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The Ten Commandments

I. Thou shalt question everything.

II. Thou shalt never give anyone reason to question thy work ethic.

III. Thou shalt never ignore thy responsibility to the sick and injured.

IV. Thou shalt be a model of professionalism, integrity and responsibility at all times.

V. Thou shalt recognize your own biases and be objective when providing care.

VI. Thou shalt balance thy professional and personal life, giving no undue time or attention to either.

VII. Thou shalt honor and respect thy peers.

VIII. Thou shalt come to work every day with purpose: work hard, learn and deliver exceptional care.

IX. Thou shalt respect the roles and concerns of other members of the healthcare team.

X. Thou shalt contribute as much to the profession as thou took from it.
INTRODUCTION

Congratulations and welcome to the SSM Health Saint Louis University Hospital Pharmacy Residency Program! The Residency Manual was developed to guide current and future residents, document our policies and expectations and to address questions or concerns that may arise during the residency year. The information contained herein serves as the basis and structure of the residency program, but is subject to change at the discretion of the Program Director and Director of Pharmacy Services based on department or individual needs.

PHARMACY MISSION, VISION, GOALS AND SCOPE OF SERVICE

Mission and Vision

Saint Louis University Hospital exists for the glory of God and the health of God’s people, in the Judeo-Christian and Jesuit traditions of service to others. We are an academic community dedicated to healing, teaching and research with a commitment to quality innovative care.

Saint Louis University Hospital is a regional leader providing tertiary-quaternary healthcare in the SSM Health network, in partnership with the physicians of the Saint Louis University School of Medicine. We are the primary teaching site for health professions’ education for the University, training tomorrow’s health care leaders. We engage the passion of our people and partners in holistic care, respectful and inclusive of the uniqueness of each person.

The mission of the Department of Pharmacy Services is to provide safe and compassionate high quality, evidence-based pharmaceutical services in a professional, collaborative, and financially responsible environment.

The vision of the Department of Pharmacy Services is to be a recognized leader in pharmacy excellence by contributing to the optimal patient experience through:

- Recognizing our pharmacy staff as the foundation for our success
- Providing innovative, adaptable, cost-effective, and evidence-based pharmaceutical care as an integral member of the healthcare team
- Ensuring safe transitions of care across the healthcare continuum
- Educating today’s providers to become tomorrow’s leaders in healthcare

Goal

The Department of Pharmacy Services assists in meeting this mission through our departmental goal of:

Providing high-quality, comprehensive pharmaceutical care to patients in an atmosphere of educational growth, shared respect and communication. Pharmaceutical care has been defined as "the responsible provision of drug therapy for the purpose of achieving definite outcomes that improve a patient’s quality of life." To this end, the Department of Pharmacy Services, in conjunction with the Department of Nursing, hospital administration and the medical staff, has directed efforts towards promoting and maintaining the role of pharmacy within the medication use system.

Scope of Service

The Department of Pharmacy Services ensures the safe, effective, timely and economical use of medications through provision of the following clinical and distributive services by licensed personnel:

1. The Department of Pharmacy Services ensures the accurate preparation, dispensing and administration of medications. Pharmacists verify medication orders; review and maintain accurate patient profiles; and ensure accurate medication compounding, dispensing and administration of medications. In addition, the Department of Pharmacy Services also recruits and retains specialized individuals qualified to deliver advanced clinical services via multidisciplinary rounds, protocol development, policy implementation and involvement in clinical research.

2. Pharmacists review and evaluate all medication orders for appropriateness of medication ordered, dosage, route and frequency of administration. Pharmacists consider patient-specific factors (age, weight, allergies, comorbidities, etc.), drug-specific factors (pharmacokinetics, pharmacodynamics, potential adverse events, etc.), previously ordered medications, medical staff policies and the biomedical literature in determining the appropriateness of the order. Pharmacists confer with physicians, nurses and other health care providers as needed to achieve optimal patient outcomes. If, in the pharmacist’s opinion, the therapeutic plan requires modification based on the above parameters, the prescriber is contacted and an alternate plan discussed.

3. The Department of Pharmacy Services further contributes to patient care and to the profession of pharmacy by serving as a training site for pharmacy students and residents. Trainees will learn to incorporate the concepts of evidence-based medicine as part of the delivery of comprehensive pharmaceutical care and to facilitate the delivery of care by functioning as an integral member of the healthcare system.
4. The Department of Pharmacy Services provides a formulary management process including the addition, deletion, temporary approval and recall of medications. Pharmacy personnel ensure the appropriate availability, procurement and storage of pharmaceuticals included on the hospital’s formulary.

5. The Department of Pharmacy Services coordinates the identification, researching, and cataloguing of Adverse Drug Reactions (ADRs) and Medication Errors (MEs). Further, the Director of Pharmacy or his/her representative reports serious ADRs and MEs to the Pharmacy, Therapeutics, Nutrition and Transfusion (PTNT) Committee. Action plans will be developed to manage or prevent particularly serious or recurrent events if deemed necessary by the PTNT Committee.

6. Investigational drugs are handled according to protocol, including proper records of use and storage.

7. The Department of Pharmacy Services provides drug information to physicians, nurses and other health care professionals.

8. The Department of Pharmacy Services provides a Medication Utilization Evaluation (MUE) process; a criteria-based process of drug usage monitoring and evaluation.

9. All medication orders and drug distribution policies and procedures approved by the medical staff shall meet JCAHO standards, federal laws and regulations and Missouri state laws and regulations.

10. The Department of Pharmacy Services is staffed 24 hours a day, seven days a week.

RESIDENCY ADVISORY COMMITTEE

The Residency Advisory Committee, composed of residency program directors, preceptors and pharmacy administrators, meets monthly and as needed. The Committee is responsible for:

1. Approving residency program and rotation goals and objectives
2. Ensuring that residents and the program meet stated goals and objectives
3. Assuring that the program meets ASHP standards
4. Developing new residency practice opportunities
5. Approving preceptors and rotations
6. Reviewing individual resident plans, goals, rotation objectives and performance
7. Reviewing and approving resident research projects
8. Recruiting new residents
9. Reviewing and maintaining the quality of the residency program
10. Other duties deemed necessary by the committee

MEMBERS

Chairperson(s): Michael Daly, Pharm.D., MSCI, BCPS (PGY1 residency program director)
Julia Alexander, Pharm.D., BCPS (PGY2 critical care residency program director)

Members: Julia Alexander, Pharm.D., BCPS
Michael Daly, Pharm.D., MSCI, BCPS
Elizabeth Gau, Pharm.D.
Timothy Heuring, Pharm.D., BCPS
Lauren Kuckewich, Pharm.D., BCPS
Janet Laquet, Pharm.D., BCPS, BCOP
Nicole Nesselhauf, Pharm.D., BCPS
Stacy Revelle, Pharm.D., BCPS
Anna Schmidt, Pharm.D., BCPS
Joseph Trang, Pharm.D.
Joseph Van Tuyl, Pharm.D.
Emily Welch, Pharm.D., BCPS
Susan Woelich, Pharm.D., BCOP

RESIDENCY PROGRAM COORDINATOR ROLES

The PGY1 and PGY2 Residency Program Coordinators serve in a leadership and supportive role within the residency program and assist the Residency Program Directors (RPD) with administrative duties/activities for the conduct of the residency program. The duties and activities that the Coordinators assist with include, but are not limited to:

1. Assisting with the quarterly evaluation and update of the Customized Training Plan for selected resident(s)
2. Participation in recruitment activities (local/national residency showcases, updating recruitment materials, website updates)
3. Residency candidate application evaluation and communication with candidates
4. Residency Advisory Committee (RAC) agenda planning and minutes
5. Residency scheduling (rotations, presentations, etc)

PHARMACY SERVICE AND HOSPITAL ORIENTATION

Each July is dedicated to orient new residents to the mission, policies, procedures, and general activities of the Saint Louis University Hospital Department of Pharmacy Services. The orientation includes the following:

1. Hospital Orientation

The Department of Human Resources presents a basic hospital orientation. This program introduces the resident to Saint Louis University Hospital’s mission, philosophy, policies, procedures, benefits, and other general information. It also provides basic health and safety information required by state and federal law. This program is generally completed over the first two days of employment.

2. Patient Care, Pharmacy, and General Computer Training

During the remainder of the first week, the residents are instructed in the use of the patient care computer system. Computer training emphasizes information organization, medication order review and verification, patient information access, database management, and communications.

3. Pharmacy Practice Duties

During orientation the resident is assigned to work in the general pharmacy practice area to gain practical experience and get acquainted with the pharmacy staff. The resident receives training in all areas of the pharmacy and on patient care floors.

4. Distributive Responsibilities

Residents are assigned to scheduled general pharmacy practice coverage (“staffing”) on scheduled weekends and/or weekday evening shifts. These shifts may be days or evenings and may include duties in central pharmacy, on the floors, in satellites or other areas as dictated by the program director. The typical resident staffing schedule includes two 6-hour shifts every fourth weekend, one 4-hour shift every week, and one additional 4-hour shift every fourth Friday, but is subject to change based on department and resident needs. Residents who have received their Missouri pharmacist license will work independently; those that have not will have limited responsibilities as described in this manual.

5. Start Dates/Calendar

The incoming residency class will start on the first available orientation period after July 1 of the interviewing year. If possible, residents are encouraged to attend orientation before July 1. A detailed orientation schedule will be prepared as part of the Customized Plan for Residency Training.

PRACTICE EXPERIENCES

Saint Louis University Hospital pharmacy residents are required to complete twelve (12) months of practice experience rotations during their residency, eleven of which must be completed at Saint Louis University Hospital. Additional rotations may be taken at affiliated institutions to meet specific skill needs and interests of each resident if approved by the program director and Residency Advisory Committee. The following rotations are available at Saint Louis University Hospital:

<table>
<thead>
<tr>
<th>Practice Experience</th>
<th>Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bone Marrow Transplant</td>
<td>Janet Laquet, PharmD, BCPS, BCOP</td>
</tr>
<tr>
<td>Emergency Medicine</td>
<td>Stacy Reveille, PharmD, BCPS</td>
</tr>
<tr>
<td>Infectious Diseases</td>
<td>Emily Welch, PharmD, BCPS</td>
</tr>
<tr>
<td>Oncology/Hematology</td>
<td>Susan Woelich, PharmD, BCOP</td>
</tr>
<tr>
<td>Neurocritical Care</td>
<td>Elizabeth Gau, Pharm.D.</td>
</tr>
<tr>
<td>Solid Organ Transplant</td>
<td>Nicole Nesselhauf, PharmD, BCPS</td>
</tr>
<tr>
<td>Trauma Surgery/Critical Care</td>
<td>Julia Alexander, PharmD, BCPS</td>
</tr>
<tr>
<td>Pharmacy Practice Mgmt/Drug Information/IDS</td>
<td>Tim Heuring, PharmD, BCPS</td>
</tr>
<tr>
<td></td>
<td>Mike Daly, PharmD, MSCI, BCPS</td>
</tr>
<tr>
<td></td>
<td>Anna Schmidt, Pharm.D., BCPS</td>
</tr>
<tr>
<td>Resident Orientation</td>
<td>Mike Daly, PharmD, MSCI, BCPS</td>
</tr>
<tr>
<td></td>
<td>Julia Alexander, PharmD, BCPS</td>
</tr>
<tr>
<td>Electronic Health Record</td>
<td>Craig Phernetton, Pharm.D., BCPS</td>
</tr>
<tr>
<td>Distributive Services</td>
<td>Erron Swick, Pharm.D., BCPS</td>
</tr>
<tr>
<td>Research</td>
<td>Mike Daly, PharmD, MSCI, BCPS</td>
</tr>
<tr>
<td></td>
<td>Julia Alexander, PharmD, BCPS</td>
</tr>
<tr>
<td>Teaching</td>
<td>Mike Daly, PharmD, MSCI, BCPS</td>
</tr>
</tbody>
</table>
The goals, objectives, and learning activities for each rotation are included at the end of the manual to allow the resident to choose preceptors and practice experiences that best complement their practice interests, skill development needs, and career goals. Residents pursuing a rotation at an affiliated site must contact the preceptor for current objectives.

ASSESSMENT AND PLAN FOR RESIDENCY TRAINING

In order to plan a challenging program that fulfills each resident's professional goals and objectives, it is crucial to assess initial interests, goals, strengths, and weaknesses. This assessment will be made during the orientation period with the program director and a rotation schedule will be devised. Prior to this, the resident must complete the Entering Resident Data Sheet and return it to the program director. Progress and changes will be reviewed quarterly during the course of the residency and documented in the Customized Plan for Residency Training. A copy of the most recent plan will always be available in the Residency Notebook for each resident.

EVALUATIONS

The resident must be evaluated at the end of each rotation by his/her preceptor. In addition, all assignments, including journal clubs and presentations, must be evaluated by all attendees. The Residency Learning System will be used to provide a consistent method of training. Residents will be evaluated based on a 1-4 scale:

- N/A = Not applicable
- 1 = Significant improvement needed
- 2 = Performance below expectations
- 3 = Performance meets expectations
- 4 = Performance exceeds expectations

Residents are evaluated by each preceptor considering 1) how the resident compares to an individual with the same level of training or experience and 2) the level of improvement in the skill since the last performance. A score of "3" indicates that the resident has met the minimum expectations for the criterion being evaluated.

The categories of required documented evaluations are listed below.

1. Rotation Evaluation of the Resident (by the Preceptor)

   The preceptor must evaluate the resident's attainment of the learning goals and objectives for the rotation. This evaluation will determine when a resident has achieved an objective and describe the behaviors, attributes and skills of the resident during and on completion of the rotation. Criteria assigned a score less than "3" should be regarded as areas of emphasis for the next evaluation period, with the expectation that noticeable improvement will have taken place. A score below "3" on the "Overall Performance" criterion indicates that the resident failed to satisfactorily attain the rotation's assigned goals and objectives and the experience must be repeated. Written evaluation of the resident must be completed at the end of every rotation. However, continuous informal feedback during the rotation is strongly encouraged. All rotation evaluations must be reviewed, signed and dated by the resident, preceptor and program director.

2. Preceptor/Rotation Evaluation (by the Resident)

   The resident must evaluate the quality of each rotation, including the preceptor's performance as a teacher and mentor. This should be completed at the end of the rotation and discussed with the preceptor. The resident's evaluation provides useful information to the program director regarding the resident's evaluation of the strengths and weaknesses of the rotations, the preceptors and the residency program in order to improve the quality of future practice experiences.

3. Self-Evaluations

   Residents must evaluate their own performance 1) at the end of each rotation, 2) after completion of each assignment and 3) at the end of each quarter (for longitudinal learning experiences). Preceptors will evaluate the quality and accuracy of the resident's self-evaluation of his or her rotation performance at the final evaluation by providing comments specific to the resident’s self-evaluation in the “Preceptor Comments” area of the resident's self-evaluation. All rotation evaluations must be reviewed, signed and dated by the resident, preceptor and program director.

4. Quarterly Evaluations

   After review of all rotation evaluations and completion of all quarterly evaluations (staffing, research, teaching, pharmacy practice management, etc.) a plan for the following quarter is devised by the program director and resident. The resident's Customized Plan is updated based on resident and program director assessment of the resident's strengths, weaknesses, interests, needs and career plans as well as rotation, project and presentation performance. Criteria assigned a score less than "3" should be regarded as areas of emphasis for the next evaluation period, with the expectation that noticeable improvement will have taken place. All quarterly evaluations must be reviewed, signed and
dated by the resident and program director. At the end of the year, there is a final evaluation of the resident and the program that is documented as part of the Customized Plan.

5. Evaluation of Resident Assignments and Presentations

For exercises such as journal clubs or presentations, a score below “3” on the “Overall Performance” criterion indicates that the overall performance was unsatisfactory and may need to be repeated. The overall score assigned is not a mathematical average since there is no objective formula to define what combination of criteria constitutes a satisfactory performance; it is up to the evaluator to make that determination. After collaboration with the other preceptors, the rotation preceptor and the program director will make the final decision on repeating the exercise.

6. Snapshots

Snapshots will be utilized to enhance the quality of resident self-evaluation. An area of weakness, as determined by the preceptor and resident, will be self-evaluated by the resident using an applicable snapshot. The preceptor will then evaluate the quality of the resident’s self-evaluation and document it on the snapshot form. Snapshots should be done once per rotation for PGY1 residents and at the discretion of the preceptor or program director for PGY2 resident. They must be reviewed, signed and dated by the resident, preceptor and program director.

All evaluations must be completed in a face-to-face discussion held between the resident and preceptor/program director within five business days of the completion of each rotation or assignment. It is important to complete the evaluations in a timely fashion to assure that the information contained within the evaluation is timely and accurate. Completed evaluations must be returned to the resident for inclusion in the Residency Notebook. If the completion of an evaluation must be delayed to allow completion of requirements or due to schedule problems, please communicate this to the program director.

RESIDENCY AND PRECEPTOR QUALITY PROGRAM

In order to ensure the continued quality of the residency program, both new and experienced preceptors must seek to improve their teaching skills. At the same time, the residency program is obligated to ensure the continuity of the learning experience for all residents in the program. This is accomplished through the Preceptor Assessment and Development Strategy. Some elements of this policy are described below.

1. Preceptor/site evaluations

The resident must evaluate the quality of each rotation, including the preceptor's performance as a teacher and mentor. Information documented in the Preceptor/Site Evaluation (See “Evaluations”) will be cataloged and used by the program directors to ensure consistency in achievement of minimum rotation requirements, effectiveness of teaching and suitability of rotation sites. Also, trends in preceptorship requiring modification, either related to the program or an individual preceptor, can be identified and addressed by the program director and/or the Residency Advisory Committee. At least annually, the program directors will assess the effectiveness of each preceptor and site and, if necessary, discuss options for improving the rotation experience.

2. Minimum rotation requirements

The Residency Advisory Committee has identified a set of rotation standards that must be achieved for every rotation. The consistent achievement or failure to achieve these standards may be used in assessing the suitability of a given rotation:

a) Orientation to the rotation site should be performed by the preceptor at the outset of the rotation and should include elements that are integral to the resident’s performance (i.e., introduction to team members, location of patients, location of references, time and location of conferences/meetings).

b) Expectations of the resident should be addressed in a face-to-face discussion between the preceptor and the resident at the beginning of the rotation.

c) Execution of the rotation will follow the Learning Experience Description contained in this manual unless significant variability is required by external circumstances. Such circumstances should be documented in the rotation evaluation.

d) Five days of modeling (i.e., rounding with the resident, if applicable), which might vary according to resident experience and comfort level as discussed between resident and preceptor.

e) At least 4 scheduled topic discussions conducted between the resident and preceptor.

f) A minimum of 8 patient care discussions, although consistent patient care discussions throughout the learning experience is encouraged and expected.

g) All evaluations will be completed and reviewed in a face-to-face meeting between preceptor and resident within five business days of the completion date. This includes the final rotation evaluation, snapshots and any applicable assignment evaluations. In the case of presentation evaluations, the preceptor from whose rotation the topic content was drawn (or their designee) is responsible for collecting and reviewing the evaluations with the resident.

3. Continuing preceptor education
Preceptors will use the following learning opportunities to promote their professional development:

a) Resident presentations
b) Pharmacotherapy Self-Assessment Program continuing education (for BPS-certified practitioners)
c) Other methods of self-learning including, but not limited to, literature review, preparation of presentations and teaching- and practice-based learning
d) SLU medical or surgical conferences
e) National meetings in their area(s) of practice

4. New preceptor development (see Preceptor Assessment and development strategy – below)
   a) Local and national preceptor development meetings
   b) On-site orientation to the program and expectations by program directors
   c) Assistance with setting up rotations for new preceptors, peer review of new learning experience description

Preceptor Assessment and Development Strategy for Saint Louis University Hospital PGY1 Pharmacy Residency and PGY2 Critical Care Residency Programs

PURPOSE:
To outline how the Saint Louis University Hospital (SLU Hospital) residency program director (RPD) will determine if prospective residency preceptors meet the standards set forth by this residency program and/or the American Society of Health-System Pharmacists (ASHP) Residency Accreditation Standard.

To establish a policy and procedure for preceptor development and improvement in accordance with the ASHP accreditation standards.

To define strategies for ongoing program improvement and to define a plan of action to ensure a high level of competency for all pharmacists involved as residency preceptors.

