



# **Pharmacy Residency Manual 2025 – 2026**

## **HSHS St. John's Hospital Springfield, IL**

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## **HSHS St. John's Hospital Mission, Vision and Core Values Statement**

HSHS St. John's Hospital provides a ministry of exceptional health care services to the people of central Illinois in the Catholic tradition of compassion, justice, and reverence for life.

Our mission statement is “To reveal and embody Christ’s healing love for all people through our high-quality Franciscan health care ministry.”

Our core values of Respect, Care, Competence and Joy will be lived by all who work here and felt by all who use our services.

## **PGY1 Purpose Statement**

PGY1 residency programs build upon Doctor of Pharmacy (PharmD) education and outcomes to develop pharmacist practitioners with knowledge, skills, and abilities as defined in the educational competency areas, goals, and objectives. Residents who successfully complete PGY1 residency programs will be skilled in diverse patient care, practice management, leadership, and education, and be prepared to provide patient care, seek board certification in pharmacotherapy (i.e., BCPS), and pursue advanced education and training opportunities including postgraduate year two (PGY2) residencies.

## **PGY2 Purpose Statement**

PGY2 residency programs build on Doctor of Pharmacy (PharmD) education and PGY1 pharmacy residency training to develop pharmacist practitioners with knowledge, skills, and abilities as defined in the educational competency areas, goals, and objectives for advanced practice areas. Residents who successfully complete PGY2 residency programs are prepared for advanced patient care or other specialized positions, and board certification in the advanced practice area, if available.

## **ASHP Accreditation Standard for Postgraduate Residency Programs**

### **Standard 1: Recruitment and Selection of Residents**

Standard 1 provides guidance to residency programs for the recruitment and selection of residents by defining candidate eligibility requirements along with the policies and procedures necessary to the recruitment process. The goal of the selection process is to ensure selected candidates will be successful in the training environment, attain professional competence, contribute to the advancement of profession of pharmacy, and support the organizations’ mission and values.

### **Standard 2: Program Requirements and Policies**

Standard 2 details the specific requirements for residency program policies; materials to be provided to candidates invited to interview; resident financial support and resources; and, requirements of *ASHP Regulations on Accreditation of Pharmacy Residencies* and *ASHP Duty Hour Requirements for Pharmacy Residencies*.

### **Standard 3: Structure, Design, and Conduct of the Residency Program**

Standard 3 defines required components of program structure, design, and conduct. It is important that the program's structure and design enable residents to achieve the purpose of the residency program through skill development in the program's required competency areas. Requirements for oversight of residents' development, formative and summative evaluations, and self-assessment are defined along with guidelines for continuous program improvement.

### **Standard 4: Requirements of the Residency Program Director and Preceptors**

Standard 4 defines eligibility and qualification requirements for residency program directors (RPDs) and preceptors as well as requirements for the residency advisory committee (RAC) and continuous preceptor development. RPDs and preceptors are critical to the success of both residents and the residency program and are the foundation of residency training. They serve as role models for residents through their professionalism and commitment to advancing the profession of pharmacy.

### **Standard 5: Pharmacy Services**

Standard 5 serves as a guide to the best practices across the continuum of pharmacy practice environments and focuses on the key elements of a well-managed department that are applicable to all practice environments. Each standard applies to all practice environments, unless otherwise indicated.

## **Program Administration**

A number of individuals participate in the administration of the pharmacy residency program. Each plays a key role in the program.

### **Director of Pharmacy**

The Director of Pharmacy has oversight responsibility for all aspects of the pharmacy department and ultimately the residency program. The Director is responsible for reporting to hospital administration on the progress and performance of the residency program.

### **Residency Program Director (RPD)**

The Residency Program Director works to assure that the overall program goals and specific learning objectives are met, training schedules are maintained, appropriate preceptorship for each experience or training period is provided, and that resident evaluations are conducted routinely and based on pre-established learning objectives. There is one RPD for each residency program. The Residency Program Directors assume a lead role in program administration and program recruitment activities for their respective programs. In coordination with the PGY1 residency program coordinator, the RPDs are responsible for development of all program policies and maintenance of the residency manual.

### **PGY1 Residency Program Coordinator (RPC)**

The Residency Program Coordinator works closely with the PGY1 RPD to assess adherence of the residency program to current ASHP standards, facilitate opportunities for preceptor

development, ensure that all deadlines are met, and foster relationships among the residents, preceptors, mentors, and project advisors. The Residency Program Coordinator serves as the chairperson of the Residency Advisory Committee.

### **Preceptor**

Each learning experience has a pharmacist preceptor or preceptors who develop and guide the learning experience to meet the residency program's goals and objectives. The implementation of the learning experience is done with consideration of the resident's goals, interests, and skills. The preceptor provides both informal and formal feedback of the resident's performance including a final summative evaluation at the conclusion of the learning experience.

### **Mentor**

Each resident selects a pharmacist to be a mentor, and to advise him or her throughout the year. Mentors assist the resident in creating a development plan for the year. On a quarterly basis, the mentor reviews the residents' progress of required activities, and together with the resident makes modifications to the development plan. Mentors are responsible for checking in on the resident's well-being, attending RAC to represent the resident, providing feedback, and guiding them in their career choices.

### **Project Advisor**

Residents will identify and select a project advisor or advisors for the major project and continuing education presentation. The advisor(s) will guide the resident's professional growth through selection and completion of the project objectives. An advisor will be selected based upon their expertise on the project topic and the RPD/RPC will assist in this process. In addition to the two projects listed above a resident may have several additional advisors assigned or selected for different projects they complete throughout the year.

### **Residency Advisory Committee (RAC)**

The Residency Advisory Committee is a standing committee of the Department of Pharmacy. It is composed of residency preceptors and mentors invited to serve by the Director of Pharmacy and respective Residency Program Director. There is a shared RAC for both the PGY1 and PGY2 program. The Committee serves in an advisory capacity to the Residency Program Directors and the PGY1 Residency Program Coordinator and endeavors to maintain the consistency and quality of the residency program. The committee provides a forum for preceptors to discuss common concerns, to develop additional learning experiences, and to promote new and innovative areas of practice. The committee communicates on a monthly basis. The specific functions of the committee include:

- Continuous evaluation of the curriculum, goals, and objectives
- Monthly evaluation of the residents' progress
- Evaluation and support of residency projects
- Resident recruitment and selection
- Preceptor development
- Preceptor appointment and reappointment

## **Requirements of the Residency Program Leadership and Preceptors**

### **Program Leaders**

The RPD(s) must meet all ASHP qualifications to be eligible for their role. (Please refer to ASHP Accreditation Standard for Postgraduate Residency Programs). The RPC must also meet the ASHP requirements to be an RPD as they will be first in line to take over the PGY1 RPD role if necessary. The RPDs are appointed by the Director of Pharmacy and approved by RAC. The RPC is appointed by the RPD with approval by the Director of Pharmacy and the RAC. In special circumstances, an RPD or RPC may be appointed who does not meet the qualifications set forth in the ASHP Standard. In this case a development plan and appropriate mentorship towards meeting full requirements will be implemented and approved by RAC and the Director of Pharmacy.

### **Preceptor Qualifications and Requirements**

Any pharmacist employed at HSHS St. John's Hospital (SJS) who is interested in precepting and serves in a position that aligns with the structure and goals of the program, as assessed by the RPD and RPC, may seek appointment as a preceptor. All preceptors must meet the requirements set forth by the ASHP standard (Please refer to ASHP Accreditation Standard for Postgraduate Residency Programs) and maintain an up to date Academic and Professional record. Additionally, all preceptors must meet the requirements set out in the preceptor development program discussed later in this manual. Preceptors who fail to maintain an up to date APR or participate in the requirements of the preceptor development program will be removed from the preceptor roster and will be unable to precept residents until reappointed.

### **Preceptor Appointment and Reappointment**

All residency leaders and preceptors must submit an up to date Academic and Professional Record (APR) in PharmAcademic by June 1<sup>st</sup> of every odd year. Preceptors who do not meet ASHP requirements at this time will be required, with assistance of the RPD/RPC, to prepare a preceptor development plan detailing how the preceptor will meet requirements within 2 years. Development plans will be reviewed and evaluated every 6 months from the date of implementation by the RPD or RPC to ensure the preceptor is on track to meet requirements. Requirements of the preceptor development plan must be met within 2 years, or the preceptor will be removed from the preceptor roster and will be unable to precept residents going forward.

New applicants for preceptor appointment must submit an APR, and if necessary, a preceptor development plan, to the RPD and RPC. If approved, the candidate will then be forwarded to RAC for final approval as preceptor. New applicant preceptors who have met the requirements for preceptor may be appointed as soon as the next RAC meeting after APR is submitted. This process must occur within 3 months of submission.

Reappointment of all currently appointed preceptors will occur in June of every odd year. The RPD or RPC will review all preceptor APRs and development plans and submit to RAC for final approval of reappointment and finalization of the preceptor roster.

## **Preceptor Development Program**

### **I. Goals**

- 1) Ensure all preceptors have the precepting skills and confidence to provide the best possible learning experiences for our residents
- 2) Ensure that preceptors stay up to date on current literature and best practices related to precepting and teaching pharmacy residents
- 3) Ensure all preceptors maintain compliance with ASHP standards for preceptor appointment

### **II. SMART Goals, Self Reflection, and Teaching Philosophy**

- 1) By September 1<sup>st</sup> of each year, all appointed preceptors are required to complete the preceptor development plan, comprised of setting 2 SMART goals for the year, reflecting on their precepting from the previous year, and updating their teaching philosophy.
- 2) A selection of SMART goals will be selected by the RPD/RPC to be verbally presented by the preceptors at the September RAC meeting

### **III. Preceptor Development Continuing Education**

- 1) All appointed preceptors are required to present a 10–15-minute educational discussion summarizing a precepting topic of their choice at least once every 4 years.
  - a. Example topics include, webinars, review articles, primary literature, books, etc.
  - b. Topics may not be repeated for at least 2 years after the first presentation
  - c. Preceptors are encouraged to bring new topics they may discover to RPD/RPC so they may be added to a list of future topics
  - d. RPD/RPC may assign topics if resident feedback and preceptor self-assessments identify specific areas of weakness

### **IV. Research and CE Participation**

- 1) All appointed preceptors are highly encouraged to precept or co-precept at least one research project and/or continuing education every 4 years.
  - a. New preceptors may be paired with more experienced preceptors to provide mentorship

### **V. Annual Schedule (schedule may vary slightly year to year, below is an example, official schedule will be published in RAC minutes)**



#### July RAC

- Preceptor Led Education
- Discussion of resident feedback

#### August RAC

- Preceptor Led Education

#### September RAC

- Preceptor Development Form Due
- SMART Goals Discussion

#### October RAC

- Preceptor Led Education

#### January RAC

- Preceptor Led Education

#### June RAC

- Preceptor Led Education

### **Criteria For Selecting Applicants, Rank List, and Phase II Match**

#### **Recruitment**

Both residency programs will participate in local, statewide, and national residency showcases to recruit candidates.

#### **Initial Applicant Selection (Pre-Interview)**

Any applicant to the PGY1 or PGY2 Infectious Diseases Residency Programs must be a prospective or current graduate of an Accreditation Council for Pharmacy Education (ACPE) accredited degree program and must submit the following materials prior to the application deadline using PhORCAS (Pharmacy Online Residency Centralized Application System):

- Letter of Intent
- Curriculum Vitae
- School of Pharmacy Transcripts
- Three Recommendations from References

For the PGY2 Infectious Diseases Residency Program, applicants must also have completed or be in the process of completing an ASHP accredited or candidate PGY1 Pharmacy Residency Program.

Once these materials are received by the RPD, they are evaluated and scored using a pre-determined scoring system that is developed and maintained by the RPD. Each applicant is objectively scored by an committee of pharmacy leadership, selected preceptors, the RPC, and the RPD. The average of these scores is then compared against all other applicants. Once a

complete list of applicants and their average scores are complete, the RPD reviews the list, using the average scores as a guideline, and determine which applicants will be invited for an interview.

### **Interview Process**

Interviews will be conducted either virtually or in person. This will be decided by the RPD prior to the first interview and the decision will apply to all applicants. During the interview, each applicant will proceed through multiple interview sessions with the RPD, preceptors, pharmacy administration, the current resident(s), and/or physicians. All interviewees will be evaluated using a pre-determined interview question scoring form developed and maintained by the RPD.

### **Final Rank List Preparation (Post-Interview)**

Once all invited applicants have completed their interview, pharmacy staff involved in the interview process are invited to meet and review their scoring forms. A member of the group will compile all the objective information from the pre interview process and the evaluation forms from the interviews. The result is a preliminary rank list of all candidates. Once a complete list of applicants and their average ranks are complete, the RPD reviews the list, using the average ranks as a guideline, and determines what each applicant's final rank will be. Once complete, the program's final rank list is entered accordingly into the National Matching System's (NMS) database.

### **Phase II Match**

If a position is unfilled in the Phase I Match, the respective program will enter the Phase II Match. The same application materials, pre- and post-interview scoring forms, and rank list process used for Phase I will be required for Phase II. Due to the abbreviated timeframe, only virtual interviews will be offered and interviews will be offered on a rolling basis as the applications are submitted and reviewed.

### **Post Match**

If a position is unfilled in the Phase II Match, the program will enter the Post-Match. The following materials are required to be emailed to the RPD:

- Letter of Intent
- Curriculum Vitae
- Two letters of recommendation

The same evaluation materials, pre- and post-interview scoring forms, and rank list process used for Phase I and II will be used for the post-match. However, due to the abbreviated timeframe, applications will be scored on a rolling basis and only virtual interviews will be offered. After at least three candidates are interviewed, the RPD and others involved in the interview process will compare interview scores to determine a rank list. The RPD will offer the position to the first candidate on the list and move down the list in order until a candidate accepts the position. At any point prior to receiving three applications, the RPD and RPC may jointly agree to make offers prior to receiving further applicants if it is determined that delay may lead candidates to accept offers elsewhere.

## **Early Commitment**

PGY1 residents who are interested in completing the PGY2 Infectious Diseases Pharmacy Residency may apply for Early Commitment to the program. The resident is required to schedule a meeting with the PGY2 Residency Program Director (RPD) to discuss the purpose and requirements of the PGY2 Residency and the resident's interests prior to applying for Early Commitment.

