ROTATION TITLE
Inpatient Adult Oncology

PURPOSE
The oncology service will provide the PGY1/Pharmacotherpay resident with the opportunity to further develop and refine advanced pharmacotherapeutic management skills required for provision of care of this specialized patient population. The resident will assist in the overall monitoring and management of the complex treatment and supportive care issues throughout the continuum of care of the patients during their inpatient admission.

LEARNING EXPERIENCE DESCRIPTION
This learning experience fulfills the requirement of an acute care rotation for the PGY1 pharmacy residency program and an internal medicine rotation for the pharmacotherapy residency program. Patients are admitted to the oncology service due to complications from anti-cancer treatment, disease progression, to receive chemotherapy, and for end of life care/transition to hospice. The medical oncology service includes patients with solid tumors; primarily lung, breast, esophageal, head & neck, bladder, and pancreatic malignancies. Clinical pharmacy services are comprehensive with a focus on pharmacokinetics, pain/nausea/other symptom management, nutrition services, chemotherapy and discharge counseling.

The resident will be rounding with the inpatient oncology service during the month. The team consists of a hematology attending, fellow, upper level resident, intern, a case manager, dietician, nurses, and pharmacist. Rounds typically begin at 9:30 am, but this time may change based on needs of the service. The team generally starts rounds on 5W though patients may be located throughout the hospital and the team may decide to start rounds in an alternate location. The preceptor will round with the resident as often as possible during the first 2 weeks of the rotation. After that time the preceptor may round less frequently depending upon the abilities of the resident and the census of the service.

During the time prior to rounds the resident should develop a problem list for the patients they are following, work-up all new admissions if able, review labs, microbiology, pathology, radiology exams, vital signs, and any medication changes. The resident should follow a minimum of 10 patients by the end of the second week of the rotation, and 15 patients by the end of the rotation. If the service has fewer than the designated minimums, the resident should then follow all patients on the service. The resident may discuss patients briefly prior to rounds or during a “downtime” on rounds. If the preceptor provides order verification for the oncology service during rounds, the resident will be expected to incorporate this into their rounding time based on availability of a computer and discretion of the preceptor.

In the afternoon the resident will meet with the preceptor for a more in depth discussion of either all patients or major problems with his/her patients. There will also be various topic discussions determined by the preceptor and resident. The resident will be expected to lead at least one topic discussion per week. The resident should provide prompt feedback to the preceptor of topics not being properly explained to them, and areas of improvement for the preceptor/team.

The resident is responsible for documenting their interventions in the appropriate pharmacy systems, following all pharmacokinetics on their patients and documenting those appropriately, as well as counseling of their patients.
LEARNING EXPERIENCE ACTIVITIES
The following activities are required during the inpatient hematology/BMT rotation. Overall, residents are expected to provide optimal patient care while refining their skills in the management of this unique patient population.

1. The resident will collect and analyze patient information to optimize patient care.
   a. Gather patient-specific data (e.g. past medical history, prior therapy, current clinical condition, etc.) in order to make rational drug therapy recommendations. Additionally, the resident should assess the patient’s medication history for appropriateness. (R2.2.1; R2.4.3; R2.4.4)
   b. Review the patient’s current drug therapy to determine the appropriateness of the drug, its indication, the dosage regimen, route/method of administration, compliance, the presence of any therapeutic duplications, therapeutic outcomes, cost, and avoidance of adverse drug events and other negative interactions each day. (R2.4.2; R2.4.3; R2.6.1)
   c. Prepare and maintain a monitoring system for the patients you are expected to follow. (The resident should follow a minimum of 10 patients by the end of the second week of the rotation, and 15 patients by the end of the rotation.)

2. Design and implement a pharmacotherapeutic care plan. The resident should apply his/her knowledge of the disease state to the patients on the service. This may require the resident to look for case reports or guidelines to assist with enhancing his/her knowledge base. Also insure recommendations follow institutional guidelines or protocols.
   a. Design therapeutic regimens to achieve the pharmacotherapeutic goals for the patients utilizing evidence-based medicine. (R2.4; R2.6.1)
   b. Obtain familiarity with and assure compliance to institutional policies and procedures for drug use evaluation guidelines and restricted drugs. (R2.9.1; PCT R7.3)
   c. Design monitoring plans that effectively measure the achievement of pharmacotherapeutic goals and take into account patient-specific factors (R2.7; R2.9.1; R2.10.1; PCT R2.7)
   d. Select and recommend appropriate therapeutic endpoints for attaining safe, effective, and cost-efficient pharmacologic outcomes.
   e. Develop and initiate alternative treatment plans should the initial regimen fail to produce the desired effect or prove toxic.

3. Increase your pharmacotherapeutic knowledge base and apply this to patient care.
   a. Review patients with preceptor daily and assure all aspects of patient care as it relates to pharmacy are addressed. (R1.4.1; R2.4.3; R2.4; PCT R2.2)
   b. Retrieve, evaluate, and apply the medical literature as a means of providing patient-specific drug information to health care providers and patients.
   c. Provide timely responses to drug information requests from your team, nursing staff, other pharmacists, preceptor, and other health care providers. (R2.8.1)
   d. Provide at least one inservice to the staff regarding a unique aspect of a medication, a newly approved medication, or an area of improvement for current patient care.
   e. Participate in rotation topic discussions (at least two per week), medicine group discussions (usually two per week), and journal club.

4. Communicate effectively with others.
   a. Ensure the continuity of pharmaceutical care to and from the acute setting. Contact providers on different medical teams in the event of a transfer or in the outpatient setting if patient is to be discharged. (R2.8.1; PCT R7.3)
   b. Counsel patients on new treatment regimens, anticoagulation, and prior to discharge as able. All transplant patients must be counseled prior to discharge focusing on immunosuppression. (R2.8.1; R2.9.2; PCT R8.3)
   c. Practice active listening, empathy, and compassion when communicating with other health care professionals, patients, and their care-givers.
d. Present at least one topic for discussion each week.

e. Present at journal club and medicine group discussions as requested.

   a. Document clinical activities performed by the resident (therapeutic drug monitoring, pharmacotherapy consults, pharmacokinetic notes, etc.) in the electronic system and print a note to place in the patient’s chart. The resident should expect to write several notes per week, but this will vary with the census.
   b. The resident should report adverse drug events utilizing the Patient Safety Net system. The resident should also discuss these errors with the preceptor and areas for improvement.
   c. When a medication allergy or reaction occurs insure the allergy is documented to prevent future reactions.
   d. Interventions (approximately ten per week) should be documented utilizing the pharmacy system. (PCT R2.12)

6. Exhibit professional behavior
   a. Exhibit professional behavior (e.g. appropriate dress/language, prepared for rounds/discussions, etc.) throughout the month.
   b. Prioritize rotation responsibilities and additional requirements of the residency program (e.g. set up time for residency project at beginning of the month).
   c. Maintain patient confidentiality at all times.
   d. Practice self-evaluation and solicit feedback from others.

7. Become an active member of the team and provide education to others.
   a. Use skill in the four preceptor roles employed in practice-based teaching (direct instruction, modeling, coaching, and facilitation).
   b. As appropriate, establish collaborative professional relationships with members of the health care team.

REQUIRED HOURS
The resident will be expected to be present from approximately 7am to 5pm Monday through Friday. As patient care requires, the above times may vary. The resident shall alert the preceptor if they anticipate they will exceed the resident work hours set forth in the ACGME policy on resident work hours.

REQUIRED MEETINGS
- Pharmacy Resident Seminar- Mondays 1-2pm
- Pharmacy Resident Interactive Teaching Experience (RITE)- Fridays 12-1pm
- Medicine Group Team Teaching (if applicable)
- Oncology Group Teaching- Mondays 2-3pm
- Medicine Group Journal Club or Oncology Journal Club
- Any other learning opportunity designated by the RPD or preceptor

REQUIRED PRESENTATIONS
- At least one inservice to the medical team, nursing staff, pharmacists or pharmacy students
- Additional presentations as assigned by the preceptor
- Participation at medicine group topic discussions
REQUIRED READINGS
- As assigned by the preceptor.
- A list of potential topics for discussion will be provided to the resident at the beginning of the rotation. At a minimum the resident will be familiar with the basic pharmacology of chemotherapy agents, monoclonal antibodies and targeted therapies, febrile neutropenia, and spinal cord compression.

OPTIONAL ACTIVITIES
The resident may also be asked to complete formal drug information literature searches, additional inservices, and assist with the development of chemotherapy order template or guidelines. The preceptor may request the resident to present at the medicine group journal club and team teaching sessions. If a student is on rotation the resident may precept the student as part of the Academician Preparation Program (APP) at the discretion of the rotation preceptor. The resident may also be asked to assist with precepting student presentations and discussions.

ROTATION PRECEPTOR:
- Ashley Glode, PharmD., BCOP
  Hematology/Oncology Clinical Specialist
  Phone: 843-876-0175
  Pager: 843-792-2123; #13523
  Email: glode@musc.edu

METHOD OF EVALUATION
After discussing the resident’s clinical experiences and interests, the preceptor and the resident will develop an individualized plan. Evaluation of the resident will be based on the learning experience objectives outlined by the Residency Program Director (RPD). A mid-point discussion and evaluation will occur. At the completion of the rotation, the resident will also have a final evaluation utilizing the ResiTrak program.