POLICY:
The Saint Louis University Hospital Pharmacy Residency Program will evaluate and select potential preceptors as well as maintain preceptor development and improvement in accordance with ASHP standards.

RESPONSIBILITY:
The RPD is responsible to select residency preceptors based on standards set forth and reassess preceptors for continued adherence to these standards.

The RPD, with support from pharmacy management, is responsible for providing preceptors with the opportunity for development of knowledge and skills related to serving as an effective preceptor. It is the responsibility of each individual preceptor to participate in opportunities offered.

Overall responsibility for residency program quality improvement is with the RPD and the Residency Advisory Committee (RAC)

PROCEDURES:
1. The RPD evaluates potential preceptors and re-evaluates current preceptors based on the ASHP Accreditation Standard for PGY1 and PGY2 Pharmacy Residency Programs established in Principle 5:

5.7 PGY1 Preceptors are licensed pharmacists, have completed an ASHP accredited residency, and have a minimum of one year of pharmacy practice experience. Alternatively, preceptors who are licensed pharmacists but have not completed an ASHP-accredited residency must be able to demonstrate mastery of knowledge, skills, attitudes, and abilities expected of one who has completed a PGY1 residency and have a minimum of three years of pharmacy practice experience.

PGY2 Pharmacist preceptors must be licensed and have completed an ASHP-accredited PGY2 residency followed by a minimum of one year of pharmacy practice in the advanced practice area. Alternatively, licensed pharmacists who have not completed an ASHP-accredited PGY2 residency may be preceptors but must demonstrate mastery of the knowledge, skills, attitudes, and abilities expected of one who has completed a PGY2 residency in the advanced practice area and have a minimum of three years of practice in the advanced area.

5.8 Preceptors have training and experience in the area of pharmacy practice for which they serve as preceptors, maintain continuity-of-practice in that area, and practice in that area at the time residents are being trained.

5.9 Each preceptor has a record of contribution and commitment to pharmacy practice characterized by a minimum of four of the following:

a. Record of improvements in and contributions to the respective area of advanced pharmacy practice.
b. Appointments to appropriate drug policy and other committees of the department/organization.
c. Formal recognition by peers as a model practitioner.
d. A sustained record of contributing to the total body of knowledge in pharmacy practice through publications in professional journals and/or presentations at professional meetings.
e. Serves regularly as a reviewer of contributed papers or manuscripts submitted for publication.
f. Demonstrated leadership through active participation in professional organizations at the local, state, and national levels.
g. Demonstrated effectiveness in teaching.

5.10 Preceptors demonstrate desire and aptitude for teaching that includes all of the following:
- Mastery of the four preceptor roles fulfilled when teaching clinical problem solving (direct instruction, modeling, coaching, facilitating).
- The ability to provide criteria-based feedback and evaluation of resident performance.
- Pursuit of continued refinement of their teaching skills.

2. The ASHP Accreditation Standard for PGY1 and PGY2 Residency Programs established in Principle 4.3 that a residency program should undergo continual program evaluation and improvement.
   a) The RPD evaluates potential preceptors based on their desire to teach and their aptitude for teaching (as differentiated from formal didactic instruction).

   The RPD shall evaluate the current preceptor list annually (see Appendix A) to determine if listed preceptors maintain the desire and aptitude to precept residents. Desire will be determined based on subjective information and evaluations from current residents involved with each preceptor. Aptitude is based on each preceptor’s current privileging status with the hospital (active license, etc.), meeting of criteria set forth in the ASHP Accreditation Standard for PGY1 and PGY2 Pharmacy Residency Programs established in Principle 5.9, along with participation in preceptor development activities and evaluation of preceptors from current and previous residents. The RPD has the authority to add or remove preceptors from the preceptor list at any time at his/her discretion.

   b) The RPD provides preceptors with opportunities to enhance their teaching skills.

   It is the responsibility of the RPD to determine which activities will be offered for preceptor development. For presentations, or other group educational activities, preceptors will be required to sign in to the program, remain for the entire program, and complete all the necessary activities for credit. For suggested personal activities (articles, online seminars, etc.), the honors system will be used. The RPD should provide at least two activities per residency year. The activities may include, but are not limited to:
   - An overview by the RPD (or preceptor, if applicable) of the highlights of the National Pharmacy Preceptors Conference
   - A preceptor development activity hosted by the St. Louis College of Pharmacy
   - A formal presentation on a preceptor development topic chosen by the Preceptor of the Year (see 2e) or RAC

   c) The RPD utilizes a plan for improving the quality of preceptor instruction based on an assessment of residents’ written evaluation of preceptor performance and other sources.

   The RPD will use a format supported by ASHP to evaluate preceptor performance and overall rotation experience. Any issues identified by the RPD in any of these evaluations will be addressed by the RPD with the included parties. Any issues brought to the RPD’s attention in addition to official evaluations will be handled in the same manner.

   d) At least annually, the RPD will consider overall program changes based on evaluations, observations, and other information.

   Per section 2a., the RPD will review the current preceptor list at least annually. The RPD will conduct an exit interview with each resident upon separation from the program. Any information received from this interview, along with information received from evaluations, observations, and other sources will be considered by the RPD for potential program changes. Issues regarding preceptor performance, rotation dissatisfaction, etc. will be discussed with the involved parties by the RPD. The RPD may add or remove preceptors or rotations from the program at any time at his/her discretion.

   e) At the end of the residency year, a member of pharmacy management will solicit the input of the residents through the use of an evaluation tool (see policy) to determine a Preceptor of the Year. A preceptor cannot receive this distinction two consecutive years.

ACTION:
The SLU Hospital residency program will provide activities, opportunities, and resources for preceptor orientation, development, and improvement.

1. Required activities:
   a. Initial preceptor assessment (ability to meet preceptor criteria) will be done during pharmacist position interviews and during orientation.
   b. New preceptor orientation will be completed prior to taking a resident on rotation (new preceptor orientation will occur when a new clinical pharmacist is ready to take residents on rotation, or when new clinical pharmacy specialists are hired). Specifically, new preceptors will:
i. Be appointed a “preceptor mentor” (will be the most recent Preceptor of the Year, unless circumstances prevent this individual from serving in this capacity).

ii. Be provided an overview of the residency program (i.e., goals, structure, policies, resident responsibilities, preceptor responsibilities) by the RPD

iii. Complete a checklist prior to taking a resident on rotation (see policy)
   1. Attend/complete at least one preceptor development session/activity
   2. Develop a rotation calendar (with input from preceptor mentor)
   3. Develop a learning experience description (with input from preceptor mentor) that is reviewed and approved by the RAC
   4. Observe at least one resident feedback session led by preceptor mentor
   5. Submit to RPD the ASHP Preceptor Academic and Professional Record

c. Attendance at 75% of Residency Advisory Committee meetings

d. Active participation in residency interviews and selection process

e. Completion and submission to the RPD the ASHP “Preceptor Academic and Professional Record” (see policy) by June 1 of each year

f. Completion and submission to the RPD a “Preceptor Self-Assessment” Form (see policy) by June 1 of each year

g. Submission to RPD of at least one residency research project idea and seminar topic by June 1 of each year
   i. Submission is optional if the Preceptor has served as primary mentor on a research project or seminar for the previous two consecutive residency years

h. Participation (as a presenter or attendee) at scheduled preceptor development sessions
   i. If selected as Preceptor of the Year, must be a presenter at one session the following year (this will count as one of the required formal presentations)

2. Encouraged activities:
   a. Participating in and facilitating informal preceptor development discussions at scheduled residency advisory committee meetings (e.g. generational gap presentation, leadership presentation, pharmacy topic video, presentation of clinical pearls, preceptor development articles)
   b. Attending local, state, and national programs and bringing information back to share with other preceptors
   c. Participating in training offered by affiliated colleges of pharmacy on preceptor development issues
   d. Actively pursuing scholarship activities in a variety of areas, such as formal presentations, participating as a journal reviewer, writing and submitting publications, performing research
   e. Acquire board certification, fellow status, etc. for formal recognition by peers as a model practitioner
   f. Actively seeking out training for self-improvement in the development of skills as a preceptor

3. Helpful Links:
   c. American College of Clinical Pharmacy (ACCP): www.accp.com
   e. AJHP Reviewer Instructions: http://ajhp.msubmit.net/cgibin/main.plex?form_type=display_rev_instructions

REFERENCES:

ST. LOUIS COLLEGE OF PHARMACY RESIDENT EDUCATION ACADEMY (REA)

Saint Louis University Hospital pharmacy residents are required to participate in the Resident Education Academy certificate program at the Saint Louis College of Pharmacy. Residents from many St. Louis area residency sites meet bi-weekly to discuss abilities-based education. The purpose of the workshops is to understand the knowledge, skills, and attitudes necessary to promote student-centered, assessment-driven learning and to use abilities-based education to achieve desired ability outcomes. After completion of the course in the fall, residents will apply these concepts in a didactic teaching setting at the St. Louis College of Pharmacy.

ST. LOUIS COLLEGE OF PHARMACY SEMINAR

A formal seminar presentation at the St. Louis College of Pharmacy is required during the fall of the residency. The formal seminar is an opportunity to develop speaking skills and a presentation that may be used in future job interviews. The resident may choose a topic in any clinical or professional practice area based on the resident's interests. Topics are preferred to be in a clinical area where a current controversial issue exists and must be approved by the residency program director.

The resident will be assigned a preceptor as a faculty mentor to assist them in preparing a 45-50 minute PowerPoint presentation, which will be followed by a 10-15 minute period of questions and answers. Prepared handouts are required.

Residents should plan ahead and allow appropriate time for the following:

1. Selection of seminar topic
2. Research using PubMed and other resources
3. Preparation of handout and PowerPoint slide presentation
Prior to the scheduled date of the presentation, the resident must present his/her formal seminar to the preceptors for constructive criticism. Revisions and subsequent presentations are at the discretion of the program director, mentor and resident.

**TEACHING OPPORTUNITIES THROUGH THE ST. LOUIS COLLEGE OF PHARMACY**

The St. Louis College of Pharmacy offers a variety of teaching opportunities for pharmacy residents. Opportunities may exist for didactic lectures, discussion group leadership, and student preceptorship.

**LICENSING REQUIREMENTS FOR PHARMACY RESIDENTS**

**Technician Licensure in Missouri:**
Residents cannot report for work or training without a valid pharmacist or technician license. New residents NOT LICENSED AS A PHARMACIST IN ANY STATE BY JULY 1 must apply for a Missouri technician license. Residents must have a valid pharmacist license by the start of patient care rotations and should begin pursuing a Missouri pharmacist license as soon as possible after they receive their ASHP Resident Matching Program results.

**Pharmacist Licensure in Missouri:**
Pharmacy residents have the following options to become a licensed pharmacist in the state of Missouri:
1. Pharmacist License by EXAMINATION
   a) Testing is by appointment at participating centers
   b) Must take 2 examinations: NAPLEX (or NAPLEX score transfer) and Missouri MPJE
2. Pharmacist License by RECIPROCITY
   a) Resident must be licensed in another state that grants reciprocity
   b) Must take Missouri MPJE
3. Temporary Pharmacist License
   a) Resident must be licensed in another state
   b) Allows pharmacists who are licensed in another state to practice in Missouri, but only in approved locations and circumstances

Residents must also obtain a certificate of medication therapeutic plan authority issued by the Missouri Board of Pharmacy.

Residents must submit their Pharmacist License application and Medication Therapy Certificate application to the Missouri Board of Pharmacy by June 1 and be prepared to produce evidence of timely submission to the program director upon request. Residents must be licensed in Missouri as a pharmacist by August 1 unless granted an extension by the program director. Residents not licensed by September 1 are subject to termination.

For an examination application and instructions contact the Missouri Board of Pharmacy by phone at (573) 751-0091 or visit their website at [http://pr.mo.gov/pharmacists.asp](http://pr.mo.gov/pharmacists.asp). Please contact the program director with any questions or problems as soon as possible.

**PHARMACY RESIDENT WORK ASSIGNMENTS WHILE AWAITING MISSOURI LICENSURE**

A resident who is a graduate of an ACPE-accredited college of pharmacy but has not yet received a Missouri pharmacist license may perform only work assignments not restricted by statute or regulation. The following activities may NOT be performed by a pharmacy resident pending Missouri licensure.

A resident awaiting licensure:
- May NOT verify physician orders in EPIC
- May NOT enter orders as a pharmacist in EPIC
- May NOT check completed new unit dose medications for correct contents and sign on the "pharmacist" line
- May NOT check completed IV's and IVPB's and sign on the "pharmacist" line
- May NOT sign for controlled substance deliveries and issuance or other paper work for scheduled medications
- May NOT prepare oncology chemotherapy unless he/she has completed the chemotherapy training class and has successfully passed the chemotherapy examination
- May NOT check crash carts and operating room case carts and sign on the "pharmacist" line
- May NOT enter or check outpatient prescriptions

**RECRUITMENT AND SELECTION OF RESIDENTS**

Saint Louis University Hospital recruits pharmacy residents through mailings, meeting contacts and referrals as well as through the Residency Showcase and Personnel Placement Service (PPS) available at the ASHP Midyear Meeting. At Midyear, the program director, current residents, and all preceptors in attendance participate in the recruitment of candidates for the residency program.
Residency candidates must submit a letter of intent, a copy of their curriculum vitae, an academic transcript and three letters of recommendation via the Pharmacy Online Residency Centralized Application Service (PhORCAS) by the application deadline in order to be considered for an on-site interview. Residency applicants meeting the following criteria may be deemed ineligible for an on-site interview:

- All residency application materials not received by the application deadline
- Any letter of recommendation that recommends the applicant at any level below “recommend”
- Cumulative grade point average below 3.0 on a 4-point scale (or equivalent) OR a grade of “B-” or lower on any graded rotation
- Five or more errors on the applicant’s curriculum vitae
- International visa sponsorship required

The number of candidates invited on-site will not exceed 16 (PGY1 program) or 4 (PGY2 program) unless an exception is granted by the program director. The above criteria are applicable after the passing of the application deadline and ONLY when the number of applicants exceeds the maximum allowable for the program. If, after application of all five criteria listed above, the number of eligible candidates still exceeds the maximum, the program director will rank the candidates using the Candidate Evaluation Form. An invitation for a one-day, on-site interview will be extended to the top candidates as determined by the program director under advisement from members of the Residency Advisory Committee.

Following completion of all candidate interviews, members of the Residency Advisory Committee participate in the ranking of candidates for each residency program. These rankings and any interviewer comments are reviewed by the program director, who will determine the final rank order of candidates for each residency program. The final rank list for each respective program is submitted to the ASHP Resident Matching Program.

**EARLY COMMITMENT PROCESS FOR PGY2 PROGRAMS**

Current PGY1 residents are eligible for early commitment to a PGY2 program at Saint Louis University Hospital without participating in the ASHP Resident Matching Program. Each PGY1 resident interested in early commitment to a PGY2 program will be evaluated using the following process:

1. Each eligible and interested resident must submit a letter of intent and curriculum vitae to the director of the PGY2 program of interest by November 1 or as otherwise communicated by the PGY2 program director during the residency year.
2. The program director may schedule the candidate(s) for an abbreviated interview before departure for the Midyear meeting in December.
3. After the interview, the Residency Advisory Committee will meet to discuss and, if necessary, rank the internal candidates. The program director may early commit a resident for the following academic year. Both individuals will sign the letter of agreement (downloadable from: [http://www.natmatch.com/ashprmp/](http://www.natmatch.com/ashprmp/)) and the program will pay the necessary fees to the National Matching Service.
4. All discussions regarding resident selection must be kept strictly confidential amongst the preceptors. This is particularly important when two or more residents are interviewing for the same position.

**RESIDENCY PROGRAM CERTIFICATE**

Upon successful completion of all program requirements and compliance with all conditions of the residency program, Saint Louis University Hospital will award the resident a certificate indicating successful completion of the residency program. All of the following criteria must be satisfied to successfully complete the program:

1. Score indicating “3 = performance meets expectations” or higher on all applicable ASHP objectives for the program at the time of last evaluation.
2. Satisfactory completion of all rotations as determined by the primary preceptor for the rotation.
3. Completion of the required number of journal clubs and formal presentations (excluding the StLCOP seminar presentation). All must be deemed satisfactory by the program director and the preceptor of the rotation on which the journal club or presentation is given (refer to “Evaluations” section).
4. Completion of a residency research project that is approved by the program director and submission of a formal write-up in manuscript format.
5. Completion of the seminar presentation and, if required by the program director, the Abilities-Based Education Workshops offered at the St. Louis College of Pharmacy.
6. Submission of a Resident Poster for presentation at the ASHP Midyear Clinical Meeting.
7. Completion of all other assignments (formulary reviews, longitudinal projects, MUEs, CQI projects, etc.)
8. Completion of the residency notebook.

Residents who fail to complete all program requirements and/or do not comply with all conditions of the residency program shall not be awarded a certificate of completion.
DISMISSAL OF RESIDENTS

Performance Management (refer to SSM Health Human Resources)
You are expected to meet facility performance expectations and standards of your job. If your performance or conduct does not meet facility expectations and standards, the facility will use a positive performance management and progressive corrective action approach whenever possible to motivate you to participate directly in the resolution of such situations. We believe that such an approach fosters your understanding of and commitment to correct a performance or conduct problem and increases the likelihood of a satisfactory resolution. However, circumstances may arise which make it advisable or inappropriate to follow the general Performance Management and progressive corrective action procedures. When circumstances warrant, facility management may decide, in its sole discretion, that some or all of the steps in the Performance Management process should not be followed and that immediate corrective action, including termination of employment is necessary. Employment with the company or any of its facilities is at will, and either you or the facility may terminate the employment relationship at any time with or without notice.

This policy is intended to complement, not conflict with or replace other policies and procedures pertaining to employee conduct and performance, including (but not limited to) the Open Door and Fair Treatment Policy and the Employee Conduct and Work Rules policy.

Generally, the Performance Management process involves an initial informal counseling, followed by more formal counseling including suspension, and/or decision-making leave, if necessary, if performance has not improved. If you have any questions regarding the Performance Management process, please speak to your supervisor or your facility Human Resources Representative.

Specifically, meeting assignment and project deadlines is an important standard of job performance. If, at any time, a resident fails to meet a deadline, the preceptor involved should collaborate with the program director to develop a plan of action. After the first offense, the resident will be counseled by the program director on the importance of meeting deadlines and pulled from rotations to complete the assigned work, if necessary. After the second offense, a written warning will be placed in their permanent employment record in human resources. Subsequent offenses will proceed according to HR policy using positive performance management and progressive corrective action (as stated above).

Episodes of gross misconduct including (but not limited to) grossly inappropriate or unethical behavior, intentional review or manipulation of privileged information or violation of hospital compliance may be punishable by immediate termination.

Resignation and Separation of Employment (refer to SSM Health Human Resources)
Separation of employment, either voluntary or involuntary, is an inevitable part of personnel activity within an organization. It is the policy of the facility to approach each employee termination with fairness, both to the employee and the facility. Since employment with the facility is based on mutual consent, both the employee and the facility have the right to terminate employment at will, with or without cause, at any time.

All accrued, vested benefits that are due and payable at termination will be paid. Some benefits may be continued at your expense if you choose. You will be notified in writing of the benefits that may be continued and the terms, conditions and limitations of such continuation. Your final pay will be distributed in accordance with applicable state law.

In the case of voluntary separation of employment, non-exempt employees, if at all possible, are expected to notify their supervisor two (2) weeks in advance of their last expected day of work. Those employees with management responsibilities are expected, if at all possible, to give four (4) weeks notice.

Please be sure to keep us informed of any address changes within the following year after you leave the facility. This will ensure proper and timely handling of forms such as W-2s and pension plan disbursements.

VACATION AND EXCUSED ABSENCES
Pharmacy residents receive 7.2 hours per pay period of paid time off (PTO) and may take vacation time under the following conditions:

1. The resident is eligible to use vacation after 30 days of employment. All Human Resources policies apply and are detailed in the Employee Handbook.

2. Requests for vacation or time off must be submitted electronically to both the rotation preceptor and the program director at least 30 days in advance for approval. The resident will work with his/her preceptor and the program director to ensure that alternative arrangements to meet program requirements are made to accommodate the absence. Exceptions may be granted at the discretion of the rotation preceptor and the program director.

3. The resident must also notify the administrative assistant and/or pharmacist scheduler of all time off to ensure correct payment.

4. Residents may trade “staffing” days with other pharmacy residents to secure specific days off; however, residents may not
request off on staffing days without an approved trade. Exceptions may be granted for required off-site residency responsibilities.

5. Vacation time should be used to schedule job interviews in the last two to three months of the residency; therefore the resident should save at least five (5) vacation days for interviewing and traveling.

6. No more than two vacation days are allowed on any one rotation. Residents are encouraged to block out single days during the week or around weekends to avoid compromising the quality of rotations. Exceptions may be granted at the discretion of the rotation preceptor and the program director.

7. Vacation time accrued as a resident is retained if the resident continues employment as a pharmacist at SLU HOSPITAL. Otherwise, accrued vacation time not used during the residency will be paid at completion of the residency. (Residents in the past have used their accrued vacation time payout for moving expenses).

EXTENDED LEAVE

Extended leave is defined as a resident missing at least 50% or three weeks of a rotation, whichever is less. At the time the absence is taken, the resident should submit written evidence of the medical necessity of an extended absence. Strategies for make-up may include rearranging the resident’s schedule or, at the discretion of the program director, extending the training period for up to one month. For absences exceeding 6 weeks, termination may be considered.

HOLIDAYS

Saint Louis University Hospital recognizes the following holidays: New Years Day* Good Friday Memorial Day Independence Day Labor Day Thanksgiving Day* Friday after Thanksgiving Day* Christmas Day*  
*Denotes major holidays

Residents provide staffing coverage at Saint Louis University Hospital by covering Christmas Eve, Christmas Day, New Year’s Eve and New Years Day. Residents will be scheduled off for the week in between the Christmas and New Year’s holidays as well as all other recognized holidays. If a minor holiday occurs during the week, it is at the preceptor’s discretion to assign the day as a holiday. Residents may trade holiday coverage with other pharmacy employees under general scheduling rules to secure specific days or holidays off. All time off during holidays are paid out of the employee’s PTO account.

ILLNESS REPORTING

Should a resident be unable to work because of illness or need for medical care, he/she must notify his/her rotation preceptor or program director in writing prior to the regular starting time. The program director will, in turn, notify the pharmacy scheduler. If notification in writing is not possible, information regarding the nature of the absence, duration of time to be missed and any other pertinent dates, times and locations should be communicated verbally and documented at the first opportunity. These guidelines apply to both on-site and off-site rotations and for illnesses occurring mid-workday.

Missing time during a scheduled residency assignment or other professional deadline is discouraged, but if it is unavoidable, the deadline or assignment date will be moved to the resident’s first day back on rotation. Exceptions may be granted at the discretion of the program director. All hospital and pharmacy department policies regarding illness reporting apply and notification and documentation must be made pursuant to these policies.

DUTY HOURS

Programs must comply with the current duty hour standards as set forth by ASHP. Duty hours are defined as all clinical and academic activities related or unrelated to the residency program. Duty hours must be limited to 80 hours per week, averaged over a 4-week period, inclusive of all in-house call and home call activities and moonlighting. Residents must be provided with 1 day in 7 free from all educational and clinical responsibilities averaged over a 4-week period. Residents should have 10 hours free of duty between scheduled duty, and must have at a minimum 8 hours between scheduled duty periods.

Duty periods:
Duty periods for PGY1 residents must not exceed 16 hours. PGY2 residents and above may be scheduled for up to 24 hours of continuous duty in the hospital, but must not be assigned additional clinical responsibilities after 24 hours of continuous duty.
Moonlighting:
Moonlighting must not interfere with the resident’s ability to satisfactorily meet the goals and objectives of the residency program (as assessed by the program director). Time spent by residents in internal and external moonlighting must be counted toward the 80-hour maximum weekly hour limit. PGY1 residents may not be employed in medical-related work outside of Saint Louis University Hospital for the duration of their residency year. PGY2 residents may maintain outside medical-related work provided: 1) the resident works no more than 8 hours per week; 2) outside shifts do not occur on days that the resident provides services to Saint Louis University Hospital and 3) outside employment are not otherwise in violation of the ASHP Duty Hours standard. The program director may, at any time and without notice, prohibit the resident from moonlighting if his/her assessment indicates that resident performance is being compromised or the moonlighting arrangement is in violation of this policy or the ASHP Duty Hours standard.

PARKING
Pharmacy residents are assigned parking on a surface lot during the week (Monday thru Friday) or, if available, the parking garage across from the hospital. Pharmacy residents are able to park in the covered garage across from the hospital on weekends and after 1pm on weekdays if their regular parking assignment is on a surface lot. There will be a fee taken out of the resident’s paycheck for parking.

MIDYEAR TRAVEL REIMBURSEMENT
Reimbursement to each pharmacy resident for ASHP Midyear travel costs is contingent on approval by Pharmacy Management and Hospital Administration. The maximum allowable reimbursement is $1500 total per resident, and is based upon documentation of reimbursable items. Reimbursable items include: Flight, registration, hotel, taxi to/from airport, baggage fees, and poster. If the combined total of reimbursable items exceeds the maximum allowable reimbursement, individual reimbursable items are subject to approval by the Residency Program Director and/or Pharmacy Management. The amount of reimbursement is subject to change based on availability of travel funds.
Procedure:
1. Each resident must submit their flight itinerary information to the RPD utilizing SSM Health travel process and/or forms by August 1st, or as otherwise directed by the RPD. Flights are booked and paid for directly by SSM Health travel after the approval signature is obtained.
2. Residents book their own registration and hotel, and are encouraged to do so as early as possible.
3. Within a week of returning from ASHP Midyear, residents must submit their reimbursable item travel receipts to ????
MISSION STATEMENT

The purpose of the PGY1 residency is to accelerate the resident’s growth beyond entry-level professional competence in patient-centered care and in pharmacy operational services and to further the development of leadership skills that can be applied in any position and in any practice setting. PGY1 residents will acquire extensive knowledge, refine their problem-solving skills, strengthen their professional values and attitudes and advance the growth of their clinical judgment. The development of sound clinical judgment is cultivated by feedback on performance, self-reflection and extensive practice. Residents will be held responsible for achieving the outcome competencies listed below.

OUTCOMES OF RESIDENCY PROGRAM

Medication Use – Manage and improve the medication-use process.

**Goal R1.1:** Identify opportunities for improvement of the organization’s medication-use system.

- **OBJ R1.1.1:** (Comprehension) Explain the organization’s medication-use system and its vulnerabilities to adverse drug events (ADEs).
- **OBJ R1.1.2:** (Analysis) Analyze the structure and process and measure outcomes of the medication use system.
- **OBJ R1.1.3:** (Evaluation) Identify opportunities for improvement in the organization’s medication-use system by comparing the medication-use system to relevant best practices.

**Goal R1.2:** Design and implement quality improvement changes to the organization’s medication-use system.

- **OBJ R1.2.1:** (Comprehension) Explain the process for developing, implementing, and maintaining a formulary system.
- **OBJ R1.2.2:** (Evaluation) Make a medication-use policy recommendation based on a comparative review (e.g., drug class review, drug monograph).
- **OBJ R1.2.3:** (Synthesis) Participate in the identification of need for, development of, implementation of, and evaluation of an evidence-based treatment guideline/protocol related to individual and population-based patient care.
- **OBJ R1.2.4:** (Synthesis) Design and implement pilot interventions to change problematic or potentially problematic aspects of the medication-use system with the objective of improving quality.

**Goal R1.3:** Prepare and dispense medications following existing standards of practice and the organization’s policies and procedures.

- **OBJ R1.3.1:** (Evaluation) Interpret the appropriateness of a medication order before preparing or permitting the distribution of the first dose.
- **OBJ R1.3.2:** (Application) Follow the organization’s policies and procedures to maintain the accuracy of the patient’s medication profile.
- **OBJ R1.3.3:** (Application) Prepare medication using appropriate techniques and following the organization’s policies and procedures.
- **OBJ R1.3.4:** (Application) Dispense medication products following the organization’s policies and procedures.

**Goal R1.4:** Demonstrate ownership of and responsibility for the welfare of the patient by performing all necessary aspects of the medication-use system.

- **OBJ R1.4.1:** (Characterization) Display initiative in preventing, identifying, and resolving pharmacy-related patient-care problems.

**Goal R6.1:** Use information technology to make decisions and reduce error.

- **OBJ R6.1.1:** (Comprehension) Explain security and patient protections such as access control, data security, data encryption, HIPAA privacy regulations, as well as ethical and legal issues related to the use of information technology in pharmacy practice.
- **OBJ R6.1.2:** (Application) Exercise skill in basic use of databases and data analysis software.
- **OBJ R6.1.3:** (Evaluation) Successfully make decisions using electronic data and information from internal information databases, external online databases, and the Internet.
Goal R2.3: As appropriate, establish collaborative professional pharmacist-patient relationships.

Goal R2.2: Place practice priority on the delivery of patient-centered care to patients.

Goal R2.1: As appropriate, establish collaborative professional relationships with members of the health care team.

Pharmaceutical Care – Provide evidence-based, patient-centered medication therapy with interdisciplinary teams.

Goal R2.6: Design evidence-based therapeutic regimens.

OBJ R2.6.1: (Synthesis) Specify therapeutic goals for a patient incorporating the principles of evidence-based medicine that integrate patient-specific data, disease and medication-specific information, ethics, and quality-of-life considerations.

OBJ R2.6.2: (Synthesis) Design a patient-centered regimen that meets the evidence-based therapeutic goals established for a patient; integrates patient-specific information, disease and drug information, ethical issues and quality-of-life issues; and considers pharmacoeconomic principles.

Goal R2.7: Design evidence-based monitoring plans.

OBJ R2.7.1: (Synthesis) Design a patient-centered, evidenced-based monitoring plan for a therapeutic regimen that effectively evaluates achievement of the patient-specific goals.

Goal R2.8: Recommend or communicate regimens and monitoring plans.

OBJ R2.8.1: (Application) Recommend or communicate a patient-centered, evidence-based Therapeutic regimen and monitoring plan to other members of the interdisciplinary team and patients in a way that is systematic, logical, accurate, timely, and secures consensus from the team and patient.

Goal R2.9: Implement regimens and monitoring plans.

OBJ R2.9.1: (Application) When appropriate, initiate the patient-centered, evidence-based therapeutic regimen and monitoring plan for a patient according to the organization’s policies and procedures.

OBJ R2.9.2: (Application) Use effective patient education techniques to provide counseling to patients and caregivers, including information on medication therapy, adverse effects, compliance, appropriate use, handling, and medication administration.

Goal R2.10: Evaluate patients’ progress and redesign regimens and monitoring plans.

OBJ R2.10.1: (Evaluation) Accurately assess the patient’s progress toward the therapeutic goal(s).

OBJ R2.10.2: (Synthesis) Redesign a patient-centered, evidence-based therapeutic plan as
necessary based on evaluation of monitoring data and therapeutic outcomes.
Goal R2.11: Communicate ongoing patient information.
OBJ R2.11.1: (Application) When given a patient who is transitioning from one health care setting to another, communicate pertinent pharmacistherapeutic information to the receiving health care professionals.
OBJ R2.11.2: (Application) Ensure that accurate and timely medication-specific information regarding a specific patient reaches those who need it at the appropriate time.

Goal R2.12: Document direct patient care activities appropriately.
OBJ R2.12.1: (Analysis) Appropriately select direct patient-care activities for documentation.
OBJ R2.12.2: (Application) Use effective communication practices when documenting a direct patient care activity.
OBJ R2.12.3: (Comprehension) Explain the characteristics of exemplary documentation systems that may be used in the organization’s environment.

Goal E2.5: Resolve conflicts through negotiation.
OBJ E2.5.1: (Application) Use effective negotiation skills to resolve conflicts.

Goal E5.1: Participate in the management of medical emergencies.
OBJ E5.1.1: (Evaluation) Exercise skill as a team member in the management of medical Emergencies according to the organization’s policies and procedures.

Goal E7.1: Use approaches in all communications that display sensitivity to the cultural and personal characteristics of patients, caregivers, and health care colleagues.
OBJ E7.1.1: (Organization) Demonstrate sensitivity to the perspective of the patient, caregiver, or health care colleague in all communications.

Leadership – Exercise leadership and practice management skills.
Goal R3.1: Exhibit essential personal skills of a practice leader.
OBJ R3.1.1 (Characterization) Practice self-managed continuing professional development with the goal of improving the quality of one’s own performance through self-assessment and personal change.
OBJ R3.1.2 (Characterization) Demonstrate pride in and commitment to the profession through appearance, personal conduct, and association membership.
OBJ R3.1.3 (Characterization) Act ethically in the conduct of all job-related activities.

Goal R3.2: Contribute to departmental leadership and management activities.
OBJ R3.2.1: (Synthesis) Participate in the pharmacy department’s planning processes.
OBJ R3.2.2: (Comprehension) Explain the effect of accreditation, legal, regulatory, and safety requirements on practice.
OBJ R3.2.3: (Comprehension) Explain the principles of financial management of a pharmacy department.
OBJ R3.2.4: (Synthesis) Prioritize the work load, organize the work flow, and check the accuracy of the work of pharmacy technical and clerical personnel or others.

Goal R3.3: Exercise practice leadership.
OBJ R3.3.1: (Synthesis) Use knowledge of an organization’s political and decision-making structure to influence accomplishing a practice area goal.
OBJ R3.3.2: (Comprehension) Explain various leadership philosophies that effectively support direct patient care and pharmacy practice excellence.
OBJ R3.3.3: (Application) Use group participation skills when leading or working as a member of a committee or informal work group.
OBJ R3.3.4: (Application) Use knowledge of the principles of change management to achieve organizational, departmental, and/or team goals.

Goal E2.2: Understand the pharmacy procurement process.
OBJ E2.2.1: (Comprehension) Explain the processes and contractual relationships that form the structure of the department’s medication procurement system.

Goal E7.3: Balance obligations to oneself, relationships, and work in a way that minimizes stress.
OBJ E7.3.1: (Synthesis) Devise an effective plan for minimizing stress while attending to personal needs, maintaining relationships, and meeting professional obligations.

Goal E7.4: Manage time effectively to fulfill practice responsibilities.
OBJ E7.4.1: (Application) Use time management skills effectively to fulfill practice responsibilities.

Project Management – Demonstrate project management skills.
Goal R4.1: Conduct a practice-related project using effective project management skills.
OBJ R4.1.1: (Synthesis) Identify a topic for a practice-related project of significance for pharmacy practice.
OBJ R4.1.2: (Synthesis) Formulate a feasible design for a practice-related project.
OBJ R4.1.3: (Synthesis) Secure any necessary approvals, including IRB and funding, for one’s design of a practice-related project.
OBJ R4.1.4: (Synthesis) Implement a practice-related project as specified in its design.
OBJ R4.1.5: (Synthesis) Effectively present the results of a practice-related project.
OBJ R4.1.6: (Synthesis) Successfully employ accepted manuscript style to prepare a final report of a practice-related project.
OBJ R4.1.7: (Evaluation) Accurately assess the impact, including sustainability if applicable, of the residency project.
Teaching – Provide medication and practice-related education/training.

Goal R5.1: Provide effective medication and practice-related education, training, or counseling to patients, caregivers, health care professionals, and the public.

OBJ R5.1.1: (Application) Use effective educational techniques in the design of all educational activities.
OBJ R5.1.2: (Synthesis) Design an assessment strategy that appropriately measures the specified objectives for education or training and fits the learning situation.
OBJ R5.1.3: (Application) Use skill in the four preceptor roles employed in practice-based teaching (direct instruction, modeling, coaching, and facilitation).
OBJ R5.1.4: (Application) Use skill in case-based teaching.
OBJ R5.1.5: (Application) Use public speaking skills to speak effectively in large and small group situations.
OBJ R5.1.6: (Application) Use knowledge of audio-visual aids and handouts to enhance the effectiveness of communications.

Drug Information – Utilize medical informatics.

Goal R1.5: Provide concise, applicable, comprehensive, and timely responses to requests for drug information from patients and health care providers.

OBJ R1.5.1: (Analysis) Discriminate between the requesters’ statement of need and the actual drug information need by asking for appropriate additional information.
OBJ R1.5.2: (Synthesis) Formulate a systematic, efficient, and thorough procedure for retrieving drug information.
OBJ R1.5.3: (Analysis) Determine from all retrieved biomedical literature the appropriate information to evaluate.
OBJ R1.5.4: (Evaluation) Evaluate the usefulness of biomedical literature gathered.
OBJ R1.5.5: (Synthesis) Formulate responses to drug information requests based on analysis of the literature.
OBJ R1.5.6: (Synthesis) Provide appropriate responses to drug information questions that require the pharmacist to draw upon his or her knowledge base.
OBJ R1.5.7: (Evaluation) Assess the effectiveness of drug information recommendations.

PRACTICE RESPONSIBILITIES

The resident provides complete pharmacy services in coordination and cooperation with Pharmacy Service professionals and support staff. These are consistent with policies and procedures for operations and clinical practice and meet all the requirements and obligations of pharmacists on staff.

The resident shall actively participate in rotation activities including team meetings, rounds, and other interdisciplinary conferences that occur on the services of his/her rotations. The rotation preceptor shall be responsible for identifying these opportunities and ensuring the resident effectively participates.

The resident shall identify therapeutic issues and problems and shall develop and present seminars to the medical, nursing, and pharmacy staffs addressing those issues. The resident is encouraged to seek opportunities to educate other ancillary health care practitioners, such as physician’s assistants, nurse practitioners, physical therapists, occupational therapists and speech therapists on subjects relating to pharmacology and medication usage.

MEDICATION MANAGEMENT AND PATIENT SAFETY

An important function of the pharmacist is to oversee the medication management process and ensure that medications are used in a way that maximizes patient safety. To this end, PGY1 Pharmacy Practice residents may serve as active participants on key committees that oversee medication management, including the Pharmacy, Therapeutics, Nutrition and Transfusion (PTNT) Committee, Medication Safety Committee and other committees at various times throughout the year. Committee service is a longitudinal experience and will be assigned by the program director based on institutional, departmental and resident need. Responsibilities may include, but are not limited to, taking minutes, preparing handouts or presentations, and leading initiatives and are subject to change based on need.

RESIDENCY ADVISOR

Each resident is assigned a program advisor from the available preceptors at the beginning of the residency program. The resident’s advisor will 1) help the resident meet the requirements for successful completion of the residency program and 2) advise the resident and facilitate execution of his/her career plan. Meetings are at the discretion of the resident and he/she may contact the residency program director and request the assignment of an alternative preceptor to serve as his/her advisor.
RESIDENCY MANUAL

A copy of the Resident’s Manual shall be provided to each resident outlining the requirements of the residency program. Residents must make themselves knowledgeable of all program requirements. Feedback from each residency class will be incorporated into the annual revision of the Resident’s Manual. Corrections, additions, or other changes to the Resident’s Manual should be addressed to the residency program director.

RESIDENCY RESEARCH PROJECT

The resident shall, with the guidance and supervision of a mentor, develop and complete a residency project. The project shall be written using a format and style consistent with publication in a professional journal (including project subject, background, methods, results, and conclusions). Pertinent project deadlines are as follows:

<table>
<thead>
<tr>
<th>Seminar and Research Project Deadlines 2015-2016</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Task</strong></td>
</tr>
<tr>
<td>Seminar (topic, description, mentor, rank date)</td>
</tr>
<tr>
<td>Project topic/title</td>
</tr>
<tr>
<td>Research rounds #1</td>
</tr>
<tr>
<td>Submit protocol and data collection form for internal review</td>
</tr>
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<td>GCCP run-through</td>
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<tr>
<td>PTNT presentation</td>
</tr>
<tr>
<td>GCCP Resident Research Symposium Slide submission</td>
</tr>
<tr>
<td>IRB submission complete</td>
</tr>
<tr>
<td>Research rounds #2</td>
</tr>
<tr>
<td>Seminar Program Information Material submission deadline</td>
</tr>
<tr>
<td>October seminar slide submission deadline</td>
</tr>
<tr>
<td>STLCOP seminars</td>
</tr>
<tr>
<td>November seminar slide submission deadline</td>
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<tr>
<td>STLCOP seminars</td>
</tr>
<tr>
<td>December seminar slide submission deadline</td>
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<tr>
<td>STLCOP seminars</td>
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<tr>
<td>Project data collection complete</td>
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<tr>
<td>STLCOP run-through</td>
</tr>
<tr>
<td>St. Louis Resident Research Symposium</td>
</tr>
<tr>
<td>Manuscript draft</td>
</tr>
<tr>
<td>PTNT presentation</td>
</tr>
<tr>
<td>Final manuscript</td>
</tr>
</tbody>
</table>

The resident also must meet the deadline set forth by ASHP for resident poster submission to the Midyear Clinical Meeting. Additional subdeadlines (i.e., data collection milestones), in addition to the above, developed by the resident and mentor(s) are strongly recommended. A recurring appointment between the resident and mentor(s) is suggested to monitor progress and identify project issues. The RPD must be notified immediately if a deadline or subdeadline is missed.

RESIDENCY NOTEBOOK

Each resident MUST maintain a Residency Notebook as a complete record of the resident’s program activities. The resident should begin to keep this ongoing notebook from the first day of the program. At the conclusion of the residency training program, the program coordinator retains the original notebook. Completion of this record is a requirement for successful completion of the program.

The residency program notebook shall include the following items completed during the residency:

1. Curriculum Vitae
2. Completed Customized Plan for Residency Training form
3. All quarterly evaluations and quarterly self-evaluations (completed and signed)
4. Preceptor evaluations of all rotations and all rotation self-evaluations
5. Completed Preceptor/Site evaluations
6. A record of all educational in-services and seminars presented
   a) Outlines
   b) Evaluations
7. Residency Project
   a) Data collection form

23
b) IRB submission

c) Final written report

d) Copy of poster

8. St. Louis College of Pharmacy Seminar presentation with evaluations

9. St. Louis College of Pharmacy Resident Teaching Workshop assignments

10. Formulary reviews, MUE, written drug information responses or other completed assignments
Saint Louis University Hospital
PGY2 Critical Care Residency Manual

Program Director

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PGY2 Residency Coordinator

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Pager: 314.491.5422  Speed: 11125
Phone: 314.268.5956
MISSION STATEMENT

Pharmacists completing the residency program will be able to integrate evidence-based pharmaceutical care as a component of the total care of seriously ill and injured patients requiring drug therapy in multiple critical care environments. They will be accountable for achieving optimal therapeutic outcomes as members of the healthcare team. Pharmacists will have the ability to educate patients and healthcare professionals on critical care topics. They will demonstrate leadership skills and professional maturity by following a personal philosophy of practice, managing their own practice, evaluating their own performance and exhibiting commitment to the profession of pharmacy.

OUTCOMES OF RESIDENCY PROGRAM

Pharmaceutical Care – Integrate pharmaceutical care as part of the total care of patients requiring drug therapy

Goal R2.2: Prioritize the delivery of care to critically ill patients.
OBJ R2.2.1: (Synthesis) Devise a plan for deciding which critical care patients to focus on if given limited time and multiple patient care responsibilities.

Goal R2.3: Act in accordance with a covenantal relationship with the patient.
OBJ R2.3.1: (Synthesis) Formulate a strategy to guide care for a critically ill patient and interaction with the patient’s family that reflects the acceptance of a covenant with the patient for that patient’s care.

Goal R2.4: Collect and analyze pertinent patient information.
OBJ R2.4.1: (Analysis) Collect and organize all patient-specific information needed to identify, prevent, and resolve medication and specialized nutrition support-related problems in order to provide appropriate evidence-based recommendations in critically ill patients with complex conditions. (See Appendix for medical problems.)
OBJ R2.4.2: (Evaluation) Assess the information base created for a critically ill patient for adequacy to identify problems and design a therapeutic regimen.
OBJ R2.4.3: (Analysis) Determine the presence of any of the following problems in a critically ill patient's current medication or specialized nutrition support therapy:
   1. Medication or specialized nutrition support used with no medical indication
   2. Patient has acute or chronic (e.g., steroid dependence) medical conditions for which there is no medication or specialized nutrition support prescribed
   3. Medication or specialized nutrition support prescribed inappropriately for a particular medical condition
   4. Current medication therapy or specialized nutrition support regimen contains something inappropriate (dose, dosage form, duration, schedule, route of administration, method of administration)
   5. There is therapeutic duplication
   6. Medication to which the patient is allergic has been prescribed
   7. There are adverse drug or device-related events or potential for such events
   8. There are clinically significant drug-drug, drug-disease, drug-nutrient, or drug-laboratory test interactions or potential for such interactions
   9. Medical condition is complicated by social, recreational, nonprescription, or nontraditional (e.g., herbal) drug use by the patient
   10. Patient not receiving full benefit of prescribed medication therapy or specialized nutrition support (e.g., system error)
OBJ R2.4.4: (Analysis) Prioritize a critically ill patient’s health care needs.

Goal R2.5: Design evidence-based therapeutic regimens for critically ill patients.
OBJ R2.5.1: (Synthesis) Specify therapeutic goals for a critically ill patient incorporating the principles of evidence-based medicine that integrate patient-specific data, disease and medication-specific information, ethics, and, when possible, quality-of-life considerations.
OBJ R2.5.2: (Synthesis) Design a regimen that meets the evidence-based therapeutic goals established for a critically ill patient; integrates patient-specific information, disease and drug information, ethical issues and, when possible, quality-of-life issues; and considers pharmacoeconomic principles.

Goal R2.6: Design evidence-based monitoring plans for critically ill patients.
OBJ R2.6.1: (Synthesis) Design an evidenced-based monitoring plan for a critically ill patient’s therapeutic regimen that effectively evaluates achievement of the patient-specific goals.

Goal R2.7: Recommend regimens and monitoring plans for critically ill patients.
OBJ R2.7.1: (Application) Recommend an evidence-based therapeutic regimen and corresponding monitoring plan in a way that is systematic, logical, accurate, timely, and secures consensus from the critical care interdisciplinary team.

Goal R2.8: When appropriate, implement selected aspects of critical care patients’ regimens and/or monitoring plans.
OBJ R2.8.1: (Application) When appropriate, order a therapeutic regimen for a critically ill patient according to the health system’s procedures.
OBJ R2.8.2: (Application) When appropriate, follow organizational procedures to implement (e.g., order tests) the monitoring plan.

Goal R2.9: Evaluate critically ill patients’ progress and redesign regimens and monitoring plans.
OBJ R2.9.1: (Evaluation) Accurately assess the critically ill patient’s progress toward the therapeutic goal(s) and the absence of adverse drug events.
OBJ R2.9.2: (Synthesis) Redesign an evidence-based therapeutic plan for a critically ill patient as necessary based on evaluation of monitoring data and therapeutic outcomes.
OBJ R2.9.3: (Application) Collect outcomes data based on the patient’s response to therapy.

Goal R2.10: Communicate ongoing patient information.
OBJ R2.10.1: (Application) When given a patient who is transitioning out of the critical care setting, communicate pertinent pharmacotherapeutic information to the receiving health care professionals.

Goal R2.11: Document direct patient care activities appropriately.
OBJ R2.11.1: (Analysis) Appropriately select direct patient-care activities for documentation.

Goal R5.1: Participate in the management of medical emergencies.
OBJ R5.1.1: (Application) Exercise skill as a team member in the management of medical emergencies as exhibited by certification in the American Heart Association Advanced Cardiac Life Support and, if applicable, Pediatric Advanced Life Support.

Goal E1.3: Exhibit critically ill patients’ medication orders and/or profiles.
OBJ E1.3.1: (Evaluation) Interpret the appropriateness of a critically ill patient’s medication order following existing standards of practice and the organization’s policies and procedures.
OBJ E1.3.2: (Evaluation) Assess a critically ill patient’s medication profile for appropriateness following existing standards of practice and the organization’s policies and procedures.

Self-evaluation – Self-assess and self-direct to foster ongoing professional growth

Professional Commitment – Promote the profession of pharmacy
Goal R1.1: Exhibit essential personal skills of a practice leader.
OBJ R1.1.1: (Characterization) Practice self-managed continuing professional development with the goal of improving the quality of one’s own performance through self-assessment and personal change.
OBJ R1.1.2: (Characterization) Demonstrate commitment to the professional practice of critical care pharmacy through active participation in the activities of local, state, and/or national professional organizations concerned with the health care of critically ill patients.
OBJ R1.1.3: (Characterization) Demonstrate the ability to make considered but rapid decisions in intense situations where time is at a minimum.

Team Participation – Function as an effective member of the healthcare team
Goal R2.1: Establish collaborative professional relationships with other members of the interdisciplinary critical care team.
OBJ R2.1.1: (Synthesis) Implement a strategy that establishes cooperative, collaborative, communicative, and effective working relationships with other members of the interdisciplinary critical care team.

Goal E3.1: Exhibit additional personal skills of a practice leader.
OBJ E3.1.1: (Complex Overt Response) Speak clearly and distinctly in grammatically correct English or the alternate primary language of the practice site.
OBJ E3.1.2: (Application) Use listening skills effectively in performing job functions.
OBJ E3.1.3: (Application) Use correct grammar, punctuation, spelling, style, and formatting conventions in preparing all written communications.
OBJ E3.1.4: (Analysis) When communicating, use an understanding of effectiveness, efficiency, customary practice and the recipient’s preferences to determine the appropriate type of, and medium and organization.

Teaching – Employ effective clinical and didactic teaching strategies to educate students, pharmacists, physicians, nurses and patients
Goal R3.1: Provide effective education or training to health care professionals and health care professionals in training.
OBJ R3.1.1: (Comprehension) Explain the differences in effective educational strategies for health care professionals and for various levels of health care professionals in training.
OBJ R3.1.2: (Synthesis) Design an assessment strategy that appropriately measures the specified objectives for education or training and fits the learning situation.
OBJ R3.1.3: (Application) Use skill in the four preceptor roles employed in practice-based teaching (direct instruction, modeling, coaching, and facilitation).
OBJ R3.1.4: (Application) Use skill in case-based teaching.
OBJ R3.1.5: (Application) Use public speaking skills to speak effectively in large and small group situations.
Goal E2.1: Provide concise, applicable, comprehensive, and timely responses to formalized requests for drug information pertaining to the critically ill from patients, health care providers, and the public.

OBJ E2.1.1: (Analysis) Discriminate between the requesters' statement of need and the actual drug information need by asking for appropriate additional information.
OBJ E2.1.2: (Synthesis) Formulate a systematic, efficient, and thorough procedure for retrieving drug information.
OBJ E2.1.3: (Analysis) Determine from all retrieved biomedical literature the appropriate information to evaluate.
OBJ E2.1.4: (Evaluation) Evaluate the usefulness of biomedical literature gathered.
OBJ E2.1.5: (Evaluation) Determine whether a study's conclusions are supported by the study results.
OBJ E2.1.6: (Synthesis) Formulate responses to drug information requests based on analysis of the literature.
OBJ E2.1.7: (Synthesis) Provide appropriate responses to drug information questions that require the pharmacist to draw upon his or her knowledge base.
OBJ E2.1.8: (Evaluation) Assess the effectiveness of drug information recommendations.

Goal E3.1: Interpret and apply the principles of pharmacologic, therapeutics, and comparative reviews concerning the critical care population.

OBJ E3.1.1: (Analysis) Discriminate between the requesters' statement of need and the actual drug information need by asking for appropriate additional information.
OBJ E3.1.2: (Synthesis) Formulate a systematic, efficient, and thorough procedure for retrieving drug information.
OBJ E3.1.3: (Analysis) Determine from all retrieved biomedical literature the appropriate information to evaluate.
OBJ E3.1.4: (Evaluation) Evaluate the usefulness of biomedical literature gathered.
OBJ E3.1.5: (Evaluation) Determine whether a study's conclusions are supported by the study results.
OBJ E3.1.6: (Synthesis) Formulate responses to drug information requests based on analysis of the literature.
OBJ E3.1.7: (Synthesis) Provide appropriate responses to drug information questions that require the pharmacist to draw upon his or her knowledge base.
OBJ E3.1.8: (Evaluation) Assess the effectiveness of drug information recommendations.

Goal E5.1: Understand faculty roles and responsibilities.

OBJ E5.1.6 (Application) Identify resources available to help develop academic skills.
OBJ E4.1.2: (Synthesis) Participate in the development or revision of the critical care elements of organizational plans for the management of mass casualty events.
OBJ E4.1.3: (Synthesis) Exercise skill in the delivery of staff training as specified in the organization’s emergency preparedness plans.
OBJ E4.1.4: (Synthesis) If needed, provide services and programs as specified in the organization’s emergency preparedness plan.

PRACTICE RESPONSIBILITIES

The resident provides complete pharmacy services in coordination and cooperation with pharmacy professionals and support staff. These are consistent with policies and procedures for operations and clinical practice and meet all the requirements and obligations of pharmacists on staff.

The resident shall actively participate in rotation activities including team meetings, rounds, and other interdisciplinary conferences that occur on the services of his/her rotations. The resident and preceptor shall be responsible for identifying these opportunities and ensuring the resident effectively participates.

The resident shall identify therapeutic issues and shall develop and present seminars to the medical, nursing, and pharmacy staffs addressing those issues. The resident is encouraged to seek opportunities to educate other ancillary health care practitioners, such as physician’s assistants, nurse practitioners, and physical therapists on subjects relating to pharmacology, therapeutics and medication usage.

MEDICATION MANAGEMENT AND PATIENT SAFETY

An important function of the pharmacist is to oversee the medication management process and ensure that medications are used in a way that maximizes patient safety. To this end, pharmacy residents are active participants on key committees that oversee medication management. Critical care residents will serve on the Critical Care Committee, which oversees respiratory and critical care practice, for the entire residency year. Responsibilities may include, but are not limited to, taking minutes, preparing handouts or presentations, and leading initiatives and are subject to change.

RESIDENCY ADVISOR

Each resident is assigned a program advisor from the available preceptors at the beginning of the residency program. The resident’s advisor will 1) help the resident meet the requirements for successful completion of the residency program and 2) advise the resident and facilitate execution of his/her career plan. Meetings are at the discretion of the resident and he/she may contact the residency program director and request the assignment of an alternative preceptor to serve as his/her advisor.

RESIDENCY MANUAL

A copy of the Resident’s Manual shall be provided to each resident outlining the requirements of the residency program. Residents must make themselves knowledgeable of all program requirements. Feedback from each residency class will be incorporated into the annual revision of the Resident’s Manual. Corrections, additions, or other changes to the Resident’s Manual should be addressed to the residency program director.

RESIDENCY RESEARCH PROJECT

The resident shall, with the guidance and supervision of appropriate preceptors, develop and complete a residency research project. The project shall be written using a format and style consistent with publication in a professional journal (including project subject, background, methods, results, and conclusions). The project will be expected to be submitted for publication in a professional journal by the end of the academic year. Pertinent project deadlines are as follows:

<table>
<thead>
<tr>
<th>Task</th>
<th>Date</th>
<th>Contact(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seminar (topic, description, mentor, rank date)</td>
<td>July 15</td>
<td>Complete via Survey Monkey email RPD, Mentor(s)</td>
</tr>
<tr>
<td>Project topic/title</td>
<td>July 31</td>
<td>RPD, Mentor(s)</td>
</tr>
<tr>
<td>Research rounds #1</td>
<td>August 19</td>
<td>Mentor(s)</td>
</tr>
<tr>
<td>Submit protocol and data collection form for internal review</td>
<td>August 31</td>
<td>Mentor(s), Anna Schmidt, Mike Daly</td>
</tr>
<tr>
<td>GCCP run-through</td>
<td>TBD</td>
<td>Mentor(s)</td>
</tr>
<tr>
<td>PTNT presentation</td>
<td>TBD</td>
<td>Mike Daly, Tim Heuring</td>
</tr>
<tr>
<td>GCCP Resident Research Symposium Slide submission</td>
<td>September 14</td>
<td>Mentor(s) <a href="mailto:gcpp.st.louis@gmail.com">gcpp.st.louis@gmail.com</a></td>
</tr>
<tr>
<td>IRB submission complete</td>
<td>September 30</td>
<td>Anna Schmidt</td>
</tr>
</tbody>
</table>

Seminar and Research Project Deadlines 2015-2016

29
The resident also must meet the deadline set forth by ASHP for resident poster submission to the Midyear Clinical Meeting. Additional subdeadlines (i.e., data collection milestones), in addition to the above, developed by the resident and mentor(s) are strongly recommended. A recurring appointment between the resident and mentor(s) is suggested to monitor progress and identify project issues. The RPD must be notified immediately if a deadline or subdeadline is missed.

**RESIDENCY NOTEBOOK**

Each resident must maintain a Residency Notebook as a complete record of the resident's program activities. At the conclusion of the residency-training program, the program director retains the original notebook. Completion of this record is a requirement for successful completion of the program.

The residency program notebook shall include the following items completed during the residency:

1. Curriculum Vitae
2. Completed Customized Plan for Residency Training form
3. All quarterly evaluations and quarterly self-evaluations (completed and signed)
4. Preceptor evaluations of all rotations and all rotation self-evaluations
5. Completed Preceptor/Site evaluations
6. A record of all educational in-services and seminars presented
   a) Outlines
   b) Evaluations
7. Residency Project
   a) Data collection form
   b) IRB submission
   c) Final written report
8. St. Louis College of Pharmacy Seminar presentation with evaluations
9. St. Louis College of Pharmacy Resident Teaching Workshop assignments, if applicable
10. Formulary reviews, MUE, written drug information responses or other completed assignments

<table>
<thead>
<tr>
<th>Research rounds #2</th>
<th>Third quarter (TBD)</th>
<th>Mentor(s)</th>
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<tbody>
<tr>
<td>Seminar Program Information Material submission deadline</td>
<td>September 14 5:00pm</td>
<td><a href="mailto:Erika.Michalski@stlcop.edu">Erika.Michalski@stlcop.edu</a></td>
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<tr>
<td>October seminar slide submission deadline</td>
<td>October 5 5:00 pm</td>
<td><a href="mailto:Erika.Michalski@stlcop.edu">Erika.Michalski@stlcop.edu</a></td>
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<tr>
<td>STLCOP seminars</td>
<td>October 13 1300-1630</td>
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<tr>
<td>November seminar slide submission deadline</td>
<td>October 28 5:00 pm</td>
<td><a href="mailto:Erika.Michalski@stlcop.edu">Erika.Michalski@stlcop.edu</a></td>
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<tr>
<td>STLCOP seminars</td>
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<td>December seminar slide submission deadline</td>
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<tr>
<td>STLCOP seminars</td>
<td>December 16 1300-1630</td>
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<tr>
<td>Project data collection complete</td>
<td>April 30</td>
<td>Mentor(s)</td>
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<tr>
<td>STLCOP run-through</td>
<td>May (TBD)</td>
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<td>St. Louis Resident Research Symposium</td>
<td>May 25 STLCOP ARB</td>
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<td>Manuscript draft</td>
<td>May 31</td>
<td>Mentor(s)</td>
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<tr>
<td>PTNT presentation</td>
<td>May 9 &amp; June 13</td>
<td>Mike Daly, Tim Heuring</td>
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<tr>
<td>Final manuscript</td>
<td>June 30</td>
<td>Mentor(s), RPD</td>
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# Learning Experience Descriptions

<table>
<thead>
<tr>
<th>Available Rotations</th>
<th>Type</th>
<th>Duration (weeks)</th>
<th>PGY1</th>
<th>PGY2</th>
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<td>Bone Marrow Transplant</td>
<td>Patient Care</td>
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<td>Cardiology</td>
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<td>Cardiology Critical Care</td>
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<td>Distributive Services</td>
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<td>Emergency Medicine</td>
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<tr>
<td>Oncology/Hematology</td>
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<td>Infectious Diseases</td>
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<tr>
<td>Pharmacy Practice Management</td>
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<td>Pulmonary/Medicine Critical Care</td>
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<td>Resident Orientation</td>
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<td>Neurocritical Care</td>
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<td>Solid Organ Transplant</td>
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<td>Surgery Critical Care</td>
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</table>

*3 consecutive weeks, followed by a 12 week longitudinal experience

**PGY1 Required Rotations:** Resident Orientation, Infectious Diseases, Pharmacy Practice Management, Cardiology, Oncology/Hematology, Bone Marrow Transplant, Solid Organ Transplant, one Critical Care rotation (Trauma Critical Care, Neurocritical Care, Medicine Critical Care, Cardiology Critical Care)

**PGY2 Required Rotations:** Emergency Medicine, Infectious Diseases, Pulmonary/Medicine Critical Care (twice), Neurocritical Care, Trauma Critical Care (twice), Surgery Critical Care, Cardiology Critical Care

Resident Orientation is required for all PGY1 residents and for all PGY2 residents that did NOT early commit from the PGY1 program at SLU HOSPITAL.
Learning Experience Description

Bone Marrow Transplant (BMT) (PGY1)  Rotation Type: Patient Care

Janet Laquet, Pharm.D., BCPS, BCOP  Phone: 577-8598  Pager: 490-3722

Description:

The BMT rotation involves the provision of pharmaceutical care for patients receiving autologous or allogeneic bone marrow transplants and background information on hematologic malignancies such as acute and chronic leukemias, lymphomas, and multiple myeloma. The purpose of this learning experience is to provide the resident an opportunity to recognize patients that will benefit from this intervention, expand the resident's knowledge base in the area of BMT, to increase the ability of the resident to provide pharmaceutical care to this patient population, to educate other health care professionals, and to provide education to patients and caregivers.

