Methodist Le Bonheur Healthcare

Methodist Le Bonheur Healthcare is an integrated, not-for-profit, six-hospital health care system located in western Tennessee that is rooted in service, quality, integrity, teamwork, and innovation. Pharmacy residency practice sites at Methodist Le Bonheur Healthcare include Methodist University Hospital (MUH), Le Bonheur Children's Hospital, and Methodist Le Bonheur Germantown Hospital. MUH, the health system's main campus and the largest, most comprehensive hospital in the health care system, is a tertiary care academic medical and referral center located in Memphis, Tennessee, with over 50 years of excellence in pharmacy residency training. MUH, which serves as the primary teaching hospital for the University of Tennessee Health Science Center, has over 600 beds and has received Advanced Comprehensive Stroke Certification from the American Heart Association/American Stroke Association as one of the busiest stroke centers in the country.

Currently, MUH has 13 pharmacy residents and six unique training programs: PGY1 Pharmacy Practice PGY1/2 Health-System Pharmacy Administration PGY2 Internal Medicine PGY2 Critical Care PGY2 Emergency Medicine PGY2 Solid Organ Transplantation

The residency training environment at MUH incorporates techniques that allow for resident development in several core areas, including clinical application (direct patient care), scholarly activity (teaching, research, publication), leadership (local, state, and national organizations), and operational activities (central pharmacy distribution and workflow). The mission of the MUH PGY1 and PGY2 residency programs is to graduate versatile practitioners capable of excelling in patient care, research, and education.

(1) Patient Care

One of the most impressive characteristics of MUH's training environment for pharmacy residents is the patient-centered integrated practice model that is now embedded in the Methodist culture. Patients assigned to the pharmacy resident's unit or rounding team are embodied in the resident's care from start to finish in conjunction with physician, nursing, social work, case management, and administration teams. MUH currently has almost 50 preceptors and provides over 25 rotations at multiple sites that range from traditional core rotations, such as internal medicine, critical care, and administration, to specialized rotations in solid organ transplantation, oncology, cardiology, nephrology, and hepatology.

Currently, pharmacy residents are responsible for all pharmacokinetic dosing of antibiotics, anticoagulation dosing, evaluation of heparin-induced thrombocytopenia with initiation/dosing/monitoring of direct thrombin inhibitors, management of parenteral nutrition, consults for pulmonary arterial hypertension medications, evaluation of blood and urine culture positive alerts, and evaluation of continuous renal replacement therapy orders. In addition,

pharmacy residents are responsible for developing the protocols and formulary reviews presented at various committees within the hospital, one of which is the required medication use evaluation. Several policies allow pharmacists to independently order all laboratory results involved with a patient's therapy, convert certain IV medications to PO, and make the renal adjustments for specific medications. Residents also participate in a 24-hour/day clinical on-call program.

Finally, MUH exposes pharmacy residents to operational activities through their service component of residency training. Residents can navigate the inner workings of the pharmacy department after completing learning experiences in the central pharmacy, IV room, surgery, transplant, oncology, and internal medicine/critical care satellite areas. The "staffing" component of the MUH residency program currently consists of one evening shift in the central pharmacy every other week and every third weekend, alternating with clinical pharmacy services in internal medicine/critical care satellite areas and central pharmacy operations. The clinical development and practice management skills that residents obtain are complemented with longitudinal Residency Conferences and a Leadership Development Series. Residency Conferences, which rotate through core subject areas and occur three times monthly, include a journal club, case conference, and lecture presentation. The Leadership Development Series involves discussion with pharmacy department leaders to gain insight into philosophies that focus on how to lead oneself, others, and the profession.

(2) Residency Research

Although not a requirement, MUH has created a culture that truly believes that contributing to the literature is a professional obligation that allows the pharmacy department to influence patient care on an international level. Since 2012, members of the pharmacy department at MUH have written over 280 scholarly works, with 120 involving pharmacy residents (51 manuscripts and 69 posters). The goal is to reinforce that contributing to the literature is an obligation of the pharmacy profession that influences patient care on the broadest level. The program fosters this goal through a structured process composed of three primary components: the Residency Research Oversight Committee, Personal Project Committee, and Research Development Series.

The Residency Research Oversight Committee solicits and vets ideas, completes project assignment, tracks progress toward publication, and assesses changes annually. Each resident is charged with presenting and defending his or her project to this committee, simulating the experience of presenting before a full institutional review board (IRB). The Personal Project Committee consists of four clinical preceptors who work with the resident to assist with planning, implementing, analyzing, and presenting the results of the project. One of the preceptors in the committee is a "novice" to that specialty area, which ensures that residents can describe their projects to someone without key knowledge of the subject and brings clarity in project design. Finally, the Research Development Series is a sequential learning experience that complements the actual project by providing interactive lectures in study design, project management, the IRB submission process, database design and development, statistical methodology, and manuscript development tips.

(3) Education

The MUH pharmacy residency has extensive involvement with the University of Tennessee College of Pharmacy. Because the university offers a Teaching and Learning Program, pharmacy residents can be appointed as adjunct clinical professors and have many opportunities to participate in didactic lectures and active learning environments. Residents are prepared for these endeavors through several seminars throughout the year, such as exam-question writing and preparation in leading active learning.

Within MUH specifically, pharmacy residents have additional opportunities to precept pharmacy students throughout almost any rotation, given that students are accepted from three colleges of pharmacy. Moreover, residents have many opportunities to educate medical residents and nurses through morning reports, journal clubs, and in-services on rounds. These experiences are complemented through preceptor mentorship and, in collaboration with the Teaching and Learning Program, lectures in preceptor development and appropriate student evaluations.

For more information about the MUH PGY1 or PGY2 residency programs, please visit the MUH program website (<u>www.methodisthealth.org/education/pharmacy-residency-programs/pgy1-and-pgy2-residency-programs.dot</u>) or contact program leadership.

Jennifer Twilla, Pharm.D., BCPS PGY1 Residency Program Director jennifer.twilla@mlh.org

Andrea Curry, MHA, CPhT Pharmacy Program Coordinator andrea.curry@mlh.org

Submitted by: Taylor Morrisette, Pharm.D. PGY1 Pharmacy Resident at Methodist University Hospital