

PGY1 Pharmacy Residency (Drug Information)

The Medical University of South Carolina (MUSC) Medical Center is a 700-bed tertiary care academic medical center providing care for patients of Charleston and throughout the state of South Carolina. In addition to general medical and surgical services, MUSC offers a variety of specialty services including cardiothoracic, transplant and neurosurgery, level I trauma center, digestive disease, psychiatry and level III neonatal intensive care. The medical center is comprised of four hospitals, Ashley River Tower, Children's Hospital, Institute of Psychiatry, and University Hospital. Outpatient facilities include the Hollings Cancer, Ashley River Tower Clinics, Rutledge Tower Clinics, Family Medicine Center and affiliated faculty practice ambulatory care centers. MUSC Medical Center also maintains a direct relationship with the MUSC University including colleges of medicine, dentistry, nursing, allied health, and pharmacy.

The Department of Pharmacy Services provides service to patients on a 24-hour basis through multiple inpatient and ambulatory pharmacies to fulfill the department's mission, vision, and goals of providing optimal pharmaceutical care to all patients.

PURPOSE

Residents in Post Graduate Year One (PGY1) residency programs are provided the opportunity to accelerate their knowledge of and experience with patient-centered care and pharmacy operational services, as well as the development of leadership skills that can be applied in any practice setting. PGY1 residents acquire knowledge required for skillful problem solving, strengthening their professional values and attitudes, and improving/using their clinical judgment. Specifically, residents will be held responsible and accountable for acquiring the following competencies: managing and improving the medication-use process; providing evidence-based, patient-centered medication therapy management with interdisciplinary teams; exercising leadership and practice management; demonstrating project management skills; providing medication and practice-related education/training; and utilizing medical informatics.

The 12-month, MUSC PGY1 Pharmacy Residency with a focus in Drug Information Practice is committed to graduating competent clinicians. Residents who graduate from our program will be prepared to continue on to a Post Graduate Year Two (PGY2) Drug Information Residency. Early match into the PGY2 Drug Information Residency Program is available and is expected of the resident in November/December of their PGY1 year.

INTENDED OUTCOMES

Specific residency goals and objectives will be established in the beginning of the residency modified according to the resident's interests and previous experiences and advisor input. To meet the purpose of the residency, the resident will advance to achieve the following outcomes:

- Manage and improve the medication-use process
- Provide evidence-based, patient-centered medication therapy management with interdisciplinary teams
- Exercise leadership and practice management skills

- Demonstrate project management skills
- Provide medication and practice-related education/training
- Utilize medical informatics
- Conduct pharmacy practice research
- Exercise added leadership and practice management skills
- Provide drug information to health care professionals and/or the public
- Demonstrate additional competencies that contribute to working successfully in the health care environment

PROGRAM STRUCTURE

The PGY1 Pharmacy Practice Residency at MUSC is a one-year post-graduate training program designed to develop essential knowledge and skills for contemporary health-system pharmacy practice at a major academic medical center or community-based hospital. The residency program provides the flexibility to adapt to the resident's specific learning needs and goals. The training is provided through concentrated clinical rotational and longitudinal experiences listed in Table 1. It is recommended that the elective experiences be focused in a medication use policy specialty (eg, informatics, medication use policy, outcomes); however, the choice of electives is based on the interests of the resident and the perceived needs for training.

Table 1. Learning Experiences

REQUIRED LEARNING EXPERIENCES	
Orientation	1 month
Management	1 month
Integrated Practice Rotation	2 months
Drug Information	1 month
Critical Care*	1 month
Pediatrics*	1 month
Psychiatry*	1 month
Ambulatory Care*	1 month
Acute Care*	1 month
Electives^	2 month
Clinical Staffing	Longitudinal
Clinical On-call	Longitudinal
Manuscript/project	Longitudinal
Seminar and RITE	Concentrated
*Available Rotation Sites	
<ul style="list-style-type: none"> – Critical Care*^: MSICU, CCU, CTICU, STICU, NSICU, MICU, PICU, PCICU, NICU, Transplant (heart/lung, solid organ) – Pediatrics*^: general (required if no previous pediatric rotation), PICU, PCICU, NNICU, hematology/oncology – Psychiatry*^: general, pediatric, geriatric – Ambulatory Care*^: BMT, oncology, HIV, internal medicine, transplant, heart failure, pharmacotherapy, family medicine – Acute Care*^: internal medicine, cardiology, hematology/oncology, BMT, nephrology consult, pulmonary consult, infectious diseases – Medication Use Policy^ – Informatics^ – Investigational Drug Services^ – Medication Assistance/Billing and Reimbursement^ 	

PRECEPTORS

Each clinical preceptor will be responsible for the coordination of their own learning experience. The preceptor will modify the learning experience accordingly, with the assistance of the residency program director (RPD), should the resident need remediation as far as residency goals are concerned. The residency preceptor will exhibit the characteristics and aptitude necessary for residency training including the mastery of the four preceptor roles fulfilled when teaching clinical problem solving (i.e. direct instruction, modeling, coaching and facilitation). The residency preceptor will guide and monitor the resident's activities and service throughout the learning experience. The residency preceptor will provide ongoing formative and summative evaluations of the resident's performance, with the goal of advancing the resident's competency on the specific goals assigned to the experience. The preceptors listed in Table 2 will be responsible for the required and elective learning experiences for this program. The resident may work with other preceptors/staff throughout the department depending on the learning experience/project assigned.

The specific preceptor responsibilities are as follows:

- Understand the resident's responsibilities to the residency teaching experience and to ongoing activities such as projects, talks, student discussions, manuscript preparation.
- Develop and maintain goals and objectives for the specific residency teaching learning experience(s).
- Review the resident's training plan and resident's previous performance and modify the learning experience accordingly.
- Orient the resident to the rotation's setting and monitor/evaluate/critique the resident's performance during the experience.
- Provide the resident a midpoint in written and verbal format, and be able to complete the final summary PharmAcademic evaluation by month's end as outlined in the residency manual.
- Advise the RPD of any appropriate interventions that may be needed relevant to the resident's performance.
- Actively participate in an annual feedback session in which preