PGY 1 & PGY 2 Pharmacotherapy
PURPOSE

PGY1 Program

PGY1 pharmacy residency programs 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.

PGY2 Program

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.

INTRODUCTION

The PGY1/PGY2 Pharmacotherapy Residency is designed to produce a specialized practitioner with an advanced degree of proficiency and expertise in working with interdisciplinary teams to deliver comprehensive patient care to diverse populations from ambulatory care to critically ill, pediatric to geriatric ages, and presenting with varied and complex health problems. The intense focus on direct patient care of this residency develops a specialist of great flexibility in the direct patient care arena, an individual who can move from one specialized area of practice to another with confidence and ease. While other clinical specialized residencies build a knowledge base and decision-making skills in one area of focus, the pharmacotherapy residency graduate refines the decision-making skill in such a way that it is transferable across practice areas and then supplements that skill with strong knowledge acquisition in a broad range of disease states.

The scope and depth of residency graduates’ experience produces a pharmacist who can successfully serve healthcare institutions as an authoritative resource for information about medications and for decision-making affecting the care of patients. Groomed for practice leadership, pharmacotherapy residency graduates can be expected to continue their pursuit of expertise in practice; to possess advanced skills to identify the pharmacotherapy and medication-use training needs of other health care professionals; to deliver effective training to those health care professionals; and to contribute to the pharmacy literature.
General Description

Texas Tech University Health Sciences Center School of Pharmacy offers the 24-Month PGY1/PGY2 Pharmacotherapy Residency Program on both the Amarillo and Lubbock campuses. Though they share many similarities, this manual will focus on the 8-year ASHP Accredited Amarillo program (until 2026). As previously described, the program provides significant depth and scope of knowledge and experience in comprehensive patient care and prepares residents to become Board Certified Pharmacotherapy Specialists. Residents are further guided to develop excellence in one area of practice focus throughout their training experience. The program is unique as it provides many opportunities for residents to tailor experiences as their career goals evolve. Furthermore, the program is nationally recognized for a robust clinician-educator training program designed for individuals with interests in part-time or full-time careers in academia.

PROGRAM GOALS

Practice Excellence

- Develop a mastery of knowledge in pharmacotherapy.
- Demonstrate advanced practice skills in the acute, ambulatory, and chronic care settings while achieving excellence in one major area of focus.
- Engage in practice management initiatives to improve the care of patient populations.
- Establish yourself as an integral member of the health care team.

Academic Excellence

- Educate learners effectively in didactic, laboratory, and discussion-based settings.
- Demonstrate effective precepting skills.
- Interpret and disseminate knowledge in pharmacotherapy.
- Generate new knowledge that enhances the care of patients or education of learners.

Individual Excellence

- Utilize an ongoing system of self-assessment and development.
- Demonstrate exemplary verbal and written communication skills.
- Employ strategies for balancing multiple work-related and personal responsibilities.
- Adopt a long-term commitment to professional and community service.
PRACTICE EXPERIENCES

Practice activities are selected to provide residents with patient care experiences across a range of practice environments, diseases, patient populations, and pharmacist and physician mentors. Required learning experiences are established for all residents in order meet the competency areas, goals and objectives for the 24-month program and to gain exposure to all required disease states as outlined for the pharmacotherapy specialist. Elective opportunities may be selected or tailored to meet individual interests or career goals.

Required Learning Experiences - Block

- Orientation (4 weeks)
- Internal Medicine - Foundational Skills (4 weeks)
- Inpatient Family Medicine (4-6 weeks)
- Internal Medicine Teaching I - II (2 x 6 weeks)
- Ambulatory Care Care (8 weeks)
- Geriatrics (4 weeks)
- Pediatrics (4 weeks)
- Medical ICU (4 weeks)
- Cardiology (4 weeks)
- Infectious Diseases (4 weeks)
- Inpatient Family Medicine Teaching (6 weeks)
- Specialization-Focused Teaching (6 weeks)

Elective Experiences - Block

*must include one additional critical care experience; required learning experiences may be repeated at an advanced level if in alignment with career goals

- Academia
- Diabetes Camp
- ED / Night Float
- Emergency Medicine*
- MICU/CCU, Cardiology focus*
- Nephrology
- Oncology
- Pediatric Intensive Care*
- SICU* +/- General Surgery
- Women’s Health

Required Learning Experiences - Longitudinal

Longitudinal experiences are scheduled over longer periods of time, ranging from 6 to 24 months.

- Practice Management (block + longitudinal)
- Research Project Development
- Discussion and Laboratory Teaching
- Inpatient Staffing (4 weeks training + 1 weekend per month)
- Anticoagulation Clinic (1 afternoon/week for 6 months)
- Family Medicine Clinic (1 afternoon/week for 6 months)
- Infectious Diseases Clinic (1 afternoon/week for 6 months)
- Pediatric Endocrinology Clinic (1 afternoon/week for 6 months)
TEACHING OPPORTUNITIES
Residents at Texas Tech have many opportunities to engage in teaching activities throughout their training. Furthermore, a formal Clinician-Educator Training Program has been integrated into the Pharmacotherapy Residency to support the training of residents who may be interested in part- or full-time careers in academia. Residents are appointed as Assistant Instructors within the school. The Clin-Ed training program provides a series of hands-on teaching opportunities within classroom, laboratory, small group, and experiential settings. Residents also engage in activities and discussions designed to prepare early-career faculty for transitions into new practice, scholarship, service, and leadership roles. While the program targets residents interested in academia, the skill sets gained through the Clin-Ed program are applicable to a broad range of career goals.

Didactic Instruction
Residents present 1-2 formal didactic lectures per year. Residents are paired with faculty mentors and are responsible for establishing learning objectives, engaging students actively within the classroom, and developing assessment questions. Residents learn how to present material effectively to both live and distant audiences.

Laboratory Instruction
Residents provide hands-on instruction in patient care-focused laboratory courses during the fall and spring semesters. Residents are assigned up to two afternoon sessions per week for laboratory and discussion-based learning. Teaching opportunities within our newly revised curriculum include, clinical immunizations, parenterals and specialty pharmacy, and applied patient care.

Discussion-Based Courses
Residents will facilitate learning activities within the school's Clinical Correlations course series. This innovative series integrates key concepts from multiple courses within a given semester in a hands-on student-centered learning environment. The courses foster practical application of course content to the practice of pharmacy in real-world scenarios. Residents will learn facilitation skills, balancing the needs and assessments of multiple groups. Residents will have the opportunity to share their creativity through development of session activities.

Experiential Learning
Residents will develop and refine preceptor skills throughout the two year's of their program. Residents will learn the basics of effective precepting through the innovative, nationally recognized Preceptor Mini-Series Program. Residents are eligible to be licensed preceptors in Texas within 6-months of their state licensure. Residents start out training third-year pharmacy students, guiding them to develop the direct patient care skills that they will use during their APPE year. As they progress to the second year, residents will precept both third and fourth year students and will enhance their ability to balance precepting roles with practice responsibilities.

Teaching and Learning Certificate Program
The TTUHSC Office of Residency Programs coordinates a 12-month teaching certificate program. Residents participate in a series of scheduled discussions and targeted learning activities. Examples of these activities include development of a teaching philosophy statement, syllabus, learning objectives, and a clinical teaching case. Residents receive feedback from teaching mentors across the program. Activities within the certificate program compliment those of the Clin-Ed Training Program.
RESIDENT PROJECTS

Research
Residents complete the equivalent of one major project per year. The two-year nature of the Pharmacotherapy Program allows the flexibility for residents to complete a single, more in-depth project, or a multi-step project. Potential project ideas are identified early in the program by the resident and refined in conjunction with the research team. At least one major project must culminate in improvement of patient care.

Resident projects must:
• include generation of original data;
• be suitable for publication or presentation at a national pharmacy meeting; and
• be reasonably completed within the timeframe of the residency program.

Project Dissemination
Residents present the results of their projects as a platform at the ALCALDE Southwest Regional Residency Conference in April. They also present the project as a poster at the TTUHSC School of Pharmacy Annual Research Days in June. Residents are also strongly encouraged to present their work at national and state professional meetings. Because the program focuses on preparing residents for successful academic careers, they are expected to publish the results of their project in a peer-reviewed journal.

ADDITIONAL ACTIVITIES

REDS (REsident Discussion Series)
Residents participate in weekly business meetings and discussions. The meetings provide an opportunity for routine communication with residency program leadership and a strategy to staying on track with various residency projects and deadlines. The discussion aspect of the series incorporates strategies for developing knowledge base, literature review, and application skills. Specifically, share in-depth discussions of patient cases for uncommon disease states that they have experienced and a comprehensive review of relevant literature and clinical points. Residents also present new literature through an efficient journal club method. Residents select and work through various professional development resources, such as TrueColors(R) or Strengthfinders(R) related to the goal of achieving individual excellence. The weekly sessions rotate between the three activities (complex case presentation, journal club, and personal development).