If interested in pursuing Early Commitment, the resident is required to submit a letter of intent electronically to the PGY2 RPD by November 13. Once the letter of intent is received, the PGY2 RPD will meet with the Residency Advisory Committee to determine if the committee would like to extend an interview to the resident. If a 2/3 vote is obtained, the resident will be offered an interview. The interview will consist of a half-day interview process involving the PGY2 RPD, PGY2 preceptors, and ID physicians. Candidates will be assessed using a pre-determined interview question scoring form.

The resident is encouraged to attend the ASHP Midyear Clinical Meeting to interview with additional PGY2 ID Programs. The St. John's PGY2 ID Residency Program reserves the right to interview external candidates at the ASHP Midyear Clinical Meeting.

After the ASHP Midyear Clinical Meeting, the RAC will meet to discuss the resident's interview as well as any interviews conducted at the Midyear meeting. If agreed upon by 2/3 vote, the PGY2 RPD will either extend an offer to the resident or recommend the resident enter the Match with external candidates. The resident may accept or refuse the offer no later than the Friday after the ASHP Midyear Clinical Meeting. If the offer is accepted, the resident must sign the Early Commitment Letter of Agreement found on the National Matching Service website, which the PGY2 RPD will send to the National Matching Service by the required deadline. If the resident wishes to apply to other programs and enter the Match, the resident may still be considered in the Match along with external candidates. If the offer is rejected, the resident will not be considered for Early Commitment or the Match.

If at any point the resident wishes to withdraw their application or refuses an offer for the Early Commitment process or residency position, he/she may do so with no negative consequences on their current PGY1 Residency Program.

## **Terms and Conditions of Resident Appointment**

### **Resident Matching Program Agreements**

- A match constitutes a binding agreement between the applicant (resident) and the pharmacy residency program that may not be reversed by either party.
- Appointment of the resident to the program is contingent upon the following:
  - Must possess current license to practice pharmacy in Illinois or be license eligible. Licensure must be completed within 120 days of the start date of the program
  - For PGY2 Residents:

- Completion of a PGY1 Pharmacy Residency Program, as evidenced by the receipt of a PGY1 Certificate of Completion within 15 days of starting the PGY2 residency
  - Failure to complete a PGY1 Pharmacy Residency will result in automatic dismissal from the PGY2 Residency Program
- RPD will send a letter to the applicant as a formal written agreement of the residency appointment to the resident within 30 days of the Match results
- ASHP Match Rules
  - <https://natmatch.com/ashprmp/rules.html>

### **Initial Employment Requirements**

- Apply for the position when posted by Human Resources. This link will be provided to the resident by the RPD or pharmacy manager
- Incoming residents must accept their job offer from HSHS in addition to signing the pharmacy resident agreement.
- Complete pre-employment testing including but not limited to TB screen, urine drug screen, and criminal background check.
- Candidate must applicable Illinois license and must be in good standing with the IL Board of Pharmacy:
  - Obtain or have valid IL technician license
  - Have active IL pharmacist license

### **Licensure Requirements**

- Successful completion of PharmD degree from an accredited school of pharmacy.
- Must possess current license to practice pharmacy in Illinois or be license eligible.
- If licensure if not obtained within 120 days from the program start date, the resident will be dismissed from the program.
- Residents are encouraged to get licensed as soon as possible. If delayed licensure causes the resident to fall behind or otherwise delays resident growth or progress a Performance Improvement Plan may need to be created for the resident to successfully complete all requirements in a reasonable amount of time necessary to receive a Certificate of Completion.

## **Duty Hours, Paid Time Off, and Moonlighting**

### **Duty Hours**

Duty hours are defined as all hours spent on scheduled clinical and academic activities, regardless of setting, related to the pharmacy residency program that are required to meet the educational goals and objectives of the program. This includes inpatient and outpatient care; staffing/service commitment; administrative duties; work from home activities; and scheduled and assigned activities, such as conferences, committee meetings, classroom time, and health and wellness events that are required. Duty hours exclude: reading, studying, and academic preparation time; travel time; and hours that are not scheduled by the residency program director or a preceptor or otherwise required by program leadership.

**Duty hours must be limited to no more than 80 hours per week, averaged over a four-week period, inclusive of moonlighting.** The resident will average at least one full day off every week over the course of each month. Residents will have at a minimum, 8 hours between scheduled duty periods. Residents will not be scheduled for more than 16 hours of continuous duty at a time. Tracking of duty hours and moonlighting will be completed by the resident each month in PharmAcademic using the Duty Hours form.

For PGY1 residents, participation in the at-home on-call program the second half of the year will be included in the maximum of 80 hours a week calculation. Only the time spent by the resident on on-call related work activities during their assigned on-call hours, including taking calls from home and utilizing electronic health record related to at-home on-call duties, count towards the 80-hour maximum weekly hour limit. The at-home on-call program is discussed in more detail later in this manual, please refer to this section for further clarification of the on-call program impact on duty hour requirements.

The RPD/RPC will ensure that each Resident complies with the current duty hour standards of the American Society of Health-System Pharmacists.

<https://www.ashp.org/-/media/assets/professional-development/residencies/docs/duty-hour-requirements.ashx>

Duty hour attestations will be reviewed monthly by the RPD/RPC. Non-compliance with duty hours will be reviewed by the RPD and discussed with the resident to identify and correct the underlying factors that lead to the violation.

### **Paid Time Off (PTO)**

Residents will accumulate a total of 23 days of PTO during their residency year. PTO will be taken for all official hospital holidays unless scheduled for staffing responsibilities or approved by the department director and RPD. PTO will be used for job interviews as well as testing dates for licensure. Since the primary purpose of the residency is educational, it is expected that not all the accrued paid time off during the residency year may be used. It mainly serves to cover PTO for holidays, sick time, professional interviews, and short duration leave requests. Days not used will be paid in full at the conclusion of the residency in accordance with hospital policy. PTO requests should be made, at a minimum, one-month prior to the leave. PTO must be approved by both the residency director and the preceptor for the learning experience in which the PTO will be redeemed.

PTO is not utilized for attendance of professional meetings; however, the resident should personally inform the RPD, the RPC, and any preceptors of learning experiences that will be affected by the absences.

### **Moonlighting**

Moonlighting is defined as any voluntary, compensated work performed either outside or within the organization (internal or external) and is separate from the requirements of the residency program. Moonlighting must not interfere with the ability of the resident to achieve the

educational goals and objectives of the residency program and must not interfere with the resident's fitness for work or compromise patient safety. All moonlighting hours must be counted towards the 80-hour maximum weekly hour limit. **Moonlighting is highly discouraged due to the educational demand of the residency program. Any moonlighting must be approved by the RPD and adhere to the following process:**

- Maximum combined internal and/or external moonlighting of 8 hours per week
- All moonlighting shifts must be approved by the RPD
- All moonlighting shifts must be recorded in PharmAcademic in the monthly Duty Hours form

If moonlighting affects the resident's performance in their scheduled duty hours, the RPD will meet with the resident to reduce or eliminate their moonlighting hours.

### **Extended Leave**

If a resident must take leave beyond what has been accrued through the Paid Time Off Policy (23 days), a customized action plan will be created for the resident to successfully complete all requirements of the program prior to graduation in order to receive a Certificate of Completion. Only extended leave that is approved by the Human Resources (HR) department will be considered eligible for a customized action plan. Extended leave that is not approved by HR will be grounds for dismissal and will be further discussed in the section titled "Dismissal, Grievance and Withdrawal."

Leaves Addressed by Specific Policies: HSHS offers several types of job protected leaves of absence in accordance with the requirements under various federal and state laws. These laws address a range of situations including but not limited to the medical needs or military obligations of the colleague or the colleague's family. Colleagues should contact Human Resources for specific information about colleague rights and responsibilities under these laws. Colleagues may also be eligible for job protected leave under the HSHS Reasonable Accommodation policy. When none of the above referenced policies apply, eligible colleagues may request a general leave of absence.

If the total number of days away from the program exceeds 37 days, a program extension will be required to receive a Certificate of Completion. Examples of days away from the program include vacation time, sick time, holiday time, religious time, interview time, personal time, jury duty time, bereavement leave, military leave, parental leave, leave of absence, elective conference attendance, and extended leave. Days away from the program does NOT include mandatory conference attendance (ie. ASHP Midyear) and staffing requirements.

Program extensions will only be granted if the leave is approved by HR. The duration of the program extension will be, at minimum, equal to the number of days away from the program in excess of 37 days and must cover all competencies missed during the leave. The program extension may exceed the number of days away from the program in excess of 37 days if required to complete the missed competencies. The requirements for graduation will not be altered and all must be met to receive a certificate. Program extension may not exceed 10 weeks. In cases where more than 10 weeks are required to meet the requirements of the program, the resident

will be dismissed and will not receive a Certificate of Completion. Payment and benefits will be included in program extensions in accordance with HR policies.

Specific HR policies will be available through the hospital intranet in Ellucid under the human resources policy handbook. Pharmacy specific policies can be found in the shared common drive. HR policies will be reviewed during orientation and an HR representative can be contacted during business hours if further clarification is desired.

### **Academic Integrity**

Residents are expected to uphold the highest standards of academic integrity in their work. Any form of academic dishonesty, including but not limited to the following, will not be tolerated:

- Fabrication of data
- Plagiarism
- Deception and misrepresentation

Residents found engaging in any of the above behaviors may be subject to disciplinary action, which could include dismissal, in accordance with both residency program and human resources policies.

This policy is not intended to discourage academic discussion, research, or collaboration. On the contrary, residents are encouraged to use all available resources to support their academic work. However, appropriate citations must be provided whenever the work of others is used in a completed assignment.

This policy also extends to the use of Artificial Intelligence (AI) tools. While residents are generally discouraged from utilizing AI tools, they may use such tools with prior approval from a preceptor or project leader. In these cases, any work generated with AI must be clearly identified as such and appropriately cited. The use of AI should be as an aid, or a tool generate ideas and not as a substitute for original thought or critical thinking.

Residents are responsible for ensuring the accuracy of any AI-generated content included in their work. Additionally, they must provide proper citations for any original sources that the AI tool has incorporated into its output. If it is determined that a submitted or presented work has been created with AI tools without prior approval or is not sufficiently of the residents own original thought, critical thinking, or research then the resident may be referred for discipline.

### **Disciplinary Action, Dismissal, Grievance and Withdrawal**

#### **Disciplinary Action**

Residents are expected to meet performance expectations, follow HSHS policies, make behavioral choices that are supportive of organizational values, and avoid causing unjustified risk or harm to themselves or others. Although a colleague might face circumstances where a violation of one of these duties occurs, whether justified or not, HSHS will tie corrective measures to the behavioral

choice of the colleague along with the potential risks their choice presented. Residents are expected to behave in a manner that aligns with HSHS core values and existing HR policies. Residents may require disciplinary action in the following circumstances regarding HR policies and core values. Please refer to the employee handbook for more specific information.

To ensure residents are on track to meet graduation requirements, and ensure resident behavior aligns with the goals of the residency program, situations may arise where disciplinary action is required to address performance deficiencies or violations of residency program policies. Below are the program specific triggers for the formal disciplinary action process that are in addition the policies laid out by the HR department.

- Poor academic performance during learning experiences/failure to progress
  - Needs improvement on > 1 objective on a single evaluation
  - Needs improvement on a specific objective on > 1 evaluation
  - Specific and repeated feedback from > 2 preceptors related to the same performance issue
  - Failure to achieve ACHR on objectives at a rate that will result in less than 80% threshold for graduation
- Excessive Tardiness as reported in RAC by > 1 preceptor
- Late work/Failure to meet deadlines without proper communication
  - Three or more missed deadlines reported at RAC
  - Missed deadlines that compromise the ability to complete graduation requirements will result in dismissal
- Violation of the Academic Integrity Policy
  - Violations of the academic integrity policy that compromise the ability to complete graduation requirements will result in dismissal
- Absenteeism
  - Repeated failure to attend noon and/or case conference without approval from preceptor or RPD/RPC
  - Failure to attend required health fairs, continuing education sessions or conference days without proper communication to RPD
  - Failure to arrive for scheduled shifts without prior PTO approval or proper notification per the SJS Pharmacy Department Staffing Guidelines

The program will follow the Performance Correction Process policy in Ellucid to create a Performance Improvement Plan (PIP) to address any deficiency listed above. All feedback and PIP will be documented in PharmAcademic by the program leadership or pharmacy leadership designee, and the resident. The Pharmacy Director or Manager will sign off on any violations to hospital policy/procedure that require performance improvement plan. For violations of program policies or performance, the performance improvement plan will be signed by the RPD.



## **Dismissal**

The following will result in dismissal from the program. Any resident dismissed from the residency program will not receive a Certificate of Completion.

- Failure to adhere to the terms of the residency appointment
- Failure to obtain a pharmacist license within 120 days of program start date
- Time away from the program in excess of PTO allotment if not approved by HR
- Failure to address deficiencies in a Performance Improvement Plan within the required timeframe
- If > 3 Performance Improvement Plans are initiated

## **Grievance**

A resident may file grievance regarding a decision leading to dismissal by contacting the Human Resources department.

## **Resident Withdrawal**

A resident may voluntarily withdraw from the residency program. The resident will inform the RPD of their intent to withdraw in writing. The resident should provide at least four weeks working notice to the RPD prior to withdrawal to ensure continuity in the provision of pharmaceutical care. Residents who withdraw will not receive a Certificate of Completion.

## **Well-Being and Resilience**

Burnout in pharmacy residents is increasingly common, marked by emotional exhaustion and reduced motivation due to intense workloads and high-pressure environments. Early recognition of symptoms like fatigue and disengagement is crucial to prevent long-term effects and support both their well-being and the quality of patient care.

### **Definitions**

- Burnout – syndrome characterized by emotional exhaustion that results in depersonalization and decreased personal accomplishment at work
- Resilience – set of individual skills, behaviors, and attitudes that contribute to personal physical, emotional, and social well-being, including the prevention of burnout
- Stress – state of mental or emotional strain or tension resulting from adverse or very demanding circumstances
- Well-being – obtaining the psychological, social, and physical resources needed to meet a particular psychological, social, and/or physical challenge

Burnout has negative consequences on patients and healthcare providers. It has been linked to decreased patient satisfaction and increased rates of hospital acquired infections. In the healthcare worker, burnout causes an increased risk of medical errors and suicide.