The core of the experience will involve participation in direct patient care activities, in the inpatient and/or outpatient environment. Objectives include education of physicians, pharmacy, patients and their caregivers and nursing staff as deemed applicable by the resident and preceptor. Topic discussions will be presented using a patient presentation format. The resident is responsible for completion of case presentations or journal clubs as scheduled during the learning experience.

Rotation Content:

Core content that will be covered via patient care experiences, discussions, reading, and/or presentations include the following:

- Principles of chemotherapy regimens
- Autologous Transplant
- Types of allogeneic transplants (Reduced Intensity, Myeloablative, and Haplo-identical)
- Mobilization Strategies
- Prophylaxis and treatment of Graft-versus-Host Disease (Immunosuppressive Therapies)
- Hepatic Complications of BMT
- Chemotherapy induced nausea and vomiting
- Infection prophylaxis and treatment (with emphasis on anti-viral therapies)
- Management of neutropenic fever
- Role of vaccination post-transplantation

Background readings on disease states which lead to BMT will be recommended to the resident to enhance learning opportunities. The content of these readings will be discussed as applicable in patient case presentations at the discretion of the resident and the preceptor and may include the following:

- Hodgkin's Disease and Non-Hodgkins Lymphomas
- Multiple Myeloma
- Myelodysplastic Syndrome
- Chronic Leukemias
- Acute Leukemias

Goals and Objectives Selected:

Goals and objectives selected to be taught and evaluated during the BMT and Hematology learning experience include:

Goal R1.5: Provide concise, applicable, comprehensive, and timely response to requests for drug information from patients and health care providers.

OBJR1.5.3: Determine from all retrieved biomedical literature the appropriate information to evaluate.

Goal R2.1: As appropriate, establish collaborative professional relationships with members of the health care team.

OBJ R2.1.1: Implement a strategy that effectively establishes cooperative, collaborative, and communicative working relationships with members of interdisciplinary health care teams.

Goal R2.3: As appropriate, establish collaborative professional pharmacist-patient relationships.

OBJ R2.3.1: Formulate a strategy that effectively establishes a patient-centered pharmacist-patient relationship.

Goal R2.4: Collect and analyze patient information.
OBJ R2.4.1: Collect and organize all patient-specific information needed by the pharmacist to prevent, detect, and resolve medication-related problems and to make appropriate evidence-based, patient-centered medication therapy recommendations as part of the interdisciplinary team.

Goal R2.8: Recommend or communicate regimens and monitoring plans.
OBJ R2.8.1: Recommend or communicate a patient-centered, evidence-based therapeutic regimen and corresponding monitoring plan to other members of the interdisciplinary team and patients in a way that is systematic, logical, accurate, timely, and secures consensus from the team and patient.

Goal E7.1: Use approaches in all communications that display sensitivity to the cultural and personal characteristics of patients, caregivers, and health care colleagues.
OBJ E7.1.1: Demonstrate sensitivity to the perspective of the patient, caregiver, or health care colleagues in all communications.

Goal R2.9: Implement regimens and monitoring plans.
OBJ R2.9.2: Use effective patient education techniques to provide counseling to patients and caregivers, including information on medication therapy, adverse effects, compliance, appropriate use, handling, and medication administration.

Goal R2.10: Evaluate patients' progress and redesign regimens and monitoring plans.
OBJ R2.10.2: Redesign a patient-centered, evidence-based therapeutic plan as necessary based on evaluation of monitoring data and therapeutic outcomes.

Learning Activities:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Goal/Objectives Covered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Navigate the guidelines database to retrieve requested information.</td>
<td>R1.5.3</td>
</tr>
<tr>
<td>Accurately gather, organize and analyze patient specific information on patients prior to rounds with medical team and/or pre-rounds with preceptor.</td>
<td>R2.4.1</td>
</tr>
<tr>
<td>Meet with preceptor for on assigned days and present selected patient(s) with emphasis on:</td>
<td>R2.4.1</td>
</tr>
<tr>
<td>1. Concise and organized retrieval of patient information</td>
<td></td>
</tr>
<tr>
<td>2. Generation of an appropriately prioritized problem list</td>
<td></td>
</tr>
<tr>
<td>3. Identification of medication therapy problems</td>
<td></td>
</tr>
<tr>
<td>4. Design of a therapeutic plan</td>
<td></td>
</tr>
<tr>
<td>5. Design of a monitoring plan</td>
<td></td>
</tr>
<tr>
<td>Be a consistent presence and active participant on team rounds and effectively recommend therapeutic regimens and monitoring plans to the team during rounds.</td>
<td>R2.1.1</td>
</tr>
<tr>
<td>Redesign the following types of therapeutic regimens and monitoring plans:</td>
<td>R2.10.2</td>
</tr>
<tr>
<td>1. Anti-infective regimens</td>
<td></td>
</tr>
<tr>
<td>2. Anti-emetic regimens</td>
<td></td>
</tr>
<tr>
<td>3. Chemotherapy regimens</td>
<td></td>
</tr>
<tr>
<td>Provide mini in-services on rounds, when requested by the team or preceptor.</td>
<td>R2.1.1</td>
</tr>
<tr>
<td>Clearly understand and actively participate in a discussion of at least five of the disease states listed in the rotation content section of the learning experience description.</td>
<td>R2.4.1</td>
</tr>
<tr>
<td>Act in a professional, courteous and respectful manner in all situations.</td>
<td>R2.1.1</td>
</tr>
<tr>
<td>Complete patient and caregiver education activities based on individual needs.</td>
<td>E7.1.1, R2.3.1, R2.9.2</td>
</tr>
</tbody>
</table>

* Other activities may be required at the discretion of the preceptor and/or program director.
Learning Experience Description

**Distributive Services (PGY1)**  
**Rotation Type:** Patient Care

**Mike Daly, Pharm.D., MSCI, BCPS**  
**Phone:** 268-7158  
**Pager:** 419-3340

**Description:**
Throughout the year, residents are assigned to scheduled general pharmacy practice coverage ("staffing") on scheduled weekends and/or weekday evening shifts. These shifts may be days or evenings and may include duties in central pharmacy, on the floors, in satellites or others as dictated by the program director. The typical resident staffing schedule includes two 8-hour shifts every fourth weekend and one 6-hour shift every week, but is subject to change based on department and resident needs. Residents who have received their Missouri pharmacist license will work independently; those that have not will have limited responsibilities as described in this manual.

**Rotation Content:**
Core content that will be covered via patient care experiences, discussions, reading, and/or presentations include the following:

- Order verification and dispensing
- Clinical initiatives
- Hospital formulary management

**Goals and Objectives:**
The following goals and objectives will be taught and evaluated:

Goal R1.3 Prepare and dispense medications following existing standards of practice and the organization's policies and procedures.

**OBJ R1.3.1** Interpret the appropriateness of a medication order before preparing or permitting the distribution of the first dose.
**OBJ R1.3.2** Follow the organization's policies and procedures to maintain the accuracy of the patient's medication profile.
**OBJ R1.3.3** Prepare medication using appropriate techniques and following the organization's policies and procedures.
**OBJ R1.3.4** Dispense medication products following the organization's policies and procedures.

Goal R2.12 Document direct patient care activities appropriately.

**OBJ R2.12.1** Appropriately select direct patient-care activities for documentation.
**OBJ R2.12.2** Use effective communication practices when documenting a direct patient-care activity.
**OBJ R2.12.3** Explain the characteristics of exemplary documentation systems that may be used in the organization's environment.

Goal R3.2 Contribute to departmental leadership and management activities.

**OBJ R3.2.4** Prioritize the work load, organize the work flow, and check the accuracy of the work of pharmacy technical and clerical personnel or others.

**Learning Activities:**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide centralized order verification and distributive services for inpatients.</td>
<td>R1.3.1, R1.3.2, R1.3.3, R1.3.4</td>
</tr>
<tr>
<td>Provide leadership to pharmacy technicians, students and other pharmacists by taking initiative to solve medication-related problems in the course of providing distributive services.</td>
<td>R3.2.4</td>
</tr>
<tr>
<td>Participate in the implementation of the hospital formulary process and other clinical initiatives (SCIP, VTE, IV-to-PO conversions) and document appropriately.</td>
<td>R2.12.1, R2.12.2, R2.12.3</td>
</tr>
</tbody>
</table>

*Other activities may be required at the discretion of the preceptor and/or program director.*
Learning Experience Description

<table>
<thead>
<tr>
<th><strong>Distributive Services (PGY2)</strong></th>
<th><strong>Rotation Type:</strong> Patient Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Julia Alexander, Pharm.D., BCPS</td>
<td>Phone: 268-7157 Pager: 419-8404</td>
</tr>
</tbody>
</table>

**Description:**
Throughout the year, residents are assigned to scheduled general pharmacy practice coverage (“staffing”) on scheduled weekends and/or weekday evening shifts. These shifts may be days or evenings and may include duties in central pharmacy, on the floors, in satellites or others as dictated by the program director. The typical resident staffing schedule includes two 8-hour shifts every fourth weekend and one 6-hour shift every week, but is subject to change based on department and resident needs. Residents who have received their Missouri pharmacist license will work independently; those that have not will have limited responsibilities as described in this manual.

**Rotation Content:**
Core content that will be covered via patient care experiences, discussions, reading, and/or presentations include the following:
- Order verification and dispensing
- Clinical initiatives
- Hospital formulary management

**Goals and Objectives:**
The following goals and objectives will be taught and evaluated:

**Goal R1.3** Exercise practice leadership.
  - **OBJ R1.3.1** Demonstrate a commitment to advocacy for the optimal care of patients through the assertive and persuasive presentation of patient care issues to members of the health care team, the patient, and/or the patient’s representative(s).
  - **OBJ R1.3.2** Explain the nature of mentoring in pharmacy, its potential connection with achievement, and the importance of willingness to serve as mentor to appropriate individuals.

**Goal R2.11** Document direct patient care activities appropriately.
  - **OBJ R2.11.1** Appropriately select direct patient-care activities for documentation.

**Learning Activities:**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide centralized and decentralized order entry and distributive services for patients in critical care areas.</td>
<td>R1.3.1</td>
</tr>
<tr>
<td>Provide leadership to pharmacy technicians, students and other pharmacists by taking initiative to solve medication-related problems in the course of providing distributive services.</td>
<td>R1.3.2</td>
</tr>
<tr>
<td>Participate in the implementation of the hospital formulary process and other clinical initiatives (SCIP, VTE, IV-to-PO conversions) and document appropriately.</td>
<td>R2.11.1</td>
</tr>
</tbody>
</table>

*Other activities may be required at the discretion of the preceptor and/or program director.
Learning Experience Description

<table>
<thead>
<tr>
<th>Electronic Health Record (PGY1)</th>
<th>Rotation Type: Non-Patient Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Craig Phernetton, Pharm.D., BCPS</td>
<td>Phone: 577-8960</td>
</tr>
<tr>
<td>Erron Swick, Pharm.D., BCPS</td>
<td>Pager: 419-5294</td>
</tr>
</tbody>
</table>

**Description:**
The Electronic Health Record (EHR) rotation introduces residents to the pharmacist’s role in building and maintaining the electronic health record. The purpose of this learning experience is to provide the resident an opportunity to learn how a pharmacist uses his/her pharmacy knowledge base to optimize the EHR. The resident will spend most of his/her time learning how to build medication-related components within the EHR and troubleshooting user-communicated issues as they arise.

**Rotation Content:**
Core content that will be covered via one-on-one guidance from the preceptor include:
- Component build
- Break/fix troubleshooting
- Determining appropriateness of end-user requests based on pharmacy knowledge base
- Translating end-user requests into potentially complex component build
- Effect communication with end-users from an array different disciplinary backgrounds (i.e., Management, Pharmacy, Nursing, Physicians, etc.)

**Goals and Objectives:**
The following goals and objectives will be taught and evaluated:

**Goal R1.5** Provide concise, applicable, comprehensive, and timely responses to requests for drug information from patients and health care providers.

- **OBJ R1.5.1** Discriminate between the requesters’ statement of need and the actual drug information need by asking for appropriate additional information.
- **OBJ R1.5.2** Formulate a systematic, efficient, and thorough procedure for retrieving drug information.

**Goal R2.1** As appropriate, establish collaborative professional relationships with members of the health care team.

- **OBJ R2.1.1** Implement a strategy that effectively establishes cooperative, collaborative, and communicative working relationships with members of interdisciplinary health care teams.

**Goal R3.2** Provide concise, applicable, comprehensive, and timely responses to requests for drug information from patients and health care providers.

- **OBJ R3.2.1** Participate in the pharmacy department's planning processes.

**Goal R3.3** Exercise practice leadership.

- **OBJ R3.3.4** Use knowledge of the principles of change management to achieve organizational, departmental, and/or team goals.

**Goal R6.1** Use information technology to make decisions and reduce error.

- **OBJ R6.1.1** Explain security and patient protections such as access control, data security, data encryption, HIPAA privacy regulations, as well as ethical and legal issues related to the use of information technology in pharmacy practice.
- **OBJ R6.1.2** Exercise skill in basic use of databases and data analysis software.
- **OBJ R6.1.3** Successfully make decisions using electronic data and information from internal information databases, external online databases, and the Internet.

**Learning Activities:**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Build simple, mixture, and orderable medication (ERX) records.</td>
<td>R2.1.1</td>
</tr>
<tr>
<td>Maintain EHR medication formularies (EFY) and medication preference lists (LPF)</td>
<td>R2.1.1</td>
</tr>
<tr>
<td>Build medication Smart Groups (OSQ) and Smart Sets (PRL)</td>
<td>R2.1.1</td>
</tr>
<tr>
<td>Edit end-user functionality and security</td>
<td>R6.1.1</td>
</tr>
<tr>
<td>Build reports and patient lists to meet end-user needs</td>
<td>R1.5.1</td>
</tr>
</tbody>
</table>

*Other activities may be required at the discretion of the preceptor and/or program director.*
Learning Experience Description

Emergency Medicine (PGY1)  
Rotation Type: Patient Care

Stacy Revelle, Pharm.D., BCPS  
Phone: 268-5956  
Pager: 491-5422

Description:
Emergency Medicine is a required learning experience for all PGY1 pharmacy residents that involves the provision of pharmaceutical care for acutely ill patients in the Emergency Department. The purpose of this learning experience is to provide the resident an opportunity to expand his/her knowledge of emergency medicine.

The core of the experience will revolve around intensive interaction with nurses and physicians of the Division of Emergency Medicine to identify and resolve medication therapy issues for patients, participate in routine patient discussions with the preceptor and topic discussions. Any required case presentations or journal clubs scheduled during the learning experience must be completed. Additional activities that may be required at the discretion of the preceptor include: giving a presentation at Emergency Medicine Grand Rounds, providing in-depth answers to physician generated drug information questions which may require intensive literature searches or providing in-services to the physicians and nursing staff.

The preceptor will serve as a role model, coach and facilitator for the resident. The length of time the preceptor spends in each of the phases of learning will depend on both the resident’s progression in the learning experience and where the learning experience occurs in the residency program.

Rotation Content:

Common disease states in which the resident will be expected to gain proficiency through literature review, topic discussions and/or direct patient care experiences include, but are not limited to:

- Cardiovascular disorders
  - Acute coronary syndromes, advanced cardiac life support, hypertensive crisis
- Infectious diseases
  - Community acquired pneumonia, sepsis, sexually transmitted diseases
- Neurologic disorders
  - Seizure disorders/status epilepticus, acute treatment of stroke
- Respiratory disorders
  - Acute asthma exacerbations/status asthmaticus, rapid sequence intubation
- Critical care syndromes
  - Toxicology, sedation/analgesia

Goals and Objectives:

The following goals and objectives will be taught and evaluated:

Goal R2.2 Place priority on the delivery of patient-centered care to patients.
  OBJ R2.2.1 Choose and manage daily activities so that they reflect a priority on the delivery of appropriate patient-centered care to each patient.

Goal R2.4 Collect and analyze patient information.
  OBJ R2.4.1 Collect and organize all patient-specific information needed by the pharmacist to prevent, detect, and resolve medication-related problems and to make appropriate evidence-based, patient-centered medication therapy recommendations as part of the interdisciplinary team.
  OBJ R2.4.3 Using an organized collection of patient-specific information, summarize patients’ health care needs.

Goal R2.5 When necessary, make and follow-up on patient referrals
  OBJ R2.5.1 When presented with a patient with health care needs that cannot be met by the pharmacist, make a referral to the appropriate health care provider based on the patient’s acuity and the presenting problem.
  OBJ R2.5.2 Devise a plan for follow-up for a referred patient.

Goal R2.9 Implement regimens and monitoring plans.
  OBJ R2.9.1 When appropriate, initiate the patient-centered, evidence-based therapeutic regimen and monitoring plan according to the organization’s policies and procedures.

Goal R2.11 Communicate ongoing patient information.
  OBJ R2.11.2 Ensure that accurate and timely medication-specific information regarding a specific patient reaches those who need it at the appropriate time.

Goal E5.1 Participate in the management of medical emergencies.
  OBJ E5.1.1 Exercise skill as a team member in the management of medical emergencies according to the organization’s policies and procedures.
### Learning Activities:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Goal/Objectives Covered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accurately gather, organize and analyze patient specific information on patients while in the emergency department.</td>
<td>R2.4.3</td>
</tr>
<tr>
<td>Meet with preceptor (on assigned days) and present patients with emphasis on:</td>
<td></td>
</tr>
<tr>
<td>6. Concise and organized retrieval of patient information</td>
<td>R2.4.1</td>
</tr>
<tr>
<td>7. Generation of an appropriate differential diagnoses list</td>
<td>R2.4.3</td>
</tr>
<tr>
<td>8. Identification of medication therapy problems</td>
<td>R2.9.1</td>
</tr>
<tr>
<td>9. Design of a therapeutic plan</td>
<td></td>
</tr>
<tr>
<td>10. Design of a monitoring plan</td>
<td></td>
</tr>
<tr>
<td>Attend Emergency Medicine conferences when applicable.</td>
<td>R2.2.1</td>
</tr>
<tr>
<td>Clearly understand and actively participate in a discussion of at least five of the disease states listed in the rotation content section of the learning experience description.</td>
<td>R2.4.1</td>
</tr>
<tr>
<td>Form professional relationships with attending level physicians in order to provide timely drug information and medication-specific information for patients in the Emergency Department.</td>
<td>R2.11.2</td>
</tr>
<tr>
<td>Pass off critical information regarding patient status, therapeutic goals, and therapeutic monitoring to pharmacists receiving patients to their respective service.</td>
<td>R2.5.1, R2.5.2, R2.11.2</td>
</tr>
<tr>
<td>Participate in admixing and preparing emergency medications according to hospital policy and procedure. (drug examples may include: alteplase, bivalirudin, fosphenytoin).</td>
<td>R2.9.1</td>
</tr>
<tr>
<td>Initiate evidenced-based therapeutic regimens and monitoring plans according to hospital policy and procedures. (patient examples may include: community-acquired pneumonia, STEMI, or acute ischemic stroke patients requiring alteplase).</td>
<td>R2.9.1</td>
</tr>
<tr>
<td>Spend adequate time in the emergency department each day to fulfill rotation responsibilities, as well as devoting time to complete other residency requirements.</td>
<td>R2.2.1</td>
</tr>
<tr>
<td>Assist in medical emergencies by providing drug information, admixing medications, assisting with dose selection, and facilitating drug delivery with emphasis in the following areas:</td>
<td>E5.1.1</td>
</tr>
<tr>
<td>1. Trauma</td>
<td></td>
</tr>
<tr>
<td>2. Respiratory intubation</td>
<td></td>
</tr>
<tr>
<td>3. Cardiac arrest</td>
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<tr>
<td>4. Acute coronary syndrome</td>
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<tr>
<td>5. Acute ischemic stroke</td>
<td></td>
</tr>
<tr>
<td>Demonstrate understanding of the concept of differential diagnosis and improve abilities to diagnosis patients in an efficient manner with common general complaints (examples may include: chest pain, abdominal pain, dizziness).</td>
<td>R2.4.1, R2.4.3</td>
</tr>
</tbody>
</table>

*Other activities may be required at the discretion of the preceptor and/or program director.*
## Rotation Learning Activities

<table>
<thead>
<tr>
<th><strong>Emergency Medicine (PGY2)</strong></th>
<th><strong>Rotation Type:</strong> Patient Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stacy Revelle, Pharm.D., BCPS</td>
<td>Phone: 268-5956 Pager: 491-5422</td>
</tr>
</tbody>
</table>

### Description:

Emergency Medicine is a required learning experience for all PGY2 pharmacy residents that involves the provision of pharmaceutical care for acutely ill patients in the Emergency Department. The purpose of this learning experience is to provide the resident an opportunity to expand his/her knowledge of critical care in emergency medicine.

