

Clinical Pharmacology

A. General Information

- 1.) Rotation Length: 2 weeks
- 2.) Rotation Location: Iowa Methodist Medical Center
- 3.) Course Directors: Geoff Wall, PharmD
William Yost, MD

B. Orientation

Orientation to this rotation will be provided by Dr. Geoff Wall, the principal Course Director. Dr. Wall will meet with the resident the day the rotation begins and provide a brief orientation. The resident should contact Dr. Wall before the rotation begins. Dr. Wall can be reached by calling him at 515/419-1524..

C. Description of Rotation

- 1.) EDUCATIONAL PURPOSE: The purpose of this rotation is to provide the resident with an opportunity to experience the application of clinical pharmacology and pharmacy principles in a large medical center. The resident will work with Dr. Geoff Wall, internal medicine clinical pharmacist. The rotation will include an opportunity to observe and participate in clinical pharmacology consultation requested by physicians, surgeons, and other health care providers; become familiar with anticoagulation management, dosing antibiotics under special circumstances, and the administration of TPN; and attend committee meetings as directed by Dr. Wall.
- 2.) PRINCIPAL TEACHING METHOD: The resident will work with and under the supervision of Dr. Wall or his designee. The resident will work with pharmacy and medical students, medical residents, and attending physicians to identify, prevent, and resolve medication therapy issues for patients on both the Internal Medicine and Critical Care Teaching Services. The resident will be responsible for examining and monitoring selected patients' medication regimens and applying the principles of pharmaceutical care in order to ensure appropriate and safe patient care. Dr. Wall will provide informal clinical teaching related to the pharmacologic issues addressed by this service, and will discuss clinical pharmacology issues that are related to the meetings attended by Dr. Wall and the resident.

- 3.) **EDUCATIONAL CONTENT:** The resident will have the opportunity to learn about issues commonly addressed on a clinical pharmacology office, including issues related to drug dosing, adverse drug reactions and drug interactions, formulary management, administration of TPN, and management of anticoagulation. In addition, the resident physician will review facets of pharmacotherapy, including:
 - a. A basic review of pharmacokinetics and therapeutic drug monitoring
 - b. Common symptom management for palliative care patients
 - c. Role of evidence-based medicine in evaluating pharmacotherapy studies
 - d. Principles of reviewing pharmacoeconomic studies

- 4.) **ANCILLARY EDUCATIONAL MATERIALS:** The resident will be given and review written and electronic review articles and materials related to topics discussed during this rotation.

D. Competency-Specific Learning Objectives

- 1.) Patient Care:** The resident will review patients on the Internal Medicine or Critical Care Teaching Services for appropriate pharmacotherapy. They may assist with clinical pharmacology consultation requested by physicians, surgeons, and other health care professionals at IMMC, including medical literature review and assessment of the literature. In this role, the resident may gather all relevant clinical information and assist in developing an assessment and plan. The resident may continue to follow selected patients and assist in the pharmacologic management as requested. The resident will serve in a consultative capacity only. In this capacity, the resident will deliver consultative care that is effective, appropriate as directed by Dr. Wall or his designee, and patient-centered.

- 2.) Medical Knowledge:** The resident will demonstrate a knowledge of basic science, particularly pharmacology and pharmacokinetics, and clinical knowledge that is appropriate for his or her level of training.

- 3.) Practice-Based Learning and Improvement:** The resident will demonstrate the ability to identify gaps in her or her knowledge base, and correct those gaps through effective use of on-line resources and tools. Specifically, the resident will demonstrate the ability to search the literature and answer clinical questions using recognized medical on-line data bases and search engines. If the resident is interested in participating in ongoing or new scholarship or research with Dr. Wall, this can be initiated during this rotation.

- 4.) **Interpersonal and Communication Skills:** The resident will demonstrate effective and respectful communication skills. The resident will communicate in a clear and well-organized fashion, both verbally and in any written documentation, and demonstrate effective listening skills. All documentation related to any consultations will be completed in a timely fashion.
- 5.) **Professionalism:** The resident will demonstrate behavior that is respectful, honest, and compassionate. The resident will maintain strict confidentiality. The resident will demonstrate reliability and punctuality in the performance of all duties, and dress and speak in a professional manner.
- 6.) **Systems-Based Practice:** The resident will learn and demonstrate understanding of the role clinical pharmacists play in a hospital, the role and composition of the Pharmacy and Therapeutics Committee, and the reason for a hospital formulary, as well as how drugs are selected for the hospital formulary. Additionally, the resident will attend educational activities provided by the Pharmacy Department and/or Pharmacy students from Drake University, including Journal Club or Pharmacy Rounds, as the resident's schedule allows.

E. Medical Record and Procedure Documentation: The resident may be asked to complete documentation of consultation and ongoing therapeutic decisions in the EMR. There are no other expectations or requirements for medical record completion or procedure documentation on this rotation.

F. Logistics

- 1.) The resident will meet with Dr. Wall on the first day of the rotation at a place and time determined by Dr. Wall.
- 2.) Further duties and responsibilities will be outlined by Dr. Wall, and may include assistance with clinical pharmacology consults requested by physicians and other health care providers, and attending drug utilization committee meetings. Additionally, the resident will receive an opportunity to teach both pharmacy students and residents about pharmacotherapy topics from the physician's perspective. This may include experiential teaching at Iowa Methodist Medical Center as well as didactic teaching in the College of Pharmacy at Drake University.
- 3.) At the beginning of the rotation, the resident will discuss with Dr. Wall areas of pharmacology they would like to review during this rotation. At least four (4) topics will be selected and reviewed by Dr. Wall, the medical resident, and others concurrently assigned to this rotation.
- 4.) There is no call associated with this rotation, nor are there any weekend duties.
- 5.) The resident will attend his or her Continuity of Care Clinic as usually scheduled.

G. Evaluation

- 1.) Residents will be evaluated by Dr. Wall at the end of the rotation. Dr. Wall will provide a final evaluation directly to the resident in a face-to-face meeting, and then submit a formal evaluation through e-value. The resident will review the final evaluation and electronically sign it when complete.
- 2.) Residents will be evaluated according to their performance in each of the core competencies described under Competency-Specific Learning Objectives.

Geoff Wall, PharmD
William J. Yost, MD
7/19/13