Continuing Education Presentation
Residents develop and present one formal continuing education presentation per year to the Panhandle Society of Health Systems Pharmacists.
RESIDENCY PROGRAM STAFF

Program Director - Krystal Haase, Pharm.D., FCCP, BCPS, BCCCP
Dr. Haase is Associate Professor and Head of the Adult Medicine Division in the Department of Pharmacy Practice. After receiving her Pharm.D. degree from the University of Texas, she completed a two-year Pharmacotherapy Residency at the Medical University of South Carolina. Dr. Haase practices in the Medical Intensive Care Unit at Northwest Texas Hospital. She developed the two-year Pharmacotherapy residency in Amarillo in 2001. Her research focus is on improvement of care to critically ill patients through optimization of drug therapy.

Program Coordinator - Maegan Whitworth, Pharm.D., BCPS
Dr. Whitworth is an Assistant Professor in the Adult Medicine Division in the Department of Pharmacy Practice. She completed both her Doctor of Pharmacy and 24-month Pharmacotherapy Residency training at Texas Tech University Health Sciences Center School of Pharmacy. Dr. Whitworth practices in the Medical, Cardiac, and Surgical Intensive Care Units at Northwest Texas Hospital.

Pharmacist-Preceptors
Taryn Bainum - Medical and Surgical ICU, Medicine Teaching
Rachel Basinger - Primary Care
Mikala Conatser - Teaching Longitudinal
Les Covington - Geriatrics, Family Medicine
Amy Cunningham - Oncology Elective
Magen Fields - Practice Management
Jill Frost - Primary Care, Women’s Health
Mark Haase - Pediatrics, PICU
Krystal Haase - Medical ICU, Medicine Teaching, Medicine Core
Lori Henke - Inpatient Staffing
Christine Johnson - Primary Care, VA
Eric MacLaughlin - Outpatient Family Medicine
Jamie McCarrell - Geriatrics
Thom Parker - Pediatric Endocrinology, Diabetes Camp
Kenna Payne - Inpatient Family Medicine
Maegan Whitworth - Orientation, Medicine Core, Medical/Surgical ICU, Medicine Teaching

Non-Pharmacist Supporting Preceptors
David Brabham, DO - Cardiology
Pablo Rodriguez, MD - Infectious Diseases, ID Longitudinal Clinic
Tarek Naguib, MD - Nephrology Elective
CURRENT RESIDENTS

Brandi Dahl, Pharm.D. 2017-2019
Dr. Dahl is a second year (PGY2) Pharmacotherapy resident at Texas Tech University Health Sciences Center School of Pharmacy and Northwest Texas Hospital in Amarillo, Texas. Dr. Dahl received her Doctor of Pharmacy degree from Texas Tech University Health Sciences Center School of Pharmacy in May of 2017. Her current practice interests include ambulatory care, transitions of care and academia.

Melissa Williams, Pharm.D., 2017-2019
Dr. Williams is second year (PGY2) Pharmacotherapy resident at Texas Tech University Health Sciences Center School of Pharmacy and Northwest Texas Hospital in Amarillo, Texas. Dr. Williams is originally from Atlanta, Georgia and received her Pharm.D from Philadelphia College of Osteopathic Medicine (PCOM) School of Pharmacy in Suwanee, GA in 2017. Her professional practice interests include ambulatory care, cardiology, internal medicine, and academia.

Casey Barrett, Pharm.D. 2018-2020
Dr. Barrett is a first year (PGY1) Pharmacotherapy resident at TTUHSC School of Pharmacy and Northwest Texas Healthcare System in Amarillo. She is originally from Rolla, Kansas and received her Doctor of Pharmacy degree from the University of Colorado Skaggs School of Pharmacy and Pharmaceutical Sciences in 2018. Her practice interests include critical care, infectious diseases, toxicology, and academia.

Dakota Freudenberg, Pharm.D. 2018-2020
Dr. Freudenberg is a first year (PGY1) Pharmacotherapy resident at Texas Tech University Health Sciences Center School of Pharmacy and Northwest Texas Hospital in Amarillo, Texas. Dr. Freudenberg is originally from Seymour, Indiana and received her BS in Chemistry from the University of Indianapolis and her Pharm.D from Purdue University College of Pharmacy in 2018. Her current practice interests are ambulatory care, mental health, transitions of care, and administration.