Individuals and organizations are responsible for identifying and managing burnout.

Responsibilities of the individual include:

- Ensure he/she appropriately rested and fit to provide services that promote patient safety
- Maintain personal health
- Implement strategies to identify and prevent burnout and promote well-being
- Seek assistance for physical, mental, emotional, and/or personal problems before performance is adversely affected. This includes assistance for drug and/or alcohol misuse.
- Report any observed physical, psychological, or emotional problems affecting the performance of a team member. This includes concerns for signs of burnout, depression, substance abuse, suicidal ideation, and/or potential for violence.

Responsibilities of the department/organization include:

- Endorse practices and behaviors that promote a positive work environment
- Respond to concerns about employee burnout, fatigue, depression, substance abuse, suicidal ideation, and/or potential for violence
- Provide access to confidential, affordable mental health assessment, counseling, and treatment.
  - Employee Assistance Program (EAP) is available to all HSHS colleagues without enrollment or cost
    - <https://hospitalsisters.sharepoint.com/sites/LiveWell/>
  - Pharmacists Recovery Network
- Provide education and raise awareness on well-being, resilience, and burnout

Validated tools exist to identify presence and extent of burnout. The resident may utilize these at any point in the year and discuss the results with their mentor and/or RPD.

- Maslach Burnout Inventory
  - <https://www.mindgarden.com/117-maslach-burnout-inventory>
  - Gold standard tool, \$\$
- Oldenburg Burnout Inventory
  - Demerouti E, Mostert K, Bakker AB. Burnout and work engagement: a thorough investigation of the independency of both constructs. J Occup Health Psychol. 2010;15(3):209-222.
  - Scientifically validated, free of charge
- Burnout Self-Test
  - [https://www.mindtools.com/pages/article/newTCS\\_08.htm](https://www.mindtools.com/pages/article/newTCS_08.htm)
  - Not scientifically validated

Strategies to prevent and address burnout and well-being include:

- Three Good Things
  - In the morning, ask yourself what 3 things you are most grateful for and what 3 things will make today great
  - In the evening, ask yourself what 3 things did you see today that were amazing and what 3 things could have made today better
- Use your lunch break to take a break
  - Eat with people you enjoy
  - Take a walk

- Sit quietly / deep breathing
- Add a “wrap-up” time to your calendar thirty minutes before the end of your shift each day
  - Allows time to finish any tasks that still need completed
  - Allows time to debrief with preceptor
  - Allows for clearer distinction between professional and personal life

In addition, ASHP provides resources on their website. These can be found at <https://www.ashp.org/Pharmacy-Practice/Resource-Centers/Workforce-Well-Being-and-Resilience>. If the resident identifies burnout, he/she is encouraged to meet with their mentor and/or RPD. Resident well-being will also be addressed in the Quarterly Development Plan.

### **Learning Experience Structure**

Organized learning experiences (rotations) provide the structure of resident training in specialized areas of pharmacy practice. The resident is expected to consider the goals and objectives for each experience as a foundation for their experience. The specific program for each resident varies based upon interests and goals but must adhere to a core structure of required learning experiences.

A comprehensive list of available learning experiences is available later in this manual in the section dedicated to the respective program. For each learning experience, a description and set of expectations can be found in PharmAcademic.

A 12-month schedule of the Learning Experiences provides a framework for structured learning activities. Within the first month of the program, the resident, the RPD, and the Residency Coordinator develop a 12-month schedule of rotations for the resident. This schedule will be presented to RAC for approval.

For each learning experience the resident is required to contact the preceptor 7 days prior to the start date to discuss the requirements and establish a schedule for the month. The resident will inform the preceptor of all time conflicts. This includes additional meetings that might arise, staffing, absences to attend meetings, etc. Prior to the start of or on the first day of the learning experience, the preceptor will orient the resident to the learning experience. This includes a review of the learning experience description (syllabus), calendar, requirements, evaluations, and expectations.

The preceptor provides guidance and assistance to the resident and ensures that the goals set forth by the resident and the program are met. The preceptor also provides the resident with frequent evaluation of their progress including a written evaluation at the conclusion of the experience.

Individual residents’ goals may change over the course of their residency. Residents may request to change or trade scheduled experiences. With the approval of the preceptors for each

experience involved, the change/trade may be referred to the Residency Advisory Committee for discussion and the RPD/RPC for approval.

## **Evaluation Methods**

During each learning experience, the resident will meet with the preceptor on a regularly scheduled basis, as determined by the preceptor and resident, to receive verbal evaluations of their performance. Additionally, there will be three required, written evaluations that must be filled out in PharmAcademic at the conclusion of each learning experience.

1. Summative Evaluation (*preceptor of resident*)
2. Learning Experience Evaluation (*resident of rotation*)
3. Preceptor Evaluation (*resident of preceptor*)

For longitudinal learning experiences the Summative Evaluation will be completed every 12 weeks, the Learning Experience Evaluation will be completed at the midpoint and endpoint, and the Preceptor evaluation will be completed at the endpoint.

During each learning experience, the preceptor may request additional written evaluations in PharmAcademic, but these are not required by the program and their completion is optional. These will be discussed with the resident during orientation to the learning experience if the preceptor would like to assign them. These include:

1. Midpoint Self-Evaluation (resident of self)
2. Midpoint Evaluation (preceptor of resident)
3. Summative Self-Evaluation (resident of self)

For residents who are not progressing as expected by the preceptor. An additional evaluation called the Formative Evaluation/General Feedback (preceptor of resident), will be completed by the preceptor to provide specific feedback on deficiencies and develop a plan to address them going forward. This evaluation will be reviewed in person with the resident and discussed at RAC.

Appropriate feedback to the resident should focus on specific strengths and weaknesses of the resident's performance regarding the assigned objectives, the resident's progress towards achievement of said objectives, and specific actionable comments that will help resident achieve the objective in the future. There should be no blank boxes in an evaluation.

Residents will be required to provide feedback on each learning experience and preceptor. Residents are expected to provide constructive feedback and comments in all sections of these evaluations. Blank sections, or inadequate feedback in an evaluation will result in the evaluation be sent back to the resident for completion.

**ALL evaluations must be submitted within 7 days of the assigned date.**

On the Summative Evaluation, each objective is marked as achieved, satisfactory progress, or needs improvement. The definitions for each option are as follows:

Rating	Definition
<b>Achieved (ACH)</b>	<ul style="list-style-type: none"><li>• Can perform or has completed associated activities independently for this learning experience</li><li>• No further development work needed</li></ul>
<b>Satisfactory Progress (SP)</b>	<ul style="list-style-type: none"><li>• Performing and progressing at a level that should eventually lead to a rating of achieved after more experience is obtained</li><li>• Sometimes requires assistance/supervision to complete objective</li><li>• Requires skill development over more than one rotation</li></ul>
<b>Needs Improvement (NI)</b>	<ul style="list-style-type: none"><li>• Not performing at an expected level at that particular time</li><li>• Deficient in knowledge/skills in this area</li><li>• Unable to ask appropriate questions to supplement learning</li><li>• Consistently requires assistance to complete objective</li></ul>

In order to meet ACHR on a specific Required Objective, the resident must have received ACH on at least one summative evaluation. Only the RPD/RPC may mark a Goal or Objective as ACHR.

Each resident (both PGY1 and PGY2) must receive ACHR status for 80% of all REQUIRED program Objectives in order to be awarded a Certificate of Completion

### Resident Development Plan

Each resident completing a residency-training program at HSHS St. John's Hospital shall complete the following documentation in addition to all required Learning Experience related evaluations (all located in PharmAcademic):

1. ASHP Resident Entering Self-Assessment Form
2. Quarterly Resident Development Plan

The resident assumes primary responsibility to complete these documents as instructed by the RPD. The ASHP Resident Entering Self-Assessment Form will be completed during the Acute Care Pharmacy Orientation Learning Experience and documented in PharmAcademic. This document will be reviewed by the RPD and considered when developing the resident's rotation schedule. This document will also be used to create the individualized Resident Development Plan. The initial resident development plan must be completed within 30 days of the start of the program.

The purpose of the Resident Development Plan is to address each resident's unique learning needs and interests to help facilitate individual and program goals. It serves as a tool for monitoring, tracking, and communicating the resident's overall progress throughout the residency and any adjustments needed to meet his/her learning needs and goals. The plan will be reassessed quarterly. The resident, with assistance from their mentor, will review the previous goals, strengths, and weaknesses to evaluate if they have been achieved, if additional action items are needed, or if new goals need to be created. The resident at this time will also document progress towards program completion. This plan will then be reviewed quarterly by the RPD and mentor. Any adjustments or feedback will be provided to the resident by the mentor. The Resident Development Plan will be uploaded in PharmAcademic by the RPD by the end of the orientation month and each quarter thereafter.

Within the framework of the ASHP Standard, the resident is encouraged to assume ownership of their training experience and development plan. The mentor will help the resident form goals, assess their completeness and feasibility, and provide feedback.

Resident Development Plan – Due Dates	
Initial Plan	July 30
1 <sup>st</sup> Quarter Update	September 30
2 <sup>nd</sup> Quarter Update	December 31
3 <sup>rd</sup> Quarter Update	March 31

At the end of the residency, the resident will complete the Exit Interview Assessment in PharmAcademic. This written feedback will serve as an annual review of the residency program. Results of the assessment will be discussed with RAC. If necessary, the RPD and RPC will develop an action plan to improve on weaknesses of the program.

## **Required Projects**

### **Medication Use Evaluation (MUE)**

The resident is required to complete an MUE during the residency year. A list of ideas, provided by the pharmacy staff and approved by RAC, will be provided to the resident. The RPD or Pharmacy Manager will meet with each resident during their training period to introduce them to the MUE process, provide a project timeline with deadlines, and assign MUE topics. Pharmacist(s) working in the area in which the medication(s) are primarily utilized and/or the pharmacist(s) originating the evaluation idea can serve as project advisors and secondary authors, directing the resident in evaluation design and data analysis.

Residents will prepare a proposal of their evaluation background, objectives, and methods and present it to the RPD/RPC prior to data collection. Final reports of the evaluation, including results and conclusions, will be turned into the RPD/RPC.

The resident will also report the evaluation to the Pharmacy and Therapeutics (P&T) Committee (if applicable) and/or other applicable committees. The resident will also assist in the implementation of any recommendations from the findings of the evaluation.

### **Drug Class Review**

The resident may be required to prepare and present a drug class review during the residency year. The topic will be assigned based on hospital formulary need. Pharmacist(s) working in the area in which the medication(s) are primarily utilized and/or the pharmacist(s) originating the evaluation idea will serve as the project advisor. Together with the mentor, the resident will create a project outline and timeline. Previous reviews prepared by prior residents may be reviewed as examples. Formulary recommendations will be presented to the Pharmacy and Therapeutics (P&T) Committee at an institution and system level and any other applicable committees. A summary of drug class review may also be presented to the pharmacy staff during a weekly huddle.

### **Treatment Guideline or Protocol (Quality Improvement)**

The PGY2 resident is required to prepare and present a new or updated treatment guideline or protocol during the residency year. A list of ideas, provided by the pharmacy staff and approved by RAC, will be provided to the resident. Pharmacist(s) working in the area where the guideline or protocol is primarily utilized and/or the pharmacist(s) proposing the idea will serve as the project mentor. Together with the project mentor, the resident will create a project outline and timeline. The final product will be presented to the Antimicrobial Stewardship Committee and other committees (i.e. Pharmacy and Therapeutics Committee) as applicable. A summary may also be presented to the pharmacy staff during a weekly huddle, if appropriate.

### **Continuing Education Presentation**

The goal of the continuing education presentations is to enhance the participant's knowledge regarding the use of drug therapy to treat and prevent disease. Participants will learn to evaluate the scientific literature and discuss its applicability to clinical practice. Residents will learn to present complex concepts and scientific data in a clear and concise manner.

The audience will consist of pharmacy practitioners, residents, faculty, students, pharmacy technicians, and invited guests from the healthcare industry. Presentations will be formal in nature and audience members normally refrain from asking questions during the presentation (except to ask brief points of clarification).

Each presentation must be 60 minutes in duration (45 minutes presentation, 15 minutes for questions) and the presenter must use audiovisual aids (i.e. slides) during the presentation. All members of the audience will evaluate each presentation using a standardized assessment instrument. Residents are required to identify a content expert/mentor for the presentation.

All programs will be offered for continuing education (CE) credit. An ACPE Program Description Form must be completed and submitted to the Office of Continuing Education at the Illinois Council of Health-System Pharmacists. This paperwork will be provided to the resident.

The following timeline will be utilized for the CE presentation:

2 months in advance of presentation

- Select topic for the CE program. The topic should be of relevance to pharmacy practice today and of interest to the audience. It should not be the same topic as your residency project.
- Identify a content expert/mentor
- Submit topic and objectives to ICHP 2 months in advance of presentation date
- Submit Faculty Guidelines to ICHP 2 months in advance of presentation date
- Submit CV to ICHP
- Submit mentor CV and conflict of interest to ICHP
- Use the ICHP Guidelines for writing learning assessment questions

1 months in advance of presentation

- Create and submit slides to project advisor
- Scheduled 2 practice presentations

2 weeks in advance of presentation

- Submit slides and assessment questions to ICHP 2 weeks in advance of the presentation
- Continue to practice your presentation

**Research Project**

Each resident is required to complete one major project relating to a specific aspect of pharmacy practice. The project may be original research, a quality improvement project, or development/enhancement of pharmacy services. Results of this project are presented orally at a regional residency conference; a written manuscript will be completed and prepared for submission to a pharmacy journal selected by the resident and RPC/RPD.