The core of the experience will revolve around intensive interaction with nurses and physicians of the Division of Emergency Medicine to identify and resolve medication therapy issues for patients; participate in routine patient discussions with the preceptor and topic discussions. Any required case presentations or journal clubs scheduled during the learning experience must be completed. Additional activities that may be required at the discretion of the preceptor include: giving a presentation at Emergency Medicine Grand Rounds, providing in-depth answers to physician generated drug information questions which may require intensive literature searches or providing in-services to the physicians and nursing staff.

The preceptor will serve as a role model, coach and facilitator for the resident. The length of time the preceptor spends in each of the phases of learning will depend on both the resident’s progression in the learning experience and where the learning experience occurs in the residency program.

### Rotation Content:

Common disease states in which the resident will be expected to gain proficiency through literature review, topic discussions and/or direct patient care experiences include, but are not limited to:

- **Cardiovascular disorders**
  - Acute coronary syndromes, advanced cardiac life support, hypertensive crisis
- **Infectious diseases**
  - Community acquired pneumonia, sepsis
- **Neurologic disorders**
  - Seizure disorders/status epilepticus, acute treatment of stroke
- **Respiratory disorders**
  - Acute asthma exacerbations/status asthmaticus, rapid sequence intubation
- **Critical care syndromes**
  - Toxicology, sedation/analgesia, heat related injuries, bioterrorism/emergency preparedness

### Goals and Objectives:

The following goals and objectives will be taught and evaluated:

**Goal R1.1** Exhibit essential personal skills of a practice leader.

OBJ R1.1.3 Demonstrate the ability to make considered but rapid decisions in intense situations where time is at a minimum.

**Goal R2.2** Prioritize the delivery of care to critically ill patients.

OBJ R2.2.1 Devise a plan for deciding which critical care patients to focus on if given limited time and multiple patient care responsibilities.

**Goal R2.4** Collect and analyze pertinent patient information.

OBJ R2.4.1 Collect and organize all patient-specific information needed to identify, prevent, and resolve medication and specialized nutrition support-related problems in order to provide appropriate evidence-based recommendations in critically ill patients with complex conditions.

OBJ R2.4.4 Prioritize a critically ill patient’s health care needs.

**Goal R2.5** Design evidence-based therapeutic regimens for critically ill patients.

OBJ R2.5.1 Specify therapeutic goals for a critically ill patient incorporating the principles of evidence-based medicine that integrate patient-specific data, disease and medication-specific information, ethics, and, when possible, quality-of-life considerations.

OBJ R2.5.2 Design a regimen that meets the evidence-based therapeutic goals established for a critically ill patient; integrates patient-specific information, disease and drug information, ethical issues and, when possible, quality-of-life issues; and considers pharmacoeconomic principles.

**Goal R5.1** Participate in the management of medical emergencies.

OBJ R5.1.1 Exercise skill as a team member in the management of medical emergencies as exhibited by certification in the American Heart Association Advanced Cardiac Life Support and, if applicable, Pediatric Advanced Life Support.

**Goal E1.3** Evaluate critically ill patients’ medication orders and/or profiles.

OBJ E1.3.1 Interpret the appropriateness of a critically ill patient’s medication order following existing standards of practice and the organization's policies and procedures.
Goal E4.1 Participate in the planning and implementation of plans for the management of mass casualty events.

**OBJ E4.1.1** Explain the critical care pharmacist’s role in the development of plans for the management of mass casualty events at the organizational, local, state, and national levels.

**OBJ E4.1.2** Participate in the development or revision of the critical care elements of organizational plans for the management of mass casualty events.

**OBJ E4.1.3** Exercise skill in the delivery of staff training as specified in the organization’s emergency preparedness plans.

**OBJ E4.1.4** If needed, provide services and programs as specified in the organization’s emergency preparedness plan.

Learning Activities:

<table>
<thead>
<tr>
<th>Activity</th>
<th>E4.1.1</th>
<th>E4.1.2</th>
<th>E4.1.3</th>
<th>E4.1.4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Review hospital policies and procedures related to disasters/bioterrorism (including surge capacity, incident command center, and resources available such as Medspod® and the Strategic National Stockpile)</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Discuss treatment/antidotes as well as decontamination procedures related to bioterroristic agents. (including anthrax, plague, smallpox, cyanide, and nerve agents)</td>
<td>E4.1.1</td>
<td>E4.1.2</td>
<td>E4.1.3</td>
<td>E4.1.4</td>
</tr>
<tr>
<td>Accurately gather, organize and analyze patient specific information on patients while in the emergency department.</td>
<td>E1.3.1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meet with preceptor (on assigned days) and present patients with emphasis on:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Concise and organized retrieval of patient information</td>
<td>R2.4.1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Generation of an appropriate differential diagnoses list</td>
<td>R2.4.4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Identification of medication therapy problems</td>
<td>R2.5.1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Design of a therapeutic plan</td>
<td>R2.5.2</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>15. Design of a monitoring plan</td>
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</tr>
<tr>
<td>Effectively recommend therapeutic regimens and monitoring plans to the emergency department staff (RNs and physicians) in critical care situations where time is at a minimum.</td>
<td>E1.3.1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attend Emergency Medicine conferences when applicable.</td>
<td>R2.2.1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clearly understand and actively participate in a discussion of at least five of the disease states listed in the rotation content section of the learning experience description.</td>
<td>R2.2.1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Form professional relationships with attending level physicians in order to provide timely drug information and medication-specific information for critically ill patients in the Emergency Department.</td>
<td>R2.4.1</td>
<td>R2.4.4</td>
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<tr>
<td>Pass off critical information regarding patient status, therapeutic goals, and therapeutic monitoring, to pharmacists receiving patients to their respective service.</td>
<td>R2.4.4</td>
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<tr>
<td>After interpreting the appropriateness of a medication order, participate in admixing and preparing emergency medications according to hospital policy and procedure. (drug examples may include: alteplase, bivalirudin, fosphenytoin).</td>
<td>E1.3.1</td>
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<tr>
<td>Initiate evidenced-based therapeutic regimens and monitoring plans according to hospital policy and procedures. (patient examples may include: community-acquired pneumonia, STEMI, or acute ischemic stroke patients requiring alteplase.)</td>
<td>E1.3.1</td>
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<tr>
<td>Assist in medical emergencies by providing drug information, admixing medications, assisting with dose selection, and facilitating drug delivery with emphasis in the following areas:</td>
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<tr>
<td>6. Trauma</td>
<td>R5.1.1</td>
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<tr>
<td>7. Respiratory intubation</td>
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<td>R1.1.3</td>
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<td>8. Cardiac arrest</td>
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<td>R2.2.1</td>
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<td>9. Acute coronary syndrome</td>
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<td>R2.4.4</td>
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<tr>
<td>10. Acute ischemic stroke</td>
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</tbody>
</table>

*Other activities may be required at the discretion of the preceptor and/or program director.
Learning Experience Description

<table>
<thead>
<tr>
<th>Infectious Diseases (PGY1)</th>
<th>Rotation Type: Patient Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emily Welch, Pharm.D., BCPS</td>
<td>Phone: 577-8597 Pager: 491-5951</td>
</tr>
</tbody>
</table>

**Description:**
The Infectious Diseases rotation involves the provision of pharmaceutical care for patients on the Infectious Diseases consult service. The purpose of this learning experience is to provide the resident an opportunity to expand his/her knowledge of infectious diseases. The core of the experience will revolve around intensive interaction with the Infectious Diseases team.

**Rotation Content:**
Core content that will be covered via patient care experiences, discussions, reading, and/or presentations include the following:

- Aminoglycoside pharmacokinetics/dosing
- Antimicrobial resistance
- Cellulitis
- CNS infection
- Community acquired pneumonia
- Dosing of antibiotics in setting of obesity, renal insufficiency, hepatic insufficiency, etc.
- Endocarditis/endovascular infection
- Fungal infections
- Intra-abdominal infections
- Meningitis
- Nosocomial pneumonia
- Urinary tract infections
- Vancomycin pharmacokinetics/dosing

Additional content to be covered at the discretion of the resident and the preceptor include the following:

- HIV/AIDS
- Interpretation of an antibiogram
- Microbiology laboratory functions
- Methicillin resistant *Staphylococcus aureus*
- Multi-drug resistant Gram-negative organisms
- Neutropenic fever
- Opportunistic infections in immunocompromised hosts
- Vancomycin resistant Enterococci

**Goals and Objectives:**
The following goals and objectives will be taught and evaluated:

**Goal R1.4** Demonstrate ownership of and responsibility for the welfare of the patient by performing all necessary aspects of the medication-use system.

- **OBJ R1.4.1** Display initiative in preventing, identifying, and resolving pharmacy-related patient-care problems.

**Goal R1.5** Provide concise, applicable, comprehensive, and timely responses to requests for drug information from patients and health care providers.

- **OBJ R1.5.2** Formulate a systematic, efficient, and thorough procedure for retrieving drug information.
- **OBJ R1.5.4** Evaluate the usefulness of biomedical literature gathered.
- **OBJ R1.5.7** Assess the effectiveness of drug information recommendations.

**Goal R2.6** Design evidence-based therapeutic regimens.

- **OBJ R2.6.1** Specify therapeutic goals for a patient incorporating the principles of evidence-based medicine that integrate patient-specific data, disease and medication-specific information, ethics, and quality-of-life considerations.

**Goal R2.7** Design evidence-based monitoring plans.

- **OBJ R2.7.1** Design a patient-centered, evidenced-based monitoring plan for a therapeutic regimen that effectively evaluates achievement of the patient-specific goals.

**Goal R2.10** Evaluate patients’ progress and redesign regimens and monitoring plans.

- **OBJ R2.10.1** Accurately assess the patient's progress toward the therapeutic goal(s).
- **OBJ R2.10.2** Redesign a patient-centered, evidence-based therapeutic plan as necessary based on evaluation of monitoring data and therapeutic outcomes.
Learning Activities:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thoroughly and accurately present patients to the preceptor with emphasis on the following:</td>
<td></td>
</tr>
<tr>
<td>1. Collection of pertinent and timely patient data</td>
<td>R1.4.1</td>
</tr>
<tr>
<td>2. Development of an assessment, therapeutic plan and monitoring plan</td>
<td>R2.7.1</td>
</tr>
<tr>
<td>3. Identification of pertinent monitoring parameters and markers of clinical success/failure</td>
<td>R2.10.1</td>
</tr>
<tr>
<td>4. Redesign of the therapeutic plan based on patient outcomes</td>
<td>R2.10.2</td>
</tr>
<tr>
<td>Answer specific drug-information questions posed by the multidisciplinary team.</td>
<td>R1.5.2</td>
</tr>
<tr>
<td>Make appropriate therapeutic recommendations to the multidisciplinary team.</td>
<td>R2.6.1</td>
</tr>
</tbody>
</table>

*Other activities may be required at the discretion of the preceptor and/or program director.
## Learning Experience Description

### Infectious Diseases (PGY2)  
**Rotation Type:** Patient Care  
**Emily Welch, Pharm.D., BCPS**  
**Phone:** 577-8597  
**Pager:** 491-5951  

### Description:
The Infectious Diseases rotation involves the provision of pharmaceutical care for patients on the Infectious Diseases consult service. The purpose of this learning experience is to provide the resident an opportunity to expand his/her knowledge of infectious diseases. The core of the experience will revolve around intensive interaction with the Infectious Diseases team.

### Rotation Content:
Core content that will be covered via patient care experiences, discussions, reading, and/or presentations include the following:

- Aminoglycoside pharmacokinetics/dosing
- Antimicrobial resistance
- Cellulitis
- CNS infection
- Community acquired pneumonia
- Dosing of antibiotics in setting of obesity, renal insufficiency, hepatic insufficiency, etc.
- Endocarditis/endovascular infection
- Fungal infections
- Intra-abdominal infections
- Meningitis
- Nosocomial pneumonia
- Urinary tract infections
- Vancomycin pharmacokinetics/dosing

Additional content to be covered at the discretion of the resident and the preceptor include the following:

- HIV/AIDS
- Interpretation of an antibiogram
- Microbiology laboratory functions
- Methicillin resistant staphylococcus aureus
- Multi-drug resistant gram negative organisms
- Neutropenic fever
- Pharmacokinetic dosing of beta-lactam antimicrobials
- Opportunistic infections in immunocompromised hosts
- Vancomycin resistant enterococci

### Goals and Objectives:
The following goals and objectives will be taught and evaluated:

**Goal R1.3 Exercise practice leadership.**

- **OBJ R1.3.1** Demonstrate a commitment to advocacy for the optimal care of patients through the assertive and persuasive presentation of patient care issues to members of the health care team, the patient, and/or the patient’s representative(s).

**Goal R2.2 Prioritize the delivery of care to critically ill patients.**

- **OBJ R2.2.1** Devise a plan for deciding which critical care patients to focus on if given limited time and multiple patient care responsibilities.

**Goal R2.4 Collect and analyze pertinent patient information.**

- **OBJ R2.4.1** Collect and organize all patient-specific information needed to identify, prevent, and resolve medication and specialized nutrition support-related problems in order to provide appropriate evidence-based recommendations in critically ill patients with complex conditions.
- **OBJ R2.4.2** Assess the information base created for a critically ill patient for adequacy to identify problems and design a therapeutic regimen.

**Goal R2.6 Design evidence-based monitoring plans for critically ill patients.**

- **OBJ R2.6.1** Design an evidenced-based monitoring plan for a critically ill patient’s therapeutic regimen that effectively evaluates achievement of the patient-specific goals.

**Goal R2.9 Evaluate critically ill patients’ progress and redesign regimens and monitoring plans.**

- **OBJ R2.9.1** Accurately assess the critically ill patient’s progress toward the therapeutic goal(s) and the absence of adverse drug events.
- **OBJ R2.9.2** Redesign an evidence-based therapeutic plan for a critically ill patient as necessary based on evaluation of monitoring data and therapeutic outcomes.
- **OBJ R2.9.3** Collect outcomes data based on the patient’s response to therapy.
Goal E2.1 Provide concise, applicable, comprehensive, and timely responses to formalized requests for drug information pertaining to the critically ill from patients, health care providers, and the public.

**OBJ E2.1.2** Formulate a systematic, efficient, and thorough procedure for retrieving drug information.

**Learning Activities:**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Make appropriate therapeutic recommendations to the multidisciplinary team.</td>
<td>R1.3.1</td>
</tr>
<tr>
<td></td>
<td>R2.4.1</td>
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<tr>
<td></td>
<td>R2.4.2</td>
</tr>
<tr>
<td>Successfully balance the needs of the patient care team with other residency responsibilities.</td>
<td>R2.2.1</td>
</tr>
<tr>
<td>Thoroughly and accurately present patients to the preceptor with emphasis on the following:</td>
<td></td>
</tr>
<tr>
<td>5. Collection of pertinent and timely patient data</td>
<td>R2.6.1</td>
</tr>
<tr>
<td>6. Development of an assessment, therapeutic plan and monitoring plan</td>
<td>R2.9.1</td>
</tr>
<tr>
<td>7. Identification of pertinent monitoring parameters and markers of clinical success/failure</td>
<td>R2.9.2</td>
</tr>
<tr>
<td>8. Redesign of the therapeutic plan based on patient outcomes</td>
<td>R2.9.3</td>
</tr>
<tr>
<td>Independently prepare for infectious-diseases-based topic discussions.</td>
<td>E2.1.2</td>
</tr>
<tr>
<td>Answer specific drug-information questions posed by the multidisciplinary team.</td>
<td>E2.1.2</td>
</tr>
</tbody>
</table>

*Other activities may be required at the discretion of the preceptor and/or program director.*
Learning Experience Description

<table>
<thead>
<tr>
<th>Oncology / Hematology (PGY1)</th>
<th>Rotation Type: Patient Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Susan K. Woelich, PharmD, BCOP</td>
<td>Phone: 268-5953 Pager: 491-4507</td>
</tr>
</tbody>
</table>

**Description:**

**Purpose:** The resident will be exposed to medication-related issues as it relates to both solid and hematologic cancers. The resident is expected to function as an interdisciplinary team member to provide individualized drug therapy for these oncology patients in an inpatient setting. The patient population will include patients with solid malignancies, hematologic malignancies, or hemophilia. The purpose of this learning experience is to provide the resident an opportunity to expand their knowledge in the area of hematology and oncology, to increase the ability of the resident to provide pharmaceutical care to this patient population, and knowledge in utilizing resources.

**Environment:** Saint Louis University Hospital oncology department includes medical hematologists and oncologists, medical fellows, interns and students, nurse practitioners, infusion nurses, social work, nutritionists, pharmacists and pharmacy technicians treating patients with various malignancies.

**Projects/In-services:** An oncology-related project or in-service will be assigned to the resident as defined by the needs of the rotation practice site. Any required case presentations or journal clubs scheduled during the learning experience must be completed as well.

**Rotation Content:**

Core content that will be covered via patient care experiences, discussions, reading, and/or presentations include the following:

- Principles of Oncology
- Resources in Oncology
- Chemotherapy Induced Nausea and Vomiting
- Infection Prophylaxis
- Neutropenic Fever
- Pain Management
- Growth Factor Support
- Tumor Lysis Syndrome
- Hypercalcemia of malignancy
- VTE prophylaxis in malignancy

Additional content to be covered at the discretion of the resident and the preceptor include the following:

- Acute leukemia (Acute Lymphoblastic Leukemia, Acute Myelogenous Leukemia, Acute Promyelocytic Leukemia)
- Lymphomas (Hodgkin's Disease, Non-Hodgkin's Lymphoma)
- Lung Cancer (Non-small cell lung cancer, Small cell lung cancer)
- Other Solid Malignancies
- Extravasation Management
- Cytotoxic chemotherapy medications versus targeted therapy
- Cytoprotective medications
- Hemophilia

**Goals and Objectives Selected:**

Goals and objectives selected to be taught and evaluated during the Oncology/Hematology learning experience include:

**Goal R1.5:** Provide concise, applicable, comprehensive, and timely response to requests for drug information from patients and health care providers.

- **OBJ R1.5.1:** Discriminate between the requesters’ statement of need and the actual drug information need by asking for appropriate additional information.
- **OBJ R1.5.2:** Formulate a systematic, efficient, and thorough procedure for retrieving drug information.
- **OBJ R1.5.4:** Evaluate the usefulness of biomedical literature gathered.
- **OBJ R1.5.6:** Provide appropriate responses to drug information questions that require the pharmacist to draw upon his or her knowledge base.

**Goal R2.1:** As appropriate, establish collaborative professional relationships with members of the health care team.

- **OBJ R2.1.1:** Implement a strategy that effectively establishes cooperative, collaborative, and communicative working relationships with members of interdisciplinary health care teams.

