Given the breadth of experiences required and available, the PGY2 ID program is dedicated to producing ID pharmacy practitioners who are extremely comfortable practicing in all areas of ID throughout and by the end of the program.

Operational activities for the PGY2 ID resident include central pharmacy distribution and an internal medicine/cardiology/pulmonology floor component. Throughout the year, 160 hours of “staffing” is expected. ID is a very specialized area of pharmacy practice, and pharmacists must stay up to date in operational and clinical activities outside ID to be well rounded upon graduation. In addition, the PGY2 ID resident is incorporated into various committees, including the antimicrobial stewardship and vaccination subcommittees, and is responsible for developing the protocols and formulary reviews presented at various committees within the hospital. The staffing opportunities and committee involvement at UHealth provide ample experiences for PGY2 ID residents to build on to their PGY1 training and to be extremely marketable when applying for a job after postgraduate training, whether in an academic or a community setting.

Clinical research has been embedded into the culture at UHealth and SSPPS. A research project with a high likelihood of publication, a medication use evaluation, and an antimicrobial stewardship project are required for residency completion. Additional opportunities for clinical research projects, medical writing, and publishing are also available. Unique research experiences of the PGY2 ID program include opportunities to complete prospective pharmacokinetic and pharmacodynamic analyses under the nationally recognized ID residency program director (Dr. Douglas N. Fish), including protocol design and institutional review board (IRB) approval, patient consent and enrollment, body fluid and/or tissue sample obtainment, and laboratory analysis. Further research opportunities are available in Dr. Fish’s clinical laboratory housed in SSPPS. Completion of a research certificate program is also required, which provides interactive lectures in study design, project management, the IRB submission process, database design and development, statistical methodology, and manuscript development tips.

The PGY2 ID resident receives an appointment as a clinical instructor in the school of pharmacy, is required to teach at least one core ID class for SSPPS, and has multiple opportunities to engage in preceptorship and other classroom-based teaching activities. SSPPS offers three ID courses for its pharmacy students, two of which are required for graduation. These required semester-long courses are on both bacterial infections/antibiotics and fungal/viral infections and their associated antimicrobials. Furthermore, a semester-long ID elective course is offered to students that provides a more in-depth analysis of ID principles and pharmacotherapy, as well as patient cases. If the resident desires, additional opportunities to teach ID lectures are available in both core classes and the ID elective course. The layered-learning model at UHealth provides the PGY2 ID resident with ample opportunities to precept pharmacy students, PGY1 residents, and even PGY2 residents in different specialties. Completion of the Colorado Pharmacy Residency Teaching Certificate Program is required if the resident has not already completed a similar program during a PGY1.

In addition to all of this, Colorado is an incredible place to be! Colorado has many great places to live, eat, hike, experience sports, and try wonderful beer!

For more information about the UCH/SSPPS PGY1 or PGY2 residency programs, please visit the program website or contact program leadership.

www.ucdenver.edu/academics/colleges/pharmacy/AcademicPrograms/Residencies/Pages/Residencies.aspx

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