The process is as follows:

1. The resident will select a project idea from the RAC approved list and project advisor within the first month of starting the residency.
2. Ensure project committee has completed CITI training.
3. Project ideas will be presented to RAC for approval at their August meeting. Prior to the meeting, the resident and their selected committee (advisor and RPD/RPC) will prepare a brief written description via Powerpoint of the project. Background information, objective, possible methodology, and potential problems should be addressed. A data collection sheet via Excel should also be prepared. The slides and data collection sheet



- should be provided to the project committee at least one week before the RAC meeting. The resident will give a formal five-minute presentation to RAC and answer questions. The project advisor will attend the meeting and assist with questions, but it is the primary responsibility of the resident to be knowledgeable about his/her project.
4. The RAC will suggest that:
    - a. The project proceed
    - b. The project be modified
    - c. The plan be reviewed further
  5. After approval, the resident and project advisor will meet on a regular basis and consult other preceptors as necessary to help develop the project. A written, detailed proposal of the final project should be prepared and submitted to the RPD/RPC. The proposal template is located on the SCRIHS website. The proposal should contain the following elements at a minimum:
    - a. Background – Includes the rationale for the project and pertinent background information. Literature citations supporting the hypothesis should be included.
    - b. Objective(s) – A statement of the primary question(s) or goal(s) of the project should be included. Secondary objectives should also be included.
    - c. Methodology – The methods for completing the project should be included. This includes trial design, population or area to be studied, data to be collected, and how data collection will occur.
    - d. Data analysis – A description of methods for analyzing data, including statistical methods and endpoints, should be discussed.
    - e. Critical Analysis – Describe study weaknesses and/or obstacles for study completion and how they will be addressed. Discuss possible outcomes and their implications.
    - f. Patient Confidentiality – Describe how patient confidentiality and data security will be maintained.
    - g. References
  6. The resident will present the final, written proposal of the project and a timetable for project completion to the project mentor and RPD/RPC. The timetable shall include specific time points for data collection, data analysis, and presentation preparation. Approval from appropriate institutional committees will be obtained prior to the initiation of the project. IRB approval is required for any project with active patient interventions, as well as retrospective studies utilizing computer data.
  7. *Optional* – The resident is responsible for completing their project management tools and sharing with the project advisor to discuss progress.
  8. For PGY1 residents – a poster of research design and preliminary results will be prepared and presented for ASHP Midyear clinical meeting.
  9. The resident will formally present the final project results to preceptors and staff in preparation for attendance at a regional residency conference.
  10. The resident will present the project at a regional residency conference.
  11. The resident will submit a written report, in manuscript style, to the project mentor and RPD/RPC.
  12. Fulfillment of the project requirement of the residency program is contingent upon the completion of the above steps.

### General Project Timeline

#### **July**

- ☐ Select project idea from Resident Project Idea List approved by RAC.
- ☐ Select project advisor Typically, project advisors are subject matter content experts on project topic.
- ☐ Select project committee. A resident's project committee will consist of the RPD or RPC, project advisor and the resident. Additional preceptors may be invited to join a resident's committee.
- ☐ Meet with project committee to discuss project selection to gain insight into project nuances and understand need. Discuss and start to prepare brief written description.
- ☐ Optional: set up project management diagram with feedback and approval by project committee

#### **August**

- ☐ Create timetable for project completion. This timetable will include specific time points for data collection, data analysis, and presentation preparation.
- ☐ Prepare slides, written proposal, and data collection sheet for RAC.
- ☐ Submit slides, written proposal, and data collection sheet to project committee and RPD/RPC 1 week prior to RAC meeting.
- ☐ Present formal 5-minute presentation to RAC and answer questions.
- ☐ Obtain approval to proceed with project.
- ☐ Optional: Time management diagrams are discussed every 2 weeks with project committee.

#### **September**

- ☐ Submit final written, detailed proposal and data collection sheet to project committee for final approval.
- ☐ If IRB review of the project is needed, submit IRB application. Of note, two months for IRB approval should be allowed.
- ☐ Optional: Time management diagrams are discussed every 2 weeks with project committee.

#### **October**

- ☐ Submit abstract to ASHP Midyear Meeting by October 1.
- ☐ Data collection should begin once IRB approval completed
- ☐ Optional: Time management diagrams are discussed every 2 weeks with project committee.

#### **November**

- ☐ Prepare poster for Midyear meeting and review with project committee, including any preliminary data collection.
- ☐ Continue data collection
- ☐ Optional: Time management diagrams are discussed every 2 weeks with project committee.

#### **December**

- ☐ Present poster at Midyear meeting.
- ☐ Continue data collection
- ☐ Optional: Time management diagrams are discussed every 2 weeks with project committee.

### **January**

- ☐ Continue data collection
- ☐ Optional: Time management diagrams are discussed every 2 weeks with project committee.

### **February**

- ☐ Prepare and submit abstract for regional residency conference with review and approval by residency committee.
- ☐ Continue/complete data collection
- ☐ Optional: Time management diagrams are discussed every 2 weeks with project committee.

### **March**

- ☐ Prepare final oral presentation for regional residency conference.
- ☐ Schedule 2 practice presentations to pharmacy department staff. At the time of the second presentation analysis should be complete.
- ☐ Revisions suggested by pharmacy audience will be incorporated and addressed.
- ☐ Optional: Time management diagrams are discussed every 2 weeks with project committee.

### **April**

- ☐ Present final project presentation including all revisions to project committee.
- ☐ Submit final slides to regional residency conference by April due date. Of note, they will not be able to be changed once submitted.
- ☐ Present project at the regional residency conference.
- ☐ Review evaluations of presentations with project committee.
- ☐ Optional: Time management diagrams are discussed every 2 weeks with project committee.

### **May**

- ☐ Identify pharmacy journal the research topic is most applicable to submit. Find and review standards for publications including formatting and content. Discuss with project committee.
- ☐ Prepare final manuscript of research project. The manuscript must be suitable for submission for publication in pharmacy journal selected.
- ☐ Optional: Time management diagrams are discussed every 2 weeks with project committee.

### **June**

- ☐ Submit written manuscript to resident committee on **JUNE 1** along with selected journal requirements.
- ☐ Once finalized, submit manuscript to journal
- ☐ Gather final versions of all components of the research project and include in electronic portfolio as requirement for graduation
- ☐ Obtain final approvals from RPD/RPC that all requirements have been met.

Additional resources to complete the research project may be found at

<https://www.ashp.org/Pharmacy-Practice/Resource-Centers/Research-Resource-Center>.

### **IRB Resources**

The Institutional Review Board (IRB) of Southern Illinois University is called the Springfield Committee for Research Involving Human Subjects (SCRIHS). It is an appropriately constituted administrative body established to protect the rights and welfare of human subjects recruited to participate in research activities conducted by healthcare professionals. The IRB also ensures institutional compliance with the ethical considerations in the Code of Federal Regulations and the ICH Harmonized Tripartite Guidelines for Good Clinical Practice. This happens largely by initial and continuing review of research protocols at the institution. The IRB review of the informed consent is an important part for purposes including, but not limited to, readability, completeness, and appropriate updating to inform subjects of new information about the protocol that may affect them.

At SIU, the IRB meets monthly. The Code of Federal Regulations mandates a specific composition of members for each IRB. There must be at least five members, both men and women must be included, at least one member must be non-scientific, and at least one member must not be affiliated with the institution. SIU further expands on these requirements so that the membership of the IRB is qualified to review the research submitted. There are fifteen members, three of whom are physicians, two who are qualified to review social science research, one from the College of Law, one community member, and one member representing hospital administration.

*All human subjects research at SIU and SJS must be approved by the IRB prior to initiation of any study activity.* There are different types of review, depending on the type of research proposed (mostly based on the level of risk to human subjects). Some protocols require full or “quorum” review, which means that a quorum of the board must vote on it at a regular meeting. Other protocols might require only expedited review, which means that a single board member will review the protocol and either approve or disapprove it. Exempt research can be approved by appointed research committees of certain departments, including the Department of Pharmacy at SJS. Other projects that aren’t meant to produce generalizable information, present no risk to human subjects, and are generally considered either program evaluations or quality assurance may not be considered research at all. Each of these types of review requires different paperwork for submission. As a pharmacy resident, you will likely be required to submit a protocol to IRB.

Before conducting research, you will be required to complete training through CITI in Protection of Human Subjects, Conflicts of Interest, and Good Clinical Practice. Online courses can be found at <https://my.siumed.edu/my/> under the Research tab. Access to SCRIHS and the appropriate IRB application documents can be found at <https://siu.imedris.net/>.

### **Committee/Meeting Involvement**

To broaden the residency experience, residents are requested to attend a variety of meetings throughout the year. These may be departmental meetings, administrative staff meetings, committee meetings, or clinical meetings. In most cases, the preceptor will assign meeting attendance at the beginning of the month. In other cases, the resident will be requested to attend a specific meeting by another preceptor in order to broaden the resident’s educational experience or assist with the development of a project. Meeting times and locations should be confirmed at the beginning of each learning experience.

The following meetings are mandatory for all residents at HSHS St. John's Hospital:

- **Resident Check-in Meetings** are held monthly with the RPD and/or RPC. These meetings serve to keep the residents informed regarding progress and developments in the program, to serve as a forum for discussion of leadership and clinical topics, and to broaden the resident's knowledge of professional issues. General feedback from preceptors, pharmacists, RAC, and technicians that is relevant will also be discussed. This meeting is also held to identify and address any potential problems that may be occurring.
- **Pharmacy Noon Conference** is held weekly on Mondays. This clinical meeting is led by residents, students and/or pharmacists who present a discussion of interesting patient cases, journal articles, or updates on disease states or drug management. This rotates between the two acute care hospitals in Springfield so that residents are exposed to other trainees regularly.
- **Departmental Meetings** are held once every few months. The purpose of these meetings is to inform the pharmacy staff of developments occurring within the system, hospital, and department.
- **Department Huddles** are held twice weekly. Residents are expected to attend and present medication safety or educational pearls updates.
- **Pharmacy and Therapeutics (P&T) Committee** is held monthly either at the local or system level. Residents are expected to attend as well as presenting information or projects for committee review. Any documents prepared for this meeting must follow specific formatting and examples will be provided. PGY1 residents will alternate taking minutes at both the local and system meetings.

PGY-2 ID residents are expected to attend the following additional meetings:

- **Infectious Diseases Conferences** include weekly ID case conference/journal club and ID topics presented at SIU SOM Grand Rounds, as applicable. The RPD and resident will discuss each month which sessions should be prioritized if on a rotation other than infectious diseases or antimicrobial stewardship. The resident is expected to present one journal club each month at the ID case conference/journal club as scheduled.
- **Infection Prevention & Infection Control (IP/IC)** meetings are held quarterly. The purpose of the committee is to review nosocomial infection rates and implement prevention strategies.
- **Antimicrobial Stewardship** meets every other month to analyze all requests for additions, deletions, and changes to the anti-infective formulary; policies and protocols; data tracking and reporting; and the overall hospital antibiotic stewardship program. The resident is responsible for taking minutes and presenting agenda items as assigned.
- **Subject Matter Expert Antimicrobial Stewardship** is a subcommittee of System PTCSC. This committee meets every other month to discuss system-wide improvements in antimicrobial use. The resident is responsible for taking minutes at each meeting and presenting agenda items as assigned.

If a resident is unable to attend any of these meetings, they should notify the RPD/ RPC by email ***before*** the meeting convenes.

### **Travel Reimbursement**

The Department of Pharmacy will reimburse travel expenses to required meetings. This includes meeting registration, travel, hotel, and meals. It is the residents' responsibility to turn in the appropriate forms and receipts for reimbursement. Forms can be found at <https://sscintranet.hshs.org/getattachment/a0ef7749-a41a-4ba3-bfbb-ace10924f3c8/Expense-Report-Procedures.aspx>.

The Department of Pharmacy will reimburse for hotel accommodations. If the resident elects to room with someone outside of the Department of Pharmacy, the department will reimburse the resident for half of the room rate. If the resident rooms with a fellow resident, additional friends and family are not allowed to share the room. Registration reimbursement is based on early-bird registration fees. Meals will be reimbursed with two exceptions. If the conference/hotel provides a meal and the resident chooses to purchase food instead, the resident will not be reimbursed for that meal. The resident will also not be reimbursed for a meal if alcohol is included in the bill or on the receipt.

To be reimbursed, prior authorization must be granted before making travel arrangements. Travel grants are also available from certain organizations for different meetings.

## **PGY1 – Pharmacy Practice Residency**

### **Program Overview**

The PGY1 Pharmacy Residency at HSHS St. John's Hospital provides the resident with the skills and knowledge required to become a competent pharmacy practitioner.

The program is a 52 week, postgraduate training experience composed of four major elements:

- Acute care
- Ambulatory care
- Clinical Services
- Practice Management

The specific program for each resident varies based upon their goals, interests, and previous experience. However, all residents are required to complete experiences in core subject areas considered to be essential to the pharmacy practitioner. A broad range of elective experiences are available to permit the resident flexibility in pursuing individual goals.

Additional learning experiences aimed at producing a well-rounded pharmacist include the development and completion of a major research project related to pharmacy practice, development and presentation of a continuing education topic, development of oral and written communication skills, patient education, participation in various departmental administrative committees, and practice in various pharmacy areas throughout the institution. Upon completion of the program, trainees are awarded a Certificate of Completion.

The resident will be introduced to the location of hospital and department specific policies and procedures during the initial orientation month. The resident is expected to know how to locate, interpret, and use paper and online guidelines, policies/procedures from the pharmacy common drive, Ellucid, and pharmacy webpage throughout their residency year. It is important the resident review and abide by policies set forth by the Colleague Handbook.

### **Educational Outcomes for the Residency Program**

Required PGY1 Competency Areas, Goals, and Objectives

- R1. Patient Care
- R2. Practice Advancement
- R3. Leadership
- R4. Teaching and Education

Residents are expected to review the PGY1 documents and understand the competency areas, goals, and objectives (CAGO) set forth by ASHP.