**Goal R2.4:** Collect and analyze patient information.

- **OBJ R2.4.2:** Determine the presence of any of the following medication therapy problems in a patient's current medication therapy:
  1. Define a purpose for each medication
  2. Provide rationale for treatment protocols
  3. Medication prescribed inappropriately for a particular medical condition
  4. Current medication therapy regimen contains something inappropriate (dose, dosage form, duration, schedule, route of administration, method of administration)
  5. There is therapeutic duplication
  6. Medication to which the patient is allergic has been prescribed
  7. There are adverse drug or device-related events or potential for such events
  8. There are clinically significant drug-drug, drug-disease, drug-nutrient, or drug-laboratory test interactions or potential for such interactions
9. Medical therapy has been interfered with by social, recreational, nonprescription, or nontraditional drug use by the patient or others.
10. Patient not receiving full benefit of prescribed medication therapy
11. There are problems arising from the financial impact of medication therapy on the patient

OBJ R2.4.3: Using an organized collection of patient-specific information, summarize patients' health care needs.

Goal R2.6: Design evidence-based therapeutic regimens.
OBJ R2.6.2: Design a patient-centered regimen that meets the evidence-based therapeutic goals established for a patient; integrates patient-specific information, disease and drug information, ethical issues and quality-of-life issues; and considers pharmacoeconomic principles.

Goal R2.10: Evaluate patients' progress and redesign regimens and monitoring plans.
OBJ R2.10.2: Redesign a patient-centered, evidence-based therapeutic plan as necessary based on evaluation of monitoring data and therapeutic outcomes.

<table>
<thead>
<tr>
<th>Learning Activities</th>
<th>Activity</th>
<th>Goal/Objectives Covered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Navigate the primary literature and guidelines database (NCCN, IDSA, MASCC, ASCO, etc) to retrieve requested information.</td>
<td>R1.5.1</td>
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<td>R1.5.2</td>
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<td>R1.5.4</td>
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<td>Provide mini in-services on rounds, when requested by the team or preceptor.</td>
<td>R1.5.6</td>
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<td>R2.1.1</td>
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<tr>
<td>Clearly understand and actively participate in discussions</td>
<td>R2.1.1</td>
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<tr>
<td>Act in a professional, courteous and respectful manner in all situations.</td>
<td>R2.1.1</td>
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<tr>
<td>Accurately gather, organize and analyze patient specific information on patients prior to rounds with medical team and/or pre-rounds with preceptor.</td>
<td>R2.4.2</td>
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<td>R2.4.3</td>
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<tr>
<td>Provide appropriate patient, drug and disease information through drug consult requests by selecting appropriate literature sources. Also, provide timely support for the outpatient oncology clinic service in all medication-related inquiries.</td>
<td>R1.5.1</td>
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<td>R1.5.2</td>
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<td>R1.5.4</td>
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<td>R1.5.6</td>
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<tr>
<td>Meet with preceptor on assigned days and present selected patient(s) with emphasis on:</td>
<td>R2.4.2</td>
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<td></td>
<td>16. Concise and organized retrieval of patient information</td>
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<td>17. Generation of an appropriately prioritized problem list</td>
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<td>18. Identification of medication therapy problems</td>
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<td>19. Design of a therapeutic plan</td>
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<td>20. Design of a monitoring plan</td>
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<td>R2.6.2</td>
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<tr>
<td>Be a consistent presence and active participant on team rounds and effectively recommend therapeutic regimens and monitoring plans to the team during rounds.</td>
<td>R2.1.1</td>
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<td>R2.6.2</td>
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<tr>
<td>Redesign the following types of therapeutic regimens and monitoring plans:</td>
<td>R2.4.2</td>
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<td>4. Anti-infective regimens</td>
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<td>5. Anti-emetic regimens</td>
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<td>6. Chemotherapy regimens</td>
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<td>R2.10.2</td>
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</tbody>
</table>

*Other activities may be required at the discretion of the preceptor and/or program director.*
Learning Experience Description

<table>
<thead>
<tr>
<th>Pharmacy Practice Management (PGY1)</th>
<th>Learning Experience Type: Administrative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tim Heuring, Pharm.D., BCPS</td>
<td>Phone: 268-7153 Pager: 419-0317</td>
</tr>
</tbody>
</table>

Description:
Pharmacy Practice Management (PPM) is an administrative experience at Saint Louis University Hospital designed to expose the resident to the diversity of roles and responsibilities that the department of pharmacy assumes to ensure safe and efficient utilization of medication therapy within the hospital. Individual assignments will allow the resident to exercise leadership and practice management skills, identify opportunities to improve the medication-use process and manage the use of investigational drug products.

Goals and Objectives Selected:

Goals and objectives selected to be taught and evaluated during the PPM learning experience include:

**Goal R1.1 Identify opportunities for improvement of the organization’s medication-use system.**
- **OBJ R1.1.1** Explain the organization’s medication-use system and its vulnerabilities to adverse drug events (ADEs).
- **OBJ R1.1.2** Analyze the structure and process and measure outcomes of the medication-use system.
- **OBJ R1.1.3** Identify opportunities for improvement in the organization’s medication-use system by comparing the medication-use system to relevant best practices.

**Goal R1.2 Design and implement quality improvement changes to the organization’s medication-use system.**
- **OBJ R1.2.1** Explain the process for developing, implementing, and maintaining a formulary system.
- **OBJ R1.2.2** Make a medication-use policy recommendation based on a comparative review (e.g., drug class review, drug monograph).
- **OBJ R1.2.3** Design and implement pilot interventions to change problematic or potentially problematic aspects of the medication-use system with the objective of improving quality.

**Goal R3.2 Contribute to departmental leadership and management activities.**
- **OBJ R3.2.1** Participate in the pharmacy department's planning processes.
- **OBJ R3.2.2** Explain the effect of accreditation, legal, regulatory, and safety requirements on practice.
- **OBJ R3.2.3** Explain the principles of financial management of a pharmacy department.

**Goal R3.3 Exercise practice leadership.**
- **OBJ R3.3.1** Use knowledge of an organization's political and decision-making structure to influence accomplishing a practice area goal.
- **OBJ R3.3.2** Explain various leadership philosophies that effectively support direct patient care and pharmacy practice excellence.
- **OBJ R3.3.3** Use group participation skills when leading or working as a member of a committee or informal work group.
- **OBJ R3.3.4** Use knowledge of the principles of change management to achieve organizational, departmental, and/or team goals.

**Goal R6.1 Use information technology to make decisions and reduce error.**
- **OBJ R6.1.2** Exercise skill in basic use of databases and data analysis software.

**Goal E2.2 Understand the pharmacy procurement process.**
- **OBJ E2.2.1** Explain the processes and contractual relationships that form the structure of the department’s medication procurement system.

Learning Activities:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Goal/Objectives Covered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluate the a pharmacy-centric operational or clinical workflow to evaluate and identify opportunities for improvement.</td>
<td>R1.1.1, R1.1.2, R1.1.3</td>
</tr>
<tr>
<td>Participate in all components of an MUE process.</td>
<td>R1.1.1, R1.1.2, R1.1.3</td>
</tr>
<tr>
<td>Evaluate an adverse drug event (medication error, adverse drug reaction, etc.) following the organization's policies and procedures.</td>
<td>R1.1.1, R1.1.2</td>
</tr>
<tr>
<td>Investigate a medication error using root cause analysis.</td>
<td>R1.1.2, R1.1.3</td>
</tr>
<tr>
<td>Participate in the pharmacy department's ongoing process for tracking and trending adverse drug events.</td>
<td>R1.1.3</td>
</tr>
<tr>
<td>Prepare at least one evidence-based drug formulary monograph and present it at PTNT Committee.</td>
<td>R1.2.1, R1.2.2</td>
</tr>
<tr>
<td>Participate in a quality improvement (QI) project.</td>
<td>R1.2.4</td>
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<tr>
<td>Task</td>
<td>Reference</td>
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<td>----------------------------------------------------------------------</td>
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</tr>
<tr>
<td>Read The Joint Commission Medication Management Standard prior to the leadership retreat.</td>
<td>R3.2.2</td>
</tr>
<tr>
<td>Actively participate in a pharmacy leadership retreat. Topics to be discussed include: strategic plan, regulations and safety requirements and financial management of a pharmacy.</td>
<td>R3.2.1, R3.2.2, R3.2.3</td>
</tr>
<tr>
<td>Read and discuss the Pharmacy Practice Model Initiative (PPMI).</td>
<td>R3.3.2</td>
</tr>
<tr>
<td>Actively participate in the PTNT and Medication Safety Committees and attend assigned meetings. The resident is also responsible for taking minutes.</td>
<td>R3.3.3</td>
</tr>
<tr>
<td>Use the principles of change management when participating in the transition to an electronic medical record.</td>
<td>R3.3.4</td>
</tr>
<tr>
<td>Manage large volumes of data using Microsoft Excel.</td>
<td>R6.1.2</td>
</tr>
<tr>
<td>Demonstrate proficiency in the use of pivot tables to summarize and analyze data.</td>
<td>R6.1.2</td>
</tr>
<tr>
<td>Participate in the department of pharmacy’s bi-annual inventory process.</td>
<td>E2.2.1</td>
</tr>
</tbody>
</table>

*Other activities may be required at the discretion of the preceptor and/or program director.*
Learning Experience Description

<table>
<thead>
<tr>
<th>Research Project (PGY1)</th>
<th>Learning Experience Type: Longitudinal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mike Daly, Pharm.D., MSCI, BCPS</td>
<td>Phone: 268-7158 Pager: 419-3340</td>
</tr>
<tr>
<td>Anna Schmidt, Pharm.D., BCPS</td>
<td>Phone: 268-7156 Pager: 490-1243</td>
</tr>
</tbody>
</table>

Description:

The Research Project is a year long, longitudinal learning experience at Saint Louis University Hospital. The resident is responsible for identifying a project for the residency year that is timely and practical to the pharmacy department and hospital. The project must be approved by the program director and Director of Pharmacy. Once approved, the resident will be assigned a project mentor. The mentor will serve as the primary resource for the resident as well as evaluate the resident’s performance quarterly. The resident will also work closely with the Investigational Drug Clinical Specialist for all activities relating to the Investigational Review Board (IRB).

The project must be presented as a resident poster at the ASHP Midyear Clinical Meeting in December and at the St. Louis Area Resident’s Research Conference in the spring. In addition, a manuscript must be prepared for potential submission to a professional journal.

Time management is crucial to the success of this learning experience. The resident must devise efficient strategies for accomplishing the required activities within a limited time frame. The research project deadlines are defined in the Residency Manual.

Goals and Objectives Selected:

Goals and objectives selected to be taught and evaluated during the Research Project learning experience include:

Goal R4.1 Conduct a practice-related project using effective project management skills.

OBJ R4.1.1 Identify a topic for a practice-related project of significance for pharmacy practice.

OBJ R4.1.2 Formulate a feasible design for a practice-related project.

OBJ R4.1.3 Secure any necessary approvals, including IRB and funding, for one’s design of a practice-related project.

OBJ R4.1.4 Implement a practice-related project as specified in its design.

OBJ R4.1.5 Effectively present the results of a practice-related project.

OBJ R4.1.6 Successfully employ accepted manuscript style to prepare a final report of a practice-related project.

OBJ R4.1.7 Accurately assess the impact, including sustainability if applicable, of the residency project.

Goal R6.1 Use information technology to make decisions and reduce error.

OBJ R6.1.1 Explain security and patient protections such as access control, data security, data encryption, HIPAA privacy regulations, as well as ethical and legal issues related to the use of information technology in pharmacy practice.

OBJ R6.1.2 Exercise skill in basic use of databases and data analysis software.

Goal E7.4 Manage time effectively to fulfill practice responsibilities.

OBJ E7.4.1 Use time management skills effectively to fulfill practice responsibilities.

Learning Activities:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Goal/Objectives Covered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify a topic for practice-related project by specified deadline.</td>
<td>R4.1.1</td>
</tr>
<tr>
<td>Create a feasible study design/methodology and data collection form by specified deadline.</td>
<td>R4.1.2</td>
</tr>
<tr>
<td>Complete IRB submission by specified deadline.</td>
<td>R4.1.3</td>
</tr>
<tr>
<td>Collect and analyze data by specified deadline.</td>
<td>R4.1.4</td>
</tr>
<tr>
<td>Present resident poster at the ASHP Midyear Clinical Meeting.</td>
<td>R4.1.7</td>
</tr>
<tr>
<td>Present results of research project at a local residents’ research conference.</td>
<td>R4.1.5 R4.1.7</td>
</tr>
<tr>
<td>Submit a manuscript suitable for publication in a professional journal by specified deadline.</td>
<td>R4.1.6 R4.1.7</td>
</tr>
<tr>
<td>Complete CITI Program (protection of human research subjects).</td>
<td>R6.1.1</td>
</tr>
<tr>
<td>Effectively create and manage a database using Microsoft Excel (or other applicable data analysis software).</td>
<td>R6.1.2</td>
</tr>
<tr>
<td>Perform statistical analysis of research data to evaluate the significance of the primary outcome.</td>
<td>R6.1.2</td>
</tr>
<tr>
<td>Meet all research project deadlines as described above.</td>
<td>E7.4.1</td>
</tr>
</tbody>
</table>

*Other activities may be required at the discretion of the preceptor and/or program director.
Learning Experience Description

**Research Project (PGY2)**

<table>
<thead>
<tr>
<th>Learning Experience Type: Longitudinal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Julia Alexander, Pharm.D., BCPS</td>
</tr>
<tr>
<td>Phone: 268-7157</td>
</tr>
<tr>
<td>Anna Schmidt, Pharm.D., BCPS</td>
</tr>
<tr>
<td>Phone: 268-7156</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Pager: 419-8404</td>
</tr>
<tr>
<td>Pager: 490-1243</td>
</tr>
</tbody>
</table>

**Description:**

The Research Project is a year long, longitudinal learning experience at Saint Louis University Hospital. The resident is responsible for identifying a project for the residency year that is timely and practical to the pharmacy department and hospital. The project must be approved by the program director and Director of Pharmacy. Once approved, the resident will be assigned a project mentor. The mentor will serve as the primary resource for the resident as well as evaluate the resident’s performance quarterly. The resident will also work closely with the Investigational Drug Clinical Specialist for all activities relating to the Investigational Review Board (IRB).

The project must be presented as a resident poster at the ASHP Midyear Clinical Meeting in December and at the St. Louis Area Resident’s Research Conference in the spring. In addition, a manuscript must be prepared for potential submission to a professional journal.

Time management is crucial to the success of this learning experience. The resident must devise efficient strategies for accomplishing the required activities within a limited time frame. The research project deadlines are defined in the Residency Manual.

**Goals and Objectives Selected:**

Goals and objectives selected to be taught and evaluated during the Research Project learning experience include:

Goal R4.1 Conduct a practice-related project using effective project management skills.

- **OBJ R4.1.1** Identify a topic of significance for a critical care pharmacy research project.
- **OBJ R4.1.2** Formulate a feasible design for a critical care pharmacy research project.
- **OBJ R4.1.3** Secure any necessary approvals, including IRB and funding, for one’s design of a project.
- **OBJ R4.1.4** Implement a critical care pharmacy research project as specified in its design.
- **OBJ R4.1.5** Effectively present the results of a critical care pharmacy research project.
- **OBJ R4.1.6** Successfully employ accepted manuscript style to prepare a final report of a critical care pharmacy research project.
- **OBJ R4.1.7** Accurately assess the impact, including sustainability if applicable, of the residency project.

**Learning Activities:**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Goal/Objectives Covered</th>
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<tbody>
<tr>
<td>Identify a topic for practice-related project by specified deadline.</td>
<td>R4.1.1</td>
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<tr>
<td>Create a feasible study design/methodology and data collection form by specified deadline.</td>
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<tr>
<td>Collect and analyze data by specified deadline.</td>
<td>R4.1.4</td>
</tr>
<tr>
<td>Present resident poster at the ASHP Midyear Clinical Meeting.</td>
<td>R4.1.5</td>
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<td>Present results of research project at a local residents’ research conference.</td>
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<tr>
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<tr>
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<td>R4.1.4</td>
</tr>
<tr>
<td>Meet all research project deadlines as described above.</td>
<td></td>
</tr>
</tbody>
</table>

*Other activities may be required at the discretion of the preceptor and/or program director.*
# Learning Experience Description

<table>
<thead>
<tr>
<th>Resident Orientation</th>
<th>Rotation Type: Administrative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mike Daly, Pharm.D., MSCI, BCPS</td>
<td>Phone: 268-7158 Pager: 419-3340</td>
</tr>
</tbody>
</table>

## Description:
The Pharmacy Resident Orientation is a required rotation for new PGY1 and PGY2 residents. The rotation involves orientation to and development of proficiency in general departmental and operational procedures. The purpose of this learning experience is to provide the resident an opportunity to understand the policies and procedures as well as the operational activities of the Pharmacy Department. The initial portion of the rotation will involve hospital and Pharmacy Department orientation.

## Goals:
By the end of the rotation, the resident will have completed any or all of the following, as required by hospital and department policy:

- Meet Employee Health requirements
- Attend SSM Health employee orientation
- Attend pharmacy department orientation
- Attend ethics training
- Sign *Conditions of Employment* document
- Review pharmacy department access authorization
- Receive pharmacy keys, EPIC password, Pyxis password, PC password, and e-mail address
- Review Pharmacy Department policies and procedures
- Complete a tour of the department

## Rotation Content:
Core content that will be covered as outlined in the Orientation Checklist in the Residency Notebook:

- Computer/education requirements
- Central pharmacy and IV room pharmacist functions
- Pharmacy technician functions
- Decentralized pharmacist functions

Emphasis will be placed on attaining competence in the performance of daily pharmacy operations.

## Activities:
Activities required to complete the Resident Orientation rotation, include:

- Order verification
- Unit dose dispensing
- Preparation and dispensing of sterile compounds
- Preparation and dispensing of cytotoxic medications
- Pyxis utilization
- Obtain or update BLS and ACLS certification (if necessary)
- Complete essential training sessions as required by the residency Program Director

Additional activities deemed necessary training elements may be required at the discretion of the Program Director.
## Learning Experience Description

### Solid Organ Transplant (PGY1)

<table>
<thead>
<tr>
<th>Rotation Type: Patient Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nicole Nesselhauf, PharmD, BCPS</td>
</tr>
</tbody>
</table>

### Description:
The Organ Transplantation rotation involves the provision of pharmaceutical care for recipients of kidney, liver, and pancreas transplantation. The purpose of the rotation is to enhance the resident’s depth of knowledge in the medication therapy management of transplant recipients. An emphasis will be placed on immunosuppression and post-transplant complications such as infections, rejection, cardiovascular and metabolic comorbidities. The resident will work together with the abdominal transplant team, a rotating staff of abdominal transplant surgery attendings, surgical residents, medical students as well as the physician assistant for transplantation.

### Rotation Content:
- **Core content** that will be covered via patient care experiences, discussions, reading, and/or presentations include the following:
  - **Immunology**
    - Panel reactive antibody & desensitization
  - **Maintenance Immunosuppression**
    - Pharmacology and PK monitoring
    - Drug – Drug interactions
    - Adverse Effects
  - **Induction Immunosuppression**
    - Pharmacology
    - Adverse Effects
  - **Opportunistic Infections: prophylaxis and treatment**
    - Cytomegalovirus
    - Pneumocystis jiroveci (PCP)
    - BK Virus
  - **Transplant Discharge Education**

- **Additional content** to be covered at the discretion of the resident and the preceptor include the following:
  - Complications of Transplant
  - Long-term Management of Complications
    - Diabetes, Hypertension, Neurotoxicity, Anemia
  - Liver Disorders leading to transplant
  - Kidney Disorders leading to transplant
  - Listing Criteria
  - UNOS Allocation of Organs
  - HLA Matching / Cross Match
  - Other OI's
  - Chronic Rejection
  - Mixed Rejection
  - Hepatitis C and Hepatitis B
  - Alcoholic Hepatitis
  - Hepato-Renal Syndrome
  - Delayed Graft Function
  - HUS
  - FSGS
  - PTLD/Cancer

### Goals and Objectives:
The following goals and objectives will be taught and evaluated:

- **Goal R1.5** Provide concise, applicable, comprehensive, and timely responses to requests for drug information from patients and health care providers.
  - OBJ R1.5.5 Formulate responses to drug information requests based on analysis of the literature.