<https://www.ashp.org/Professional-Development/Residency-Information/Residency-Program-Resources/Residency-Accreditation/PGY1-Competency-Areas>

### **Requirements for Graduation**

- Successful completion of all assigned Learning Experiences
  - This includes completion of all projects and presentations assigned as part of each learning experience
- Achievement of program objectives as demonstrated by designation of ACHR on  $\geq 80\%$  of the assigned objectives for this program
- Satisfactory completion of at least one Medication Use Evaluation, drug class review, and quality improvement project
- Successful completion of a Major Project
  - Presentation of project poster at the ASHP Midyear Clinical Meeting
  - Oral presentation of project results at a regional pharmacy residency conference
  - Completion of formal manuscript for research project and final approval of manuscript by project mentors and RPD

- ☐ Successful completion of all teaching requirements of the SIUE teaching certificate
- ☐ Presentation of ACPE-Accredited CE presentation at a local ICHP Sangamiss meeting
- ☐ Submission of all PharmAcademic evaluations
- ☐ Minimum of 45 staffing shifts
- ☐ Completion of 52-week work commitment

**Successful completion of these items, signed off by the RPD in the Resident Development Plan, will result in the resident being awarded a Certificate of Completion.**

### Learning Experiences Offered

<b>Required Learning Experiences (1 month)</b>
Orientation
Antimicrobial Stewardship <sup>1</sup>
Continuing Education Lecture
Critical Care
Infectious Disease Consult <sup>1</sup>
Internal Medicine
Pediatric Medicine
Pharmacy Leadership
Transitions of Care
<b>Required Longitudinal Learning Experiences</b>
Ambulatory Care (4 months; 1 day/week)
Drug Information (11 months)
Medication Safety and Quality (11 months)
Pharmacy Practice (11 months)
Major Project (11 months)
Teaching Certificate (11 months)
<b>Elective Learning Experiences (1 month)<sup>2</sup></b>
Advanced Antimicrobial Stewardship
Advanced Critical Care
Advanced Emergency Medicine
Advanced Pediatric Medicine
Cardiology
Emergency Medicine
Neonatal Critical Care
Trauma

1. Residents may choose between Antimicrobial Stewardship or Infectious Diseases Consult as their required ID learning experience; the other may be taken as an elective if desired
2. Program leadership will do their best to accommodate requests for elective rotations. However, elective learning experiences may not always be available and will depend on preceptor availability, resident schedules, and other variables.



## **Pharmacy Practice Component (Staffing)**

Each resident will be required to complete a pharmacy practice component of the residency program. Although often referred to as “staffing” this practice component is another learning opportunity within the framework of the residency program. This experience is crucial to the development of professional practice skills and the development of pharmacy practice distribution skills. The resident will gain proficiency in distribution skills, the incorporation of clinical services, development of personnel management skills, and develop insight into the operations (policies and procedures) of acute care facilities. The guidelines for the Pharmacy Practice component are as follows:

- Each resident is expected to practice as a pharmacist throughout the residency year.
- Scheduling
  - Staffing will be assigned as every third weekend and two evening shifts per month.
  - As part of the professional staff of the department, residents are expected to assist with holiday coverage during the residency year. Residents will be expected to cover one winter holiday shift (Thanksgiving day, Christmas day, New Year’s day) and one summer holiday shift (Memorial day, Labor day) during the residency year. Residents will be asked to assign holidays amongst themselves.
    - Residents are allowed to switch holidays amongst themselves with approval from the RPD/RPC. The Pharmacy Manager will decide the final day and shift for major and minor holidays.
  -
- Residents are exempt from the practice component during their orientation learning experience.

Evaluations of the resident’s performance in this role will be completed by Pharmacy Practice preceptor assigned in PharmAcademic as part of the Pharmacy Practice learning experience. Feedback will be elicited from several members of the pharmacy department to evaluate all aspects of the resident’s skill set.

## **Teaching Requirements**

Residents at HSHS St. John’s Hospital will have teaching responsibilities at the Southern Illinois University Edwardsville School (SIUE) of Pharmacy through the completion of the SIUE Teaching Certificate Program. The resident will have a choice of various teaching experiences over the course of the year. Residents may be involved in facilitating group discussions, participating in practice laboratory, and evaluating students in integrated patient management modules. Teaching sessions usually range from 2-3 hours. Teaching assignments will be discussed during the orientation period at “bootcamp” and assigned during the course of the year from SIUE faculty. Furthermore, the resident may have some precepting and mentoring responsibilities for entry-level pharmacy students on experiential rotations.

The residency program will provide the pharmacy resident opportunities to develop, enhance and refine their teaching skills through:

- Participation in teaching selected topics in a didactic course offered by the SIUE College of Pharmacy
- Precepting PharmD students from participating Colleges of Pharmacy affiliated with HSHS St. John's Hospital during their clinical experiences and in ambulatory care clinics
- In-service presentations to pharmacy staff, nursing, and other health care professionals
- Interdisciplinary rounding on specific services

### **The Four Preceptor Roles**

<b>Preceptor's Role</b>	<b>Definition</b>	<b>Example</b>
Direct Instruction	Ensuring that the resident has the required background information before applying a skill.	Assigning the resident to read articles or chapters on a disease state and therapies (e.g., transplant pharmacotherapy) before learning to design medication regimens for patients with that condition.
Modeling	Preceptor demonstration of thinking strategies by "thinking out loud" while performing tasks the resident needs to learn so resident can hear the thought process.	Preceptor "thinking out loud" while solving patient cases as the resident observes and listens.
Coaching	Resident demonstration of thinking strategies by "thinking out loud" while performing tasks; receives feedback from the preceptor.	Resident "thinking out loud" while solving patient cases, while receiving feedback from the preceptor.
Facilitating	Allowing a resident to function independently while the preceptor remains available for questions as needed.	Preceptor lets the resident know how to reach him/her while the resident sees patients independently, meeting to debrief afterward.

### **Professional Society Involvement**

Residents completing the program at HSHS St. John's Hospital are expected to develop and maintain involvement in professional society activities on local, state, and national levels. Involvement is critical to the development of the resident and the achievement of professional and personal goals.

Residents are expected to actively participate in ICHP, ASHP, or other nationally recognized societies of their choice. Activities could include attendance at meetings, presenting topics at professional sessions, serving on committees, and volunteering for service to the society.

Funding for attendance at the ASHP Annual Meeting, or other major meetings, is contingent upon acceptance of a presentation or other service-related activities and funding availability.

Typical meetings residents attend annually:

- ICHP Annual Meeting – to participate (possibly present) & recruit at showcase
- ASHP Annual Meeting – to present ongoing research project & recruit at showcase
- Great Lakes Residency Conference or Illinois Pharmacy Resident Conference – to present final research projects

A different pharmacy meeting may be attended by a resident upon RPD/RPC approval for relevance and adaptation of schedule.

### **Lead Resident**

The purpose of the Lead Resident role is to serve as the liaison between residents, preceptors, and the Department of Pharmacy and to coordinate resident activities. This position and subsequent responsibilities will rotate on a monthly basis.

### **Responsibilities**

- Serve as the point person to facilitate and clarify issues and policies regarding the Pharmacy Residency Program at HSHS St. John's Hospital
- On the first day of each rotation, provide the resident rotation schedule and any pertinent information to the entire pharmacy department via email
- E-mail the Pharmacy Department each Friday with list of presenters and presentation items for Noon Conference the following Monday
- Work with Administrative Assistant to coordinate scheduling and room reservations in advance. If virtual platforms are being used, they will assist in set-up.
- Represent the Pharmacy Residency Program at all relevant Department of Pharmacy meetings and conferences. Prepare and distribute the minutes for the required meetings, as applicable.
- Respond to all codes during rotation hours unless specifically directed otherwise by preceptor

### **Specific Responsibilities by Month**

- August
  - Coordinate resident team building event

- Coordinate volunteer activity event
- September
  - Plan travel and maintain accountability for ICHP Annual Meeting
  - Bring materials for showcase to meeting
- November
  - Coordinate ASHP Midyear Clinical Meeting
- December
  - Coordinate showcase set-up at Midyear
- January
  - Assist with development and planning for residency program interviews
  - Distribute information concerning the regional residency research conference to residents and preceptors
- February
  - Schedule lunch, tour, and interview groups for resident interviews
  - Assemble interview packets for preceptors
- March
  - Coordinate Great Lakes/ILPRC
- May – June
  - Address incoming residents' questions/concerns

*This is not an all-inclusive list, but meant to serve as an example of activities performed by the lead reside*

### Code Blue Response

Code attendance is an important part of pharmacy residency training. The ability to manage emergent situations is a critical part of practicing as a clinical pharmacist in a hospital setting. Responding to and participating in codes within the hospital is the best way to achieve proficiency at this skill and this should be encouraged.

The lead resident each month will be designated the code blue response resident and will be responsible for responding to all codes during rotation hours unless otherwise specified by their current preceptor. During non-rotation hours (ie. staffing, weekends) the lead resident is encouraged to attend codes when able, and when doing so will not negatively affect pharmacy operations.

Unfortunately, due to the public announcement of codes, there are frequently more people present than are needed to effectively manage the situation. This can quickly become a problem and may interfere with the provision of care. Therefore, to encourage resident attendance at codes in a way that will not result in an excessive number of learners present, the following hierarchy has been developed to allow preceptors and residents to rapidly determine the roles of all pharmacy learners present. *Code blues in the Emergency Department are excluded from this policy.*

1. ICU Resident if code is in an ICU

2. Peds Resident if code is a pediatric patient
3. Lead Resident Assigned to Codes
4. ICU/ED Resident if code is not in an ICU
5. Resident rotating on the unit if not an ICU
6. Residents who arrive at code but do not meet above criteria
7. Students rotating in the involved unit
8. Students not rotating in the involved unit

Using hierarchy above, residents are expected to delineate themselves and any students present into appropriate roles using the criteria below at the final discretion of the preceptors present. Note that this is not in order of arrival at code, as learners higher up on the hierarchy arrive, they are to replace those below them. Also of note, the pharmacist/preceptors present at the code may override these criteria based upon their professional assessment of the situation and the needs of the learners.

1. Primary learner
  - at crash cart with primary preceptor
  - responsible for code documentation (iVent)
2. Secondary learner
  - with secondary preceptor
  - If no secondary preceptor present, this role is up to the discretion of primary pharmacist
3. Tertiary learner
  - Outside room unless instructed otherwise by primary/secondary preceptor
4. Tertiary learner
  - Outside room unless instructed otherwise by primary/secondary preceptor
5. Send back to rotation, too many learners present.
  - May be overridden at discretion of primary/secondary preceptor

## **On-Call Program**

### **Goals**

To develop the residents' leadership skills and enhance the resident's practice responsibilities through fielding issues that affect the pharmacy department in real time. Knowledge of the clinical and operational aspects of the department paired with proactive communication are necessary for the resident to achieve success.

### **Responsibilities**

- To perform at-home call coverage. The resident is not expected to be on-site, aside from assigned weekend shift.
- To serve as administrative and operational support in the following manner:
  - Assist in obtaining medications needed urgently from other area hospitals
  - Placing orders for medications
  - Handle staff related issues (eg. call-ins)

- Troubleshooting pyxis issues
- Nonformulary approvals
- Submission of EPIC tickets

### **Coverage**

Starting in January, on the weekend they are scheduled for staffing (every third weekend), each resident will be responsible for the above responsibilities from the hours of 0700-2300. This will include the hours they are normally scheduled to be at the hospital staffing, and all hours within the 0700-2300 window that may fall outside their scheduled shift. The resident is not required to be at the hospital for hours outside their scheduled shift.

### **Training**

Starting in October, the resident will begin working with the staff pharmacists during their scheduled weekends to learn how to triage and address issues that may arise during weekend shifts. They will assist in escalating these issues to the leader on call and discuss methods to manage these issues with the leadership on call as they arise. Residents will also debrief weekend issues with the pharmacy leadership and/or the RPD on Monday as needed to ensure resident has appropriate opportunity to learn how to manage them going forward. From October 1<sup>st</sup> - December 31<sup>st</sup> the resident will not be expected to perform any duties outside of normally scheduled in-house staffing hours.

### **Level of Supervision**

Once the formal on-call program begins in January the resident will have support from the pharmacy leader on-call at all times. The resident will communicate with the pharmacy leader on-call as needed to complete duties and to learn methods of approaching and managing issues that may arise. In addition to the pharmacy leader on-call, the resident is encouraged to utilize experienced staff pharmacists who may be present during staffing hours to assist in triaging and managing issues.

### **Resources**

- Process & Procedures Folder on the I: drive – Pharmacy → Common → Process and Procedures contains several troubleshooting documents for reference.
- Pharmacy leader-on-call: Communication preferences with each leader on-call will be provided before January 1<sup>st</sup>. This can also be found within the pharmacy schedule document.
- House supervisor: the resident will notify the house supervisor to triage any patient or nursing issues that are not pharmacy related.

### **Documentation**

- Proper hand-off to leadership will occur via e-mail by the following Monday at 0700 utilizing the SBAR format. This will include any pertinent information to describe the situation, pertinent actions taken to resolve the issue and any follow-up steps necessary that are still yet to be done.

- Residents will report the number of at home hours worked during their on-call shift via the Monday email to pharmacy leadership and RPD to allow for assessment of the impact of the on-call program to ensure there is no negative effect on resident's well-being.
- Participation in the call program will be assessed monthly at RAC where preceptors will discuss any negative impact on performance related to the on-call program. If significant negative impact on performance is noted, steps will be taken to identify root cause (ie. lots of late calls, excessive anxiety related to on-call program). The RPD, with input from RAC, will then develop a plan to address the issue.

#### **Evaluations**

- Evaluation of On-Call program will be completed by the preceptor(s) on PharmAcademic Pharmacy Practice (Service Component) longitudinal evaluation.

## **PGY2 - Infectious Diseases Residency**

### **Program Overview**

The PGY-2 Infectious Diseases (ID) Residency Program at HSHS St. John's Hospital (SJS) provides the resident with the knowledge, skills, and abilities required to become a competent clinical pharmacy specialist in infectious diseases.

The PGY-2 ID residency program is a fifty-two week, post-graduate training composed of ten required learning experiences. Additionally, the resident will complete two months of electives.

The program varies for each resident based upon their goals, interests, and previous experiences. In accordance with current ASHP standards, each Infectious Diseases resident is required to

complete all required rotations in core subject areas. Elective rotations are available to permit the resident flexibility in pursuing individual goals.

Additional learning experiences include the development and completion of practice-related research, development of oral and written communication skills through the completion of multiple projects and an ACPE Accredited Continuing Education Presentation, patient education, participation in various departmental committees, and practice in pharmacy areas throughout the institution. Upon successful completion of the Infectious Diseases pharmacy residency training program, trainees are awarded a Certificate of Completion.

### **Competency Areas**

Competency Area R1: Patient Care

Competency Area R2: Practice Advancement

Competency Area R3: Leadership

Competency Area R4: Teaching and Education

## **Requirements for Graduation**

### **Residency Program Requirements for Graduation**

- ☐ Completion of all assigned Learning Experiences
- ☐ Achievement of at least 80% of the required ASHP objectives for the residency program
- ☐ Completion of all ASHP-required PGY-2 Infectious Diseases Core Areas of Patient Care Experiences documented in PharmAcademic (see Appendix C)
- ☐ Completion of longitudinal research project:
  - ☐ Presentation at regional resident research conference, if accepted
  - ☐ Manuscript style document or written project report
- ☐ Satisfactory completion of at least one of each of the following projects:
  - ☐ Medication utilization evaluation (MUE)
  - ☐ Drug class review
  - ☐ Treatment guideline or protocol review
  - ☐ Quality Improvement project
- ☐ Poster presentation of either longitudinal research project or MUE at the ASHP Midyear Clinical Meeting, if accepted
- ☐ Completion of all requirements of SIUE Teaching Certificate Program, if applicable
- ☐ Completion of ACPE-Accredited Continuing Education (CE) presentation at a local ICHP meeting
- ☐ Submission of all PharmAcademic evaluations and documentation prior to exiting the program
- ☐ Completion of the 52-week work commitment

**Successful completion of these items, signed off by the RPD in the Resident Development Plan, will result in the resident being awarded a Certificate of Completion.**

## **Learning Experiences Offered**



## Orientation

All PGY-2 residents must complete the Orientation learning experience at the start of the residency program as directed by the RPD and PGY-1 and PGY-2 Residency Coordinators. All residents be oriented to the PGY-2 residency program policies and expectations and will complete provided orientation checklists.

For PGY-2 residents who did not complete their PGY-1 residency at SJS, Orientation will at minimum include overview of the hospital and pharmacy policies, pharmacist workflow and decentralized pharmacist roles, pharmacy distribution and operations, clinical pharmacist workflows and protocols, the clinical evening pharmacist staffing role and expectations, and the ED clinical pharmacist decentralized staffing role and expectations.

PGY-2 residents who did complete their PGY-1 residency at SJS will have an altered Orientation experience that will not require a review of pharmacist workflow and decentralized pharmacist roles, pharmacy distribution and operations training, or clinical pharmacist workflows and protocols, as the resident is expected to retain this knowledge from their experiences in the PGY-1 residency program. Orientation will instead consist of, at a minimum, training in the evening clinical pharmacist staffing role in the central pharmacy, training in the ED clinical pharmacist decentralized staffing role, and residency program structure and expectations.

## Learning Experience Schedule

Learning experiences will be scheduled according to resident and preceptor preferences and schedule feasibility and to optimize resident learning and achievement of program goals and objectives. It is highly encouraged to complete Infectious Disease Consult I and Antimicrobial Stewardship I in the first half of the residency year.

PGY-2 ID Residency Learning Experiences
REQUIRED
Orientation (1 month)
Antimicrobial Stewardship I (1 month)
Antimicrobial Stewardship II (1 month)
Antimicrobial Stewardship III (1 month)
Critical Care (1 month)
Infectious Disease Consult I (1 month)
Infectious Disease Consult II (1 month)
Infectious Disease Consult III (1 month)
Microbiology (2 weeks)
Pediatric Infectious Diseases (1 month)
ELECTIVE
Academia (1 month)
Infection Prevention and Control (2 weeks)
Pediatric Infectious Disease II (1 month)
Teaching Certificate Program (Longitudinal)
Wound Care Clinic (2 weeks)

<b>LONGITUDINAL</b>
Infectious Disease Ambulatory Care
Clinical Staffing
Continuing Education Lecture
Research Project

### **Pharmacy Practice Component (Clinical Staffing)**

The residency program has an integrated staffing service commitment designed to assure that the resident can function as a well-rounded pharmacist. To achieve this objective, the resident will be scheduled to staff in the emergency department two weekend days per month on average starting after orientation (expectation: minimum of 18 ED staffing days throughout the residency year). The resident will also work two evening clinical staffing shifts in the central pharmacy per month on average as the evening clinical pharmacist (expectation: minimum of 18 evening clinical staffing shifts throughout the residency year). In addition, the resident will work one summer and one winter holiday. Winter holidays include Thanksgiving, Christmas, or New Year's Day; Summer holidays include Labor Day or Memorial Day. The residency program complies with the duty hour standards of the American Society of Health-System Pharmacists (ASHP).

Orientation to the ED staffing experience will occur during the Orientation Learning Experience. The resident will be responsible for performing all of the required duties of the clinical pharmacists who work in the ED. Each shift starts at 0700 and ends at 1930. The resident will be responsible for order verification, intervention documentation, medication procurement for all ED patients, and review of cultures for patients discharged from the ED. Additional clinical duties include but are not limited to advanced cardiac life support, stat stroke, acute MI, trauma, severe sepsis/septic shock, and rapid sequence intubation.

Orientation to the evening clinical staffing experience will occur during the Orientation Learning Experience. The resident will be responsible for performing all of the required duties of the clinical pharmacists who staff in central pharmacy in the evening. Each shift starts at 1500 and ends around 2230. The resident will be responsible mainly for pharmacy clinical consults related to vancomycin, aminoglycosides, and warfarin. The resident also will assist in answering drug information questions and order verification.

### **Teaching Responsibilities**

Upon successful completion of the PGY-2 ID Pharmacy Residency program, the resident will have developed competency in teaching and training healthcare professionals, pharmacy students, and patients.

#### **Required Involvement**

##### **PGY-1 Pharmacy Resident and APPE Pharmacy Student Precepting**

The PGY-2 ID resident will have responsibilities as a co-preceptor for PGY-1 residents and APPE Students who are on the same rotation. PGY-1 residents are required to take either the

Antimicrobial Stewardship or Infectious Disease Consult Learning Experience, with the option to take the other as an elective. APPE students also have the option to take an infectious diseases elective rotation. Layered learning will be instituted when multiple learners are completing the same learning experience. The PGY-2 resident will be expected to act as co-preceptor to the other learners and will assist the primary preceptor in completing evaluations and leading educational activities.

#### Physician/Provider Education

The PGY-2 ID resident is expected to attend and present journal clubs related to relevant ID topics during the ID Case conference meetings. These meetings occur weekly on Tuesdays at noon. The resident is expected to present once monthly when possible/as scheduled starting after orientation (minimum of 5 journal clubs).

#### Patient Education

Training in patient education skills will be satisfied primarily through direct patient counseling in the Infectious Disease Ambulatory Care learning experience. These experiences will involve discussions with patients about disease and drug therapy, monitoring and adjusting drug therapy regimens, and helping patients maximize medication adherence. The resident will also have the opportunity to educate hospital inpatients during acute care rotations where applicable.

#### **Optional Involvement**

##### Didactic Lectures

The PGY-2 ID resident will have the option to present up to two academic lectures during the year for SIUe School of Pharmacy (required if Academia elective is selected). These will occur in the therapeutics course (spring Infectious Diseases module). Additional teaching opportunities (lectures, group discussions, case presentations, etc.) can be provided during the Infectious Disease Consult rotations if desired. If applicable, the resident is also responsible for any review materials, practice cases, and test questions associated with their lecture. The topics will be determined by the preceptor and applicable faculty member with input from the resident. The resident must submit their materials to the faculty member two weeks in advance of the lecture date.

Several opportunities exist throughout the year to present education materials to various physician groups during their monthly meetings. These usually consist of a 10 – 20 minute presentation discussing new literature or Antimicrobial Stewardship principles. Either the Learning Experience Preceptor or RPD will serve as mentor for these presentations. Presentation materials will be due to the preceptor/RPD at least one week in advance of the meeting date.

##### Teaching Certificate Program

Residents who have *not* completed a Teaching Certificate or similar program during their PGY-1 residency will be required to complete this program. It is optional for those who have already completed a Teaching Certificate.

The Teaching Certificate Program is designed to introduce residents to academic literature, contemporary pharmacy profession education, teaching styles, and philosophies. The goal of this

program is to provide a forum for program participants to gain knowledge of proven and successful education techniques and to demonstrate experience and accomplishment in these areas. Through didactic participation, completion of formal teaching experiences, and the development of a teaching portfolio, participants can document their participation and experiences. Each participant who completes all program requirements will be awarded a certificate at the conclusion of the year. The certificate will be awarded on behalf of the Southern Illinois University Edwardsville School of Pharmacy. Although a schedule of monthly deadlines is in place to keep pace with the certificate offerings, it is recommended that the resident complete as many relevant modules as possible early in the year prior to teaching.

### **Professional Society Involvement**

Residents completing the program at HSHS St. John's Hospital are expected to develop and maintain an involvement in professional society activities on a local, state, and national level. Involvement is critical to development of the resident and achievement of professional goals.

As part of the resident's professional development, travel to and attendance at meetings on a regional and national level is expected. Annual meetings PGY-2 ID residents generally attend include:

- SIDP Business Meeting & ID Week
- ASHP Midyear Clinical Meeting – ongoing research project or MUE poster presentation, recruiting, and networking
- Regional Pharmacy Residency Conference – presentation of final research project

#### **Illinois Council of Health-System Pharmacists (ICHP)**

Residents should plan to join and assume an active role in the Illinois Society of Health-System Pharmacists. Activities may include attending the ICHP Annual Meeting held in the Chicagoland area, the Spring Meeting held in downstate Illinois or the St. Louis area, or any local meetings held in the Springfield, IL area, and volunteering for service to the society.

#### **Society of Infectious Diseases Pharmacists (SIDP)**

The PGY2 infectious disease resident is encouraged to join this national organization that is dedicated to serving the needs infectious disease pharmacist specialists and trainees.

Involvement with a society committee and attendance at the annual SIDP business meeting are also encouraged.

#### **Infectious Diseases Society of America (IDSA)**

The resident is encouraged to join this national organization dedicated to physicians, scientists, and other healthcare professionals who specialize in infectious diseases. Benefits include discount registration for IDWeek and access to *Clinical Infectious Diseases Journal*.

#### **American Society of Health-System Pharmacists (ASHP)**

Residents should plan to join and assume an active role in the American Society of Health-System Pharmacists. Activities include attendance at the Midyear Clinical Meeting and volunteering for service to the society. Residents will present a poster at the Midyear Clinical Meeting as well as

assist with resident recruitment.

Residents are encouraged to join other societies and practice groups that support their professional needs and interests.

## **Appendix A**

### **Your Responsibilities as a Pharmacy Resident**

**Clifton J. Latiolais**

Much has been said and written about the obligations and responsibilities required of the Preceptor, the Pharmacy Department and its staff and the hospital for teaching you, the pharmacy resident. But what about your responsibilities as a resident? Do you have any? If so, what are they? Let us seek the answers.

Before going further, you must know what the word “responsibility” means. To me, the best definition is “a particular burden of obligation upon who is responsible.”<sup>1</sup>

#### **To Your Hospital**

Learning is most efficient when the learner is actively involved in the learning process. That is why you are in the residency program, i.e., to learn through doing. You, as a pharmacy resident, enter into a contract with the hospital to render certain services in return for a learning experience. Because you are in a hospital training program, you are expected to give the hospital services in return for the stipend received. To believe that you are there only to learn is not true. The hospital has provided the training ground and is entitled to receive a fair share of your services as its reward.

Every hospital has its own policies, rules and regulations. These have been drafted by the trustees and are binding to every employee. You, as a resident, being an employee of the hospital, are expected to familiarize yourself and abide by them. Any infraction, such as smoking in a prohibited area, is reason enough for disciplinary action. You should also respect the hospital’s property by carefully using equipment and fixtures.

The hospital expects you, a graduate pharmacist, to practice within the legal framework of your profession. You must strictly adhere to all federal, state and local laws. The hospital may assume liability for a breach of any pharmacy standard, law or regulation.

You should show your sincere loyalty to the hospital. This can be done by supporting its policies, rules and regulations, both inside and outside of the building. Criticizing the hospital is being disloyal. Any criticizing should be done privately in the confines of the department head’s or other administrative officer’s office.

## **To Your Profession**

There should not be any question about giving your wholehearted support to the pharmacy profession. This can be done best by actively supporting the American Pharmaceutical Association and American Society of Hospital Pharmacists as a minimum. This, of course, can be done by becoming a member of both groups. You should also belong to both the state and

local pharmacy and hospital pharmacy organizations. You might also join other pharmaceutical groups of a specialized area of interest.

Becoming a member is not enough. To receive the full worth of belonging, you should attend the meetings of these organizations. If there is an opportunity, you might even participate on one of the programs. You should not have to be prodded to attend these meetings. You have the responsibility of fulfilling this obligation.

To many graduated residents lose their interest and become lackadaisical after receiving their certificate. Promote hospital pharmacy after completing your residency. There are several ways of doing this. Those who have an ability to write should do so, not for the sake of publishing an article, but to contribute to the worth-while literature of hospital pharmacy conduct scientific or administrative research wherever you go. A profession dies without research. Recruit capable pharmacy students to hospital pharmacy. Remember, they will be our leaders of tomorrow.

You will soon realize that you are slowly forgetting what you learned in college. This can be solved by your own continuing education program. One way is to attend professional meetings and local seminars. You are in a position where, if a meeting is scheduled during the daytime, you can take leave from the hospital and attend the meeting.

Perhaps a new development in the nursing field will directly affect the Pharmacy Department. Therefore, you should learn and keep abreast of new trends in the hospital field. This means that you must pursue not only the pharmacy, but the hospital literature as well. This can be done best by subscribing to some of the pharmacy and hospital journals. If this is too expensive, the pharmacy should have these journals available. If there is something lacking, then the hospital library will have them.

Along with keeping abreast of new trends in hospital pharmacy practice, don't forget drugs. As a pharmacist, you are responsible for keeping current with trends in drug therapy. Providing drug information daily means that you must know about new drug information or where you can obtain it. By the same token, being aware of drugs removed from the market is just as important.

You are professional practitioners. Maintain the highest standards of daily prescription practice. Too many times I see shortcuts or slipshoddiness. These are not becoming of a

professional. You owe it to yourself and the patients to dispense and compound with the highest degree of accuracy attainable.