- **Goal 2.3** As appropriate, establish collaborative professional pharmacist-patient relationships.
  - OBJ R2.3.1 Formulate a strategy that effectively establishes a patient-centered pharmacist-patient relationship.

- **Goal 2.4** Collect and analyze patient information.
  - OBJ R2.4.1 Collect and organize all patient-specific information needed by the pharmacist to prevent, detect, and resolve medication-related problems and to make appropriate evidence-based, patient-centered medication therapy recommendations as part of the interdisciplinary team.

- **Goal 2.5** When necessary, make and follow up on patient referrals
  - OBJ R2.5.2 Devise a plan for follow-up for a referred patient

- **Goal 2.9** Implement regimens and monitoring plans.
Use effective patient education techniques to provide counseling to patients and caregivers, including information on medication therapy, adverse effects, compliance, appropriate use, handling, and medication administration.

Goal 2.11 Communicate ongoing patient information.
OBJ R2.11.1 When given a patient who is transitioning from one health care setting to another, communicate pertinent pharmacotherapeutic information to the receiving health care professionals.

Goal 2.12 Document direct patient care activities appropriately.
OBJ 2.12.1 Appropriately select direct patient-care activities for documentation.
OBJ 2.12.2 Use effective communication practices when documenting a direct patient-care activity.

<table>
<thead>
<tr>
<th>Learning Activities</th>
<th>Activity</th>
<th>Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collect and analyze pertinent patient information in preparation for rounds and patient presentations.</td>
<td>Design, monitor, and recommend therapeutic plans for: immunosuppression, antibiotic prophylaxis/treatment regimens, antihypertensive regimens, and antidiabetic regimens.</td>
<td>R2.4.1</td>
</tr>
<tr>
<td>Reconcile patient home medications and take special care to ensure the patient has been started on his/her current immunosuppressant regimen.</td>
<td></td>
<td>R2.3.1</td>
</tr>
<tr>
<td>Respond to drug information questions based on evidence based guidelines, literature, and knowledge base.</td>
<td></td>
<td>R1.5.5</td>
</tr>
<tr>
<td>Communicate therapeutic plans to interdisciplinary team members (nursing coordinators and social workers) to ensure that necessary outpatient follow-up is arranged.</td>
<td></td>
<td>R2.11.1</td>
</tr>
<tr>
<td>Provide medication education to transplant recipients including information on immunosuppressant administration, monitoring, and side effects.</td>
<td></td>
<td>R2.5.2</td>
</tr>
<tr>
<td>Document induction / maintenance Immunosuppression, notable medication changes, and transplant education activities in Epic.</td>
<td></td>
<td>R2.3.1</td>
</tr>
<tr>
<td>Attend kidney and liver patient selection meetings and pathology conferences.</td>
<td></td>
<td>R2.9.2</td>
</tr>
</tbody>
</table>

*Other activities may be required at the discretion of the preceptor and/or program director.
Learning Experience Description

<table>
<thead>
<tr>
<th>Teaching (PGY1)</th>
<th>Rotation Type: Longitudinal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mike Daly, Pharm.D., MSCI, BCPS</td>
<td>Phone: 268-7158 Pager: 419-3340</td>
</tr>
</tbody>
</table>

**Description:**
Teaching is a year-long, longitudinal learning experience at Saint Louis University Hospital designed to introduce the PGY1 resident to the clinical educator role. The resident will primarily serve as a role model for pharmacy students as well as develop and refine skills used in the facilitation of small group discussions. Opportunities to develop bedside clinical teaching strategies and deliver feedback will also be provided.

The resident will also develop and deliver an ACPE-accredited seminar presentation as well as participate in the Resident Education Academy (REA) at Saint Louis College of Pharmacy. The learning experience description for the REA is independent of the longitudinal Teaching learning experience description.

**Rotation Content:**

Core content that will be covered via patient care experiences, discussions, reading, and/or presentations include the following:

- Teaching philosophy
- Clinical and didactic teaching methodology

**Goals and Objectives:**

The following goals and objectives will be taught and evaluated:

Goal R5.1 Provide effective medication and practice-related education, training, or counseling to patients, caregivers, health care professionals, and the public.

- **OBJ R5.1.1** Use effective educational techniques in the design of all educational activities.
- **OBJ R5.1.2** Design an assessment strategy that appropriately measures the specified objectives for education or training and fits the learning situation.
- **OBJ R5.1.3** Use skill in the four preceptor roles employed in practice-based teaching (direct instruction, modeling, coaching, and facilitation).
- **OBJ R5.1.4** Use skill in case-based teaching.

Goal R7.4 Manage time effectively to fulfill practice responsibilities.

- **OBJ R7.4.1** Use time management skills effectively to fulfill practice responsibilities.

**Learning Activities:**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Goal/Objectives Covered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop strategies to teach pharmacy students at the bedside.</td>
<td>R5.1.1, R5.1.3, R5.1.4</td>
</tr>
<tr>
<td>Effectively lead patient case discussions to pharmacy students.</td>
<td>R5.1.1, R5.1.3, R5.1.4</td>
</tr>
<tr>
<td>Effectively lead a topic discussion to pharmacy students.</td>
<td>R5.1.1, R5.1.3, R5.1.4</td>
</tr>
<tr>
<td>Serve as a role model for pharmacy students.</td>
<td>R5.1.3</td>
</tr>
<tr>
<td>Provide prompt, formative feedback to pharmacy students.</td>
<td>R5.1.2</td>
</tr>
<tr>
<td>Present an ACPE-accredited seminar presentation.</td>
<td>R5.1.2, R5.1.5, R5.1.6, R7.1.4</td>
</tr>
<tr>
<td>Meet all deadlines for the activities described above.</td>
<td>R7.1.4</td>
</tr>
</tbody>
</table>

*Other activities may be required at the discretion of the preceptor and/or program director.*
## Learning Experience Description

### Rotation Type: Longitudinal

<table>
<thead>
<tr>
<th>Julia Alexander, Pharm.D., BCPS</th>
<th>Phone: 268-7157</th>
<th>Pager: 419-3340</th>
</tr>
</thead>
</table>

### Description:

The teaching experience for PGY2 residents involves not only participation in, but leadership of, advanced didactic and clinical teaching activities. PGY2 residents should begin to develop proficiency in teaching to a mixed group of individuals with different knowledge, experience and training backgrounds while expanding his/her understanding of different teaching philosophies and methodologies. PGY2 residents should also learn about the establishment and maintenance of a PGY2 critical care residency program through discussion and active participation in recruitment and selection of residents.

### Rotation Content:

Core content that will be covered via patient care experiences, discussions, reading, and/or presentations include the following:

- Teaching philosophy
- Clinical and didactic teaching methodology
- Roles and responsibilities of faculty members
- Establishment and maintenance of a PGY2 critical care residency program

### Goals and Objectives:

The following goals and objectives will be taught and evaluated:

**Goal R1.3 Exercise practice leadership.**
- **OBJ R1.3.2** Explain the nature of mentoring in pharmacy, its potential connection with achievement, and the importance of willingness to serve as mentor to appropriate individuals.
- **OBJ R1.3.4** Explain the general processes of establishing and maintaining a critical care pharmacy residency program.

**Goal R3.1 Provide effective education or training to health care professionals and health care professionals in training.**
- **OBJ R3.1.1** Explain the differences in effective educational strategies for health care professionals and for various levels of health care professionals in training.
- **OBJ R3.1.2** Design an assessment strategy that appropriately measures the specified objectives for education or training and fits the learning situation.
- **OBJ R3.1.3** Use skill in the four preceptor roles employed in practice-based teaching (direct instruction, modeling, coaching, and facilitation).
- **OBJ R3.1.4** Use skill in case-based teaching.

**Goal E5.1 Understand faculty roles and responsibilities.**
- **OBJ E5.1.1** Explain variations in the expectations of different colleges/schools of pharmacy for teaching, practice, research, and service.
- **OBJ E5.1.2** Explain the role and influence of faculty in the academic environment.
- **OBJ E5.1.3** Describe the academic environment.
- **OBJ E5.1.4** Describe the types and ranks of faculty appointments.
- **OBJ E5.1.5** Discuss the promotion and tenure process for each type of appointment.
- **OBJ E5.1.6** Identify resources available to help develop academic skills.
- **OBJ E5.1.7** Explain the characteristics of a typical affiliation agreement between a college of pharmacy and a practice site.

### Learning Activities:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead didactic and bedside clinical teaching of pharmacy students and PGY1 pharmacy residents.</td>
<td>R1.3.2, R3.1.1, R3.1.2, R3.1.3, R3.1.4</td>
</tr>
<tr>
<td>Present an ACPE-accredited seminar presentation.</td>
<td>R3.1.2</td>
</tr>
<tr>
<td>Discuss the roles and responsibilities of faculty members with the program director.</td>
<td>E5.1.1, E5.1.2, E5.1.3, E5.1.4, E5.1.5, E5.1.6, E5.1.7</td>
</tr>
<tr>
<td>Discuss the establishment and maintenance of a PGY2 critical care residency with the program director and participate in the recruitment and, selection of new residents.</td>
<td>R1.3.2, R1.3.4</td>
</tr>
</tbody>
</table>

*Other activities may be required at the discretion of the preceptor and/or program director.*
Learning Experience Description

<table>
<thead>
<tr>
<th>Trauma Surgery/Critical Care (PGY1)</th>
<th>Rotation Type: Patient Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Julia Alexander, Pharm.D., BCPS</td>
<td>Phone: 268-7157</td>
</tr>
<tr>
<td></td>
<td>Pager: 419-3340</td>
</tr>
</tbody>
</table>

**Description:**
The Trauma Surgery rotation involves the provision of pharmaceutical care for patients on the Trauma Surgery Critical Care service. The purpose of this learning experience is to provide the resident an opportunity to expand his/her knowledge of critical care in a surgical intensive care setting. The core of the experience will revolve around intensive interaction with the trauma surgeons and intensive care nurses. The rotation provides opportunities and flexibility for independent practice. The resident is encouraged to take initiative in the direction of the learning experience to optimize his/her personal development.

**Rotation Content:**
Core content that will be covered via patient care experiences, discussions, reading, and/or presentations include the following:
- Traumatic brain injury
- Crush injuries/Compartment syndrome
- Spinal cord injury
- Sedation/analgesia/chemical paralysis management
- DVT/PE prophylaxis and treatment
- Resuscitation/Fluid and electrolyte management
- Postoperative ileus

Additional content to be covered at the discretion of the resident and the preceptor include the following:
- TBI neuroendocrine dysfunction
- TBI disorders of sodium
- Intra-abdominal infections
- Hemodynamic monitoring
- Open fractures
- Nutritional support for surgery patients

**Goals and Objectives:**
The following goals and objectives will be taught and evaluated:

Goal R1.3 Prepare and dispense medications following existing standards of practice and the organization’s policies and procedures.

**OBJ R1.3.2** Follow the organization’s policies and procedures to maintain the accuracy of the patient’s medication profile.

Goal R1.4 Demonstrate ownership of and responsibility for the welfare of the patient by performing all necessary aspects of the medication-use system.

**OBJ R1.4.1** Display initiative in preventing, identifying, and resolving pharmacy-related patient-care problems.

Goal R1.5 Provide concise, applicable, comprehensive, and timely responses to requests for drug information from patients and health care providers.

**OBJ R1.5.1** Discriminate between the requesters’ statement of need and the actual drug information need by asking for appropriate additional information.

Goal R2.1 As appropriate, establish collaborative professional relationships with members of the health care team.

**OBJ R2.1.1** Implement a strategy that effectively establishes cooperative, collaborative, and communicative working relationships with members of interdisciplinary health care teams.

Goal R2.4 Collect and analyze patient information.

**OBJ R2.4.3** Using an organized collection of patient-specific information, summarize patients’ health care needs.

Goal R2.5 When necessary, make and follow up on patient referrals.

**OBJ R2.5.1** When presented with a patient with health care needs that cannot be met by the pharmacist, make a referral to the appropriate health care provider based on the patient acuity and the presenting problem.

Goal R2.8 Recommend or communicate regimens and monitoring plans.

**OBJ R2.8.1** Recommend or communicate a patient-centered, evidence-based therapeutic regimen and corresponding monitoring plan to other members of the interdisciplinary team and patients in a way that is systematic, logical, accurate, timely, and secures consensus from the team and patient.

Goal R2.9 Implement regimens and monitoring plans.

**OBJ R2.9.1** When appropriate, initiate the patient-centered, evidence-based therapeutic regimen and monitoring plan for a patient according to the organization’s policies and procedures.
Goal R2.11 Communicate ongoing patient information.

OBJ R2.11.2 Ensure that accurate and timely medication-specific information regarding a specific patient reaches those who need it at the appropriate time.

<table>
<thead>
<tr>
<th>Learning Activities:</th>
<th>Activity</th>
<th>Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Discuss different methods of communication strategies for effective involvement in patient care.</td>
<td>R2.11.1</td>
</tr>
<tr>
<td></td>
<td>Assess medication profile for accuracy.</td>
<td>R1.3.2</td>
</tr>
<tr>
<td></td>
<td>Accurately gather, organize, and analyze patient specific information utilizing computer medication profiles and laboratory modules for pertinent lab and diagnostic data.</td>
<td>R1.4.1</td>
</tr>
<tr>
<td></td>
<td>Meet with preceptor (on assigned days) and present patients with emphasis on:</td>
<td>R2.4.3</td>
</tr>
<tr>
<td></td>
<td>1. Concise and organized retrieval of all pertinent patient information</td>
<td></td>
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<td></td>
<td>2. Generation of appropriate disease/therapy assessment</td>
<td></td>
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<td></td>
<td>3. Identification of medication therapy problems</td>
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<tr>
<td></td>
<td>4. Design of therapeutic plan</td>
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<tr>
<td></td>
<td>5. Design of monitoring plan</td>
<td></td>
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<tr>
<td></td>
<td>When necessary, recommend referral to appropriate consult services to optimize unmet clinical and/or overall health care needs of patient.</td>
<td>R2.5.1</td>
</tr>
<tr>
<td></td>
<td>Effectively recommend appropriate drug therapy regimens and associated monitoring parameters to members of the multidisciplinary team.</td>
<td>R2.8.1, R2.9.1</td>
</tr>
<tr>
<td></td>
<td>When necessary, provide clinical information regarding patients transferring level of care to receiving healthcare professionals.</td>
<td>R2.11.2</td>
</tr>
<tr>
<td></td>
<td>Provide a written or verbal response to a drug information request from the multidisciplinary team.</td>
<td>R1.5.1</td>
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</table>

*Other activities may be required at the discretion of the preceptor and/or program director.
Learning Experience Description

<table>
<thead>
<tr>
<th>Trauma Surgery/Critical Care (PGY2)</th>
<th>Rotation Type: Patient Care</th>
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<tbody>
<tr>
<td>Julia Alexander, Pharm.D., BCPS</td>
<td>Phone: 268-7157 Pager: 419-3340</td>
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</table>

Description:
The Trauma Surgery rotation involves the provision of pharmaceutical care for patients on the Trauma Surgery service. The purpose of this learning experience is to provide the resident an opportunity to expand his/her knowledge of critical care in a surgical intensive care setting. The core of the experience will revolve around intensive interaction with the trauma surgeons and intensive care nurses. The rotation provides opportunities and flexibility for independent practice. The resident is encouraged to take initiative in the direction of the learning experience to optimize his/her personal development.

Rotation Content:
Core content that will be covered via patient care experiences, discussions, reading, and/or presentations include the following:

- Crush injuries
- Spinal cord injury management
- Sedation/analgesia/chemical paralysis management
- Nutritional support for surgery patients
- DVT/PE prophylaxis and treatment
- Resuscitation/fluid and electrolyte management
- Hemodynamic monitoring
- Traumatic brain injury
- Postoperative ileus

Additional content to be covered at the discretion of the resident and the preceptor include the following:

- Intra-abdominal infections
- Open fractures

Goals and Objectives:
The following goals and objectives will be taught and evaluated:

Goal R1.3 Exercise practice leadership.

OBJ R1.3.1 Demonstrate a commitment to advocacy for the optimal care of patients through the assertive and persuasive presentation of patient care issues to members of the health care team, the patient, and/or the patient’s representative(s).

OBJ R1.3.3 Demonstrate a caring attitude toward critically ill patients and their representative(s).

Goal R2.1 Establish collaborative professional relationships with other members of the interdisciplinary critical care team.

OBJ R2.1.1 Implement a strategy that establishes cooperative, collaborative, communicative, and effective working relationships with other members of the interdisciplinary critical care team.

Goal R2.2 Prioritize the delivery of care to critically ill patients.

OBJ R2.2.1 Devise a plan for deciding which critical care patients to focus on if given limited time and multiple patient care responsibilities.

Goal R2.3 Act in accordance with a covenantal relationship with the patient.

OBJ R2.3.1 Formulate a strategy to guide care for a critically ill patient and interaction with the patient’s family that reflects the acceptance of a covenant with the patient for that patient’s care.

Goal R2.4 Collect and analyze pertinent patient information.

OBJ R2.4.1 Collect and organize all patient-specific information needed to identify, prevent, and resolve medication and specialized nutrition support-related problems in order to provide appropriate evidence-based recommendations in critically ill patients with complex conditions.

OBJ R2.4.3 Determine the presence of problems in a critically ill patient's current medication or specialized nutrition support therapy.

Goal R2.5 Design evidence-based therapeutic regimens for critically ill patients.

OBJ R2.5.1 Specify therapeutic goals for a critically ill patient incorporating the principles of evidence-based medicine that integrate patient-specific data, disease and medication-specific information, ethics, and, when possible, quality-of-life considerations.

Goal R2.10 Communicate ongoing patient information.

OBJ R2.10.1 When given a patient who is transitioning out of the critical care setting, communicate pertinent pharmacotherapeutic information to the receiving health care professionals.

Goal E2.1 Provide concise, applicable, comprehensive, and timely responses to formalized requests for drug information pertaining to the critically ill from patients, health care providers, and the public.
OBJ E2.1.1 Discriminate between the requesters’ statement of need and the actual drug information need by asking for appropriate additional information. 
OBJ E2.1.7 Provide appropriate responses to drug information questions that require the pharmacist to draw upon his or her knowledge base.

Learning Activities:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Objectives</th>
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<tbody>
<tr>
<td>Introduce and explain the role of a PGY2 pharmacy resident to members of the multidisciplinary team.</td>
<td>R2.1.1</td>
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<tr>
<td>Discuss different methods of communication strategies for effective involvement in patient care.</td>
<td>R2.1.1</td>
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<tr>
<td>Assess medication profile for accuracy.</td>
<td>R2.4.3</td>
</tr>
<tr>
<td>Accurately gather, organize, and analyze patient specific information utilizing computer medication profiles and laboratory modules for pertinent lab and diagnostic data.</td>
<td>R2.4.1</td>
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<tr>
<td>Meet with preceptor (on assigned days) and present patients with emphasis on:</td>
<td>R2.2.1</td>
</tr>
<tr>
<td>1. Concise and organized retrieval of all pertinent patient information</td>
<td>R2.4.1</td>
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<tr>
<td>2. Generation of appropriate disease/therapy assessment</td>
<td>R2.4.3</td>
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<tr>
<td>3. Identification of medication therapy problems</td>
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<td>4. Design of therapeutic plan</td>
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<tr>
<td>5. Design of monitoring plan</td>
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<tr>
<td>Optimize patients’ drug therapy regimens. Demonstrate assessment of:</td>
<td>R2.5.1</td>
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<tr>
<td>1. Dosing</td>
<td></td>
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<td>2. Therapeutic goals and mechanism of action</td>
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<tr>
<td>3. Potential adverse effects and drug interactions</td>
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<td>4. Monitoring parameters</td>
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<tr>
<td>Effectively recommend appropriate drug therapy regimens and associated monitoring parameters to members of the multidisciplinary team.</td>
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<td>Discuss emotional difficulties/difficult decisions as relates to critically ill patients and their family members, including end of life and quality of life.</td>
<td>R1.3.3</td>
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<tr>
<td>When necessary, provide clinical information regarding patients transferring level of care to receiving healthcare professionals.</td>
<td>R2.3.1</td>
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<tr>
<td>Provide a written or verbal response to a drug information request from the multidisciplinary team.</td>
<td>E2.1.1</td>
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<td>E2.1.7</td>
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