It is your professional responsibility to observe both moral and ethical codes. You should show that your conduct is above reproach and has met the qualities of a good pharmacist. You have the moral obligation to see that other pharmacists do not practice under the influence of alcohol, narcotics, or other stimulants and depressants. Wolkovich defines ethics and “the etiquette, rules or standards of ideal personal or professional conduct.”<sup>2</sup>

The Alpha’s Code of Ethics says, in part, “Accordingly, the pharmacist recognizes his responsibility to the state and to the community for their well-being, and fulfills his professional obligations honorably.”<sup>3</sup>

Just because you earned a degree by completing five years in a college of pharmacy does not mean you automatically deserve respect from both professional and non-professional people alike. You must earn respect. Earn it through your daily interactions with people by the way you conduct yourself as a professional. People do not respect a B.S. or Pharm.D. degree, but the person holding it.

You should be loyal to your colleagues. If a question is raised doubting the integrity of a fellow pharmacist, give him the benefit of the doubt. To openly criticize another pharmacist without his being able to defend himself is unjust.

### **To Your Department**

Looking at an organizational chart, you find yourself directly responsible to the Director of the pharmacy department. This is a unique position. Usually no one else is directly responsible to this person except his assistant. The time arises, through, that you are assigned to a certain area such as inpatient dispensing. In this event, you are now responsible to the Supervisor of inpatient dispensing. Theoretically, you still are responsible to the Director, but for practical purposes, your responsibility lies with the Supervisor.

Difficulties may arise from this. You may see some thing being done that you don’t agree with. The natural tendency might be to go immediately to the Director and inform him of it. A staff pharmacist has a more difficult time than you to bypass his Supervisor in attempting upward communication. The subordinate realized that if he does bypass his immediate Supervisor, he might jeopardize his whole future with him. This is not so for you because of your relationship with the Director. You should respect the chain of command, however. Wait until the next conference of other such time for a discussion.

Times arise when a certain area may be deluged with work or a pharmacist is sick. When this occurs, it is your duty to cheerfully come to the aid of the others. You may argue that the department should be able to get along without your services. This is true. But remember that many times you are working on projects not directly concerned with getting drugs to the patient. I could not willfully stand aside and watch other pharmacists toil and sweat because I had to

complete a survey on the use of germicide solutions in the hospital. If a job requires teamwork, do your fair share of the work.

You should be agreeable and help other people in the pharmacy. It is possible for an individual to be a good pharmacist, but be a disagreeable person. Agreeableness can be developed. One must think less of oneself and be interested in the feelings of other people. Where intradepartmental communication can be improved, you are in an ideal position to serve as a liaison between the director and the pharmacy staff. Sometimes the staff does not always fully understand the reasons why a change has been made such as in a new procedure. Due to your close relationship to both the Director and staff, you are in an ideal position to explain such things. The staff may be dissatisfied with something but hesitate to tell the Director about it. They may well tell you, however, and you can convey the staff's feelings to the Director.

Probably all the pharmacists on the staff have been practicing pharmacy much longer than you have. They have amassed a wealth of knowledge and experience during this time. They must be respected for this. A college of pharmacy is limited to what it can teach. Therefore, there is much to be learned after graduation. You may think you know more than many of the pharmacists, but a "know it all" attitude will not gain you anything. Age and experience count for something. It is probable that individuals of the older generation can offer profitable suggestions and advice, which you can use to your advantage.

### **To Your Preceptor**

The relationship between you and your Preceptors in today's residency program can be traced back to the classical apprenticeship of the medieval craft guilds. You have been told of the fascination of the work for the by and the mutual devotion of both the master and apprentice.

The Preceptors should be accorded all the loyalty and respect due to them. Although you are seeking advanced specialized training unlike an apprentice or intern, your Preceptor deserves these. They are the masters. Have faith in them. Perhaps they may do things that are not completely understood at the time. Have faith in them until they can explain their ways. Faith is a powerful attribute. It is easier to help one who has faith than it is if he is suspicious. I am not saying to extend blind loyalty, but you should give the intention of your preceptors the most favorable interpretation.

Learn to speak and write to your Preceptors. If you can learn to communicate and clearly understand them, you enhance your chances of a close relationship. Sometimes you discuss things of a private or semi-private nature. You must hold these in confidence. You are obliged to tell no one about such matters while other times you have the use discretion.

Having a close rapport with your Preceptor, you should be ready to accept any criticism, advice, or suggestion that they might offer. This works both ways. You have the responsibility of informing them, of anyway they might improve themselves or the department. Through this close relationship, the Preceptor and you can discuss things that would otherwise serve as a barrier between the two of you.



Your Preceptor is a busy and important individual. His/her time is valuable to the hospital. Respect this time. You should not bother them with trivialities. Speaking of time, if you feel you have not been in an area long enough to have fully grasped the subject, you have the responsibility of informing your preceptor of this. Not saying anything will only handicap you in the future.

Now to consider what responsibilities you owe to yourself. First of all, you are a professional. Don't forget it! Conduct yourself as only a professional would.

### **TO YOURSELF**

There are some qualities and attitudes for which you must assume responsibility.

#### **1. Attendance and Punctuality**

These go hand in hand. Regular attendance on time should become a habit. You have no more right to be two minutes late than you have to be two hours late. If you must turn in a report every three months, do so on the date due without someone reminding you.

#### **2. Personal Appearance**

You should look like a resident. Never use extremes in your attire. There should be a certain something about your appearance, which encourages confidence in your ability.

#### **3. Integrity of Character**

Positions of trust and responsibility can go only to those who are scrupulously honest. Careful observance of one's word and a code of personal honor are necessary to accomplishing any high endeavor.

#### **4. Desire to Cooperate**

Modern economic life results from men working together in voluntary and involuntary cooperation. We can only have real progress based upon joint endeavor.

#### **5. Diligence and Application**

This means consistency in purpose, attention to necessary details, and the ability to stick to a job until it is mastered.

#### **6. Improvement on Own Initiative**

Self-improvement is the development of all your faculties. Gibbon once said "Every person has two education...one he receives from others and, one more important, which he gives himself." If you aren't familiar with a drug, find out about it before, not after someone asks you a question.

#### 7. Enthusiasm

In the words of Emerson, "Nothing great was ever achieved without enthusiasm." Enthusiasm and the ability to arouse enthusiasm in others should be based on a sincere belief that there is a sound reason for enthusiasm. This enthusiasm is contagious so it can serve to inspire the other pharmacy staff members.

#### 8. Perform Duties Promptly and Cheerfully

Sometime or another you are faced with doing something you don't like to do. If you are assigned something, which may not be to your liking, you have a responsibility to do it promptly and cheerfully. Putting it off will only make matters worse and grumbling about it won't help either.

#### 9. Willingness to work

Belonging to a profession such as pharmacy, you must be ready to serve your fellow man whenever called upon, day or night. You may think it is possible to be a success working from 9 to 5. It isn't. How many real successful men do you personally know who work only eight hours a day? Think about it.

Don't think these are the only qualities and attitudes that are needed to make a good resident. This is not so. The above list contains the things that stand uppermost in my own mind. The next person would have his own list.

These, then, are your responsibilities as pharmacy residents. Take a moment and examine yourself. Are you deficient in any of the mentioned areas? You have the responsibility to cultivate them if you are to meet with the success you naturally aspire to.

The words of Keith Preston seem appropriate.

I am the captain of my soul; I rule it with stern joy;  
And yet I think I have more fun When I was a cabin boy.

#### References

1. Barnhart, Clarence L.: The American College Dictionary, text edition, Harper & Brothers Publisher, New York, p. 1034.
2. Wolkovich, William L.: Norms of Conduct for Pharmacists, The Colonial Press, Inc., Clinton, Mass., 1962, p. 18.
3. Anon.: J. Am. Pharm. Assoc., Pract. Ed. NS3:72 (Feb.) 1963.

# Appendix B

## PGY1 Residency Alumni

### 1992 – 1993

**Name:** Rick Bartlett, RPh  
**Research Project:** "Justification of a Hospital Pharmacy Satellite in the Emergency Room Setting"  
**Initial Position:** Retail/Consultant Pharmacist, Rushville, IL

**Name:** Michelle Mulcahy Smith, RPh, PharmD  
**Research Project:** "Development and Implementation of a Clinical Pharmacy Position in Oncology"  
**Initial Position:** Staff Pharmacist, St. John's Hospital

**Name:** Delores Smith, PharmD  
**Research Project:** "Multi-Disciplinary Task Force on the Monitoring, Evaluation, and Prevention of Medication Errors"  
**Initial Position:** Drug Information Specialist, St. Francis Hospital, Peoria, IL

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### 1993 – 1994

**Name:** Richard Jacobson, RPh  
**Research Project:** "Development of Policies and Procedures for the Implementation of Pharmacy-Prepared Sterile Products in a Class 100,000 Cleanroom"  
**Initial Position:** Staff Pharmacist, St. John's Hospital

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### 1994 – 1995

No Participant

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### 1995 – 1996

**Name:** Charis Lau  
**Research Project:** "Development of Home Infusion Services in Hospital Pharmacy"  
**Initial Position:** Unknown

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### 1996 – 1997

**Name:** Nancy Hall, PharmD  
**Research Project:** "Application of the JCAHO Medication Use Indicators at St. John's Hospital"  
**Initial Position:** Pharmacy Resident, St. John's Hospital

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### 1997 – 1998

**Name:** Nancy Hall, PharmD  
**Research Project:** "The Impact of a Multi-Disciplinary Team Approach on the Quality of Life of Patients with Congestive Heart Failure"  
**Initial Position:** Staff Pharmacist, St. John's Hospital

**1998 – 1999**

**Name:** Maren Danielson, PharmD  
**Research Project:** "Development and Implementation of a Palivizumab Clinic for High Risk Infants"  
**Initial Position:** Staff Pharmacist, Methodist Medical Center, Peoria, IL

**Name:** Scott Metzger, PharmD  
**Research Project:** "Developing a Pediatric Clinical pharmacist Position at St. John's Children's Hospital"  
**Initial Position:** Staff Pharmacist, St. Mary's Medical Center, Racine, WI

<b>2010 – 2011</b>		
<b>Name</b>	<b>Project</b>	<b>First Position</b>
Mary Mullin, PharmD Wingate College of Pharmacy	Evaluation of Inpatient warfarin management in a community hospital	Clinical Pharmacist St. John's Hospital Springfield, IL
Tracy Kimler, PharmD University of Illinois – Chicago	Association of hyperglycemia with clinical outcomes in hospitalized patients receiving enteral nutrition	Clinical Pharmacist St. Mary's Hospital Decatur, IL
<b>2011 – 2012</b>		
Amy Carlson, PharmD Southern Illinois University – Edwardsville	Filling the Gap: Asthma Education in Pediatrics	Clinical Pharmacist University of Kansas Kansas City, KS
Kristin Genzlinger, PharmD University of Arizona	Medication Reconciliation by pharmacists, pharmacy technicians, and pharmacy students at St. John's Hospital	Clinical Staff Pharmacist Yakima Regional Medical Center Yakima, WA
Patrick Schmees, PharmD Ohio Northern University	Outcomes Of An Extended-Infusion Piperacillin- Tazobactam Protocol Implementation In A Community Teaching Hospital Adult Intensive Care Unit	Clinical Pharmacist Memorial Hospital Belleville, IL
<b>2012 – 2013</b>		

Kendra Bowling, PharmD Saint Louis College of Pharmacy	Improving clinical quality measures for venous thromboembolism in a community hospital	Clinical/Staff Pharmacist Mercy Hospital Jefferson Crystal City, MO
Colleen Sheehan, PharmD Southern Illinois University – Edwardsville	Adult Immunization Impact Program	Manager of MTM services Walgreens Columbia, MO
Caitlynn Thomack, PharmD Saint Louis College of Pharmacy	Comparison of pharmacy student-led versus nurse-led medication reconciliation initiation at a large regional medical center	Emergency Medicine Pharmacist Tradition Medical Center Boca Raton, FL
<b>2013 – 2014</b>		
Alby Jacob, PharmD Northeastern University	Vancomycin versus daptomycin in MRSA with vancomycin MIC > 1 mcg/mL in skin and soft tissue infections	Clinical Pharmacist Yale-New Haven New Haven, CT
Mallory Rueter, PharmD St. Louis College of Pharmacy	Retrospective Analysis of Tranexamic Acid Outcomes in Total Knee Replacement, Total Hip Replacement and Hip Fracture Surgery	Clinical Informatics Pharmacist HSHS System Informatics Springfield, IL
Jena Cummins, PharmD Southern Illinois University – Edwardsville	Assessment of a pharmacy- driven warfarin dosing protocol comparing pharmacist to physician dosing in an institutional setting	Clinical/Staff Pharmacist HSHS St. Elizabeth's Hospital Bellville, IL

<b>2014 – 2015</b>		
Michael Cusumano, PharmD University of Washington	Melatonin for sleep following extubation in the pediatric intensive care unit.	Emergency Department Clinical Pharmacist HSHS St. John's Hospital Springfield , IL
Heather Malcom, PharmD Creighton University	Retrospective analysis of ascorbic acid on prevention of post-coronary artery bypass grafting atrial fibrillation	Clinical Pharmacist SSM DePaul Health Care St. Louis, MO
<b>2015 – 2016</b>		

Monica Allen, PharmD University of Toledo College of Pharmacy	Influence of antimicrobial stewardship efforts on treatment of uncomplicated skin and soft tissue infections in the emergency department	Clinical Pharmacist Genesys Health System Grand Blanc, MI
Jenna Ksiazkiewicz, PharmD Southern Illinois University – Edwardsville	Total versus adjusted body weight dosing of vancomycin in obese patients: a retrospective review of safety and efficacy	Clinical Pharmacist Unity Point Health- Proctor Peoria, IL
<b>2016 – 2017</b>		
Kyle Dillon, PharmD Southern Illinois University – Edwardsville	Impact of a nursing driven sedation protocol in mechanically ventilated intensive care unit patients	PGY-2 Critical Care Lakeland Regional Medical Center Lakeland, FL
Phillip Kilver, PharmD Southern Illinois University – Edwardsville	Impact of Pharmacy-Driven Education on Antibiotic Prescription Rates for Acute Uncomplicated Bronchitis in Emergency Department Patients	Critical Care Pharmacist John Peter Smith Hospital Fort Worth, TX
Bryant McNeely, PharmD Southern Illinois University – Edwardsville	Prospective Comparison of Medication Reconciliation Completed by Nurses versus Trained Pharmacy Technicians in the Emergency Department	Critical Care Clinical Pharmacist HSHS St. John's Hospital Springfield, IL
<b>2017 – 2018</b>		
Dalena Vo, PharmD Butler University	Evaluation of a Standardized Opioid Tolerant and Opioid Naïve Pain Management Order Set in Adult General Medicine Patients	Critical Care Clinical Pharmacy Specialist Indiana University- Methodist Hospital Indianapolis, IN
Jessica Lorenson, PharmD Southern Illinois University – Edwardsville	Stabilizing euglycemia in diabetic ketoacidosis: a retrospective comparison of full- versus reduced-rate insulin infusion	Clinical Pharmacist HSHS St. John's Hospital Springfield, IL
Michelle Chicoineau, PharmD St. Louis College of Pharmacy	Time to Antimicrobial De- escalation after Implementation of Cerebrospinal Fluid Polymerase Chain Reaction	Staff Pharmacist HSHS St. Joseph Hospital Breese/Highland, IL
<b>2018 – 2019</b>		

Meghan Fischer, PharmD Southern Illinois University – Edwardsville	Use of direct oral anticoagulants compared to warfarin in the obese population	Clinical Acute Care Pharmacist OSF St. Joseph Hospital Bloomington, IL
Dakota Huene, PharmD Southern Illinois University – Edwardsville	Incidence of Hospital-Acquired <i>Clostridioides difficile</i> Infection After Intervention by Infection Prevention and Antimicrobial Stewardship	Clinical Pharmacist CGH Medical Center Sterling, IL
Zibin Zhang, PharmD University of Illinois - Chicago	Evaluation of acid suppressive therapy appropriateness in adult non-critically ill patients	Emergency Department Clinical Pharmacist HSHS St. Johns Hospital Springfield, IL
<b>2019 – 2020</b>		
Niti Patel, PharmD Southern Illinois University – Edwardsville	Describing the Incidence of Hypoglycemic Events with a Novel Guideline-Aligned Diabetic Ketoacidosis Protocol: A Single Cohort Study	Staff Pharmacist HSHS St. John’s Hospital Springfield, IL
Shannon Stuart, PharmD Belmont University	Impact of Provider Education by a Pharmacist on Antibiotic Prescription Trends for Patients with Uncomplicated Diverticulitis Discharged from the Emergency Department	Clinical Acute Care Pharmacist OSF St. Joseph Hospital Bloomington, IL
Erin Surbeck, PharmD Southern Illinois University – Edwardsville	Quality Improvement of a Pharmacist-led Medication Reconciliation Program	Clinical Acute Care Pharmacist OSF St. Joseph Hospital Bloomington, IL
<b>2020 – 2021</b>		
Austin Dillon, PharmD Southern Illinois University – Edwardsville	Comparing Intravenous Heparin Infusion Monitoring Strategies in Obese Patients	Clinical Staff Pharmacist HSHS St. John’s Hospital Springfield, IL
Erica Ridley, PharmD University of Arkansas for Medical Sciences	Total Duration of Inpatient and Outpatient Antibiotic Therapy for Hospitalized Adults with Uncomplicated Community- Acquired Pneumonia	Clinical Pharmacist Memorial Medical Center Springfield, IL

Vincent Chau, PharmD Southern Illinois University – Edwardsville	Retrospective Evaluation of Pantoprazole Use in Gastrointestinal Hemorrhage	Clinical Pharmacist Blessing Hospital Quincy, IL
<b>2021 – 2022</b>		
Alina Viteri, PharmD Southern Illinois University – Edwardsville	Evaluating the Outcomes of Infectious Diseases Consultation on methicillin susceptible Staphylococcus aureus bacteremia	PGY-2 ID HSHS St. John’s Hospital Springfield, IL
Jary Carpenter-Branson, PharmD University of Health Sciences and Pharmacy in St. Louis	Impact of Midodrine on Facilitation of Vasopressor Weaning in Intensive Care Unit Patients	Pediatric Emergency Department Pharmacist Lee Health Fort Myers, FL
Laila Kuziez, PharmD University of Health Sciences and Pharmacy in St. Louis	Evaluating Safety, Efficacy and Usage of Remdesivir	PRN Clinical Staff Pharmacist HSHS St. John’s Hospital Springfield, IL
<b>2022 – 2023</b>		
Shin (Nana) Allison, PharmD Southern Illinois University – Edwardsville	Impact of Concurrent Pharmacist Review and Intervention on CMS SEP-1 Core Measure Compliance in the Emergency Department	Clinical Pharmacist Southeast Hospital Cape Girardeau, MO
Sara Neale, PharmD University of Health Sciences and Pharmacy in St. Louis	Anti-Xa vs. aPTT: Evaluation of Heparin Monitoring Strategies	Clinical Pharmacist HSHS St. John’s Hospital Springfield, IL
Cady Schleeper, PharmD University of Health Sciences and Pharmacy in St. Louis	Evaluation of a Meds to Beds Program in Pediatric Patients	Clinical Pharmacist HSHS St. John’s Hospital Springfield, IL
<b>2024 – 2025</b>		
Alexis McCarthy, PharmD Southern Illinois University – Edwardsville	Trauma and Thrombosis: Transforming VTE Prophylaxis Practices	PGY-2 Critical Care Lakeland Regional Health Lakeland, FL



Cozette Smith, PharmD University of Health Sciences and Pharmacy in St. Louis	Evaluation Of Heparin And The Incidence Of Invasive Interventions In Patients With Acute VTE And ACS	Clinical Pharmacist Memorial Medical Center Springfield, IL
Teagan Strom, PharmD Southern Illinois University – Edwardsville	To DRIP, or Not To DRIP: Evaluating DRIP Score and MDRO Risk Factors in Pneumonia Patients	Clinical Pharmacist SSM Good Samaritan Hospital Mt. Vernon, IL

## Appendix C

### **PGY-2 Infectious Diseases Core Areas of Patient Care Experiences**

Each experience must be documented in PharmAcademic as either patient care or non-patient care (i.e. topic discussion, journal club, case presentation, project) prior to the end of the year. The following chart dictates which experiences must be patient care and which can be non-patient care.

<b>Topic</b>	<b>Required (Patient Care)</b>	<b>Required (Non-Patient Care accepted)</b>
Bone and joint infections	X	
Cardiovascular infections	X	
Central nervous system infections	X	
Fever of unknown origin		X
Fungal infections	X	
Gastrointestinal infections	X	
Hepatitis B		X
Hepatitis C		X
HIV-infection and AIDS		X
Intra-abdominal infections	X	
Neutropenic fever	X	
Ophthalmologic infections		X
Opportunistic infections in immunocompromised hosts	X	
Parasitic infections		X
Reproductive organ infections		X
Respiratory infections: upper and lower	X	
Rickettsial infections		X
Sepsis	X	
Sexually transmitted diseases		X
Skin and soft tissue infections	X	
Travel medicine		X

Tuberculosis and other mycobacterial Infections		X
Urologic infections	X	
Viral infections	X	

## Appendix D

### PGY2 Infectious Diseases Residency Alumni

Resident and School	Project	First Position
<b>2012 – 2013</b>		
Punit Shah, PharmD, BCPS Butler University	Monitoring of Outpatient Parenteral Antimicrobial Therapy (OPAT) and Implementation of Clinical Pharmacy Services at a Community Infusion Unit	Clinical Pharmacy Specialist, Antimicrobial Utilization Review Cedars-Sinai Medical Center Los Angeles, CA
<b>2013 – 2014</b>		
Kelly Percival, PharmD, BCPS Drake University	Impact of an Antimicrobial Stewardship Intervention on Urinary Tract Infection Treatment in the Emergency Department	Clinical Assistant Professor, Infectious Diseases Specialist Drake University College of Pharmacy and Health Sciences, Mercy Medical Center Des Moines, IA
<b>2014 – 2015</b>		
Sara Jones, PharmD, BCPS (AQ-ID) Butler University	Comparison Of Outcomes In Patients Receiving A Beta-lactam Versus Vancomycin For Methicillin-susceptible <i>Staphylococcus aureus</i> Bacteremia	Clinical Pharmacy Specialist, Infectious Diseases Eastern Maine Medical Center Bangor, ME
<b>2015 – 2016</b>		
Natalie Tucker, PharmD, BCIDP Butler University	Outcomes of inpatient treatment for urinary tract infections with beta-lactam or fluoroquinolone antibiotics	Clinical Pharmacy Specialist, Antimicrobial Stewardship HSHS St. John's Hospital Springfield, IL
<b>2016 – 2017</b>		
Tyson Dietrich, PharmD South Dakota State University	Impact of provider education on methicillin-resistant <i>Staphylococcus aureus</i> (MRSA) nasal swabs and antibiotic de-escalation	Clinical Specialist – Infectious Diseases and Antimicrobial Stewardship Kingman Regional Medical Center Kingman, AZ

<b>2018 – 2019</b>		
Ilya Rybakov, PharmD Purdue University	Methicillin-resistant <i>Staphylococcus aureus</i> (MRSA) Nasal Screening to Streamline Antibiotic Therapy in Pediatric Pneumonia	OPAT Clinical Pharmacy Specialist WVU Hospital Morgantown, WV
<b>2019 – 2020</b>		
Jessica Seadler, PharmD Drake University	Evaluation of Local Pathogens and Management of Diabetic Foot Infections	Clinical Pharmacy Specialist, Antimicrobial Stewardship Dayton Children’s Hospital Dayton, OH
<b>2020 - 2021</b>		
Aakash Patel, PharmD Manchester University	One and Done?: Evaluating the Potential Benefits of Oritavancin	Clinical Generalist-ID Parkview Regional Medical Center Fort Wayne, IN
<b>2021 – 2022</b>		
Ryan Flynn, PharmD South Dakota State University	Clinical Outcomes of Vancomycin Area-Under-the- Curve Monitoring: A Quasi- Experimental Study	Antimicrobial Stewardship Program Clinical Pharmacist Monument Health Rapid City, SD
<b>2022 – 2023</b>		
Alina Viteri, PharmD Southern Illinois University – Edwardsville	Clinical Outcomes of Vancomycin Area-Under-the- Curve Monitoring: A Quasi- Experimental Study	Clinical Pharmacy Specialist, ID/AMS UAMS Little Rock, Arkansas
<b>2023 – 2024</b>		
Ryan Moran, PharmD Southern Illinois University – Edwardsville	Clinical Outcomes of Micafungin for Invasive Fungal Infections in the Obese and Nonobese	Clinical Pharmacist St. Louis University Hospital St. Louis, Mo
<b>2024 – 2025</b>		
Kendra Bourland, PharmD Southern Illinois University – Edwardsville	Efficacy of Nirsevimab versus Palivizumab for the Prevention of Respiratory Syncytial Virus- Related Hospitalizations	Infectious Disease Pharmacist MU Health Care-Univ Hospital Columbia, Mo

## **Appendix E**

### **ASHP Statements and Guidelines**

ASHP Statement on Leadership as a Professional Obligation: <https://www.ashp.org/-/media/assets/policy-guidelines/docs/statements-leadership-as-professional-obligation.ashx?la=en&hash=8075402CEF5D1D871442210DB608AEF6E50F23E3>

ASHP Statement on Professionalism: <https://www.ashp.org/-/media/assets/policy-guidelines/docs/statements-professionalism.ashx?la=en&hash=11A75F73FC7B9475B990B1D084EE919DCEF061AE>

ASHP Statement on the Pharmacy and Therapeutics Committee and the Formulary System:  
<https://www.ashp.org/-/media/assets/policy-guidelines/docs/statements-pharmacy-and-therapeutics-committee-and-formulary-system.ashx?la=en&hash=6F1F2992AD68E828FBE5F4B43C6E3F3EC46489F4>

ASHP Guidelines on the Pharmacy and Therapeutics Committee and the Formulary System:  
<https://www.ashp.org/-/media/assets/policy-guidelines/docs/guidelines-pharmacy-therapeutics-committee-formulary-system.ashx?la=en&hash=71F7987CEB5B885148DC201ED5B065AF88EE1C84>

ASHP Guidelines on Documenting Pharmaceutical Care in Patient Medical Records:  
<https://www.ashp.org/-/media/assets/policy-guidelines/docs/guidelines-documenting-pharmaceutical-care-patient-medical-records.ashx?la=en&hash=2E88327978C45096448C895A0686A9355D57DE3D>

ASHP Guidelines on Medication-Use Evaluation: <https://www.ashp.org/-/media/assets/policy-guidelines/docs/guidelines-medication-use-evaluation.ashx?la=en&hash=87B76034DB84C55922BE5AA0227E4D2B3819B5B7>

ASHP Guidelines on the Pharmacist's Role in the Development, Implementation, and Assessment of Critical Pathways: <https://www.ashp.org/-/media/assets/policy-guidelines/docs/guidelines-pharmacists-role-development-implementation-assessment-critical-pathways.ashx?la=en&hash=0815FABA6A1C02801A7072824D2957883DCC9A92>

ASHP Statement on Pharmaceutical Research in Organized Health-Care Settings:  
<https://www.ashp.org/-/media/assets/policy-guidelines/docs/guidelines-pharmaceutical-research-organized-health-care-settings.ashx?la=en&hash=A372224985F46675B974D37B0231BDBFD9E0E150>

ASHP Statement on the Pharmacist's Role in Antimicrobial Stewardship and Infection Prevention and Control: <https://www.ashp.org/-/media/assets/policy-guidelines/docs/statements-pharmacists-role-antimicrobial-stewardship.ashx?la=en&hash=8754BE283462A780557E634616B5D173030A6DA1>

ASHP Statement on the Role of Health-System Pharmacists in Public Health:  
<https://www.ashp.org/-/media/assets/policy-guidelines/docs/statements-role-of-health-system-pharmacists-in-public-health.ashx?la=en&hash=3B3A41CF56EA117D5CE5D6A381B2C2BEC9DD32D4>

ASHP Guidelines on Pharmacist Involvement in HIV Care: <https://www.ashp.org/-/media/assets/policy-guidelines/docs/guidelines-pharmacist-involvement-hiv-care.ashx?la=en&hash=0C1627AB511CFF01861B50235FEF35A041E531C9>

ASHP Foundation: Research Resources:  
<http://www.ashpfoundation.org/MainMenuCategories/ResearchResourceCenter/ResearchResources.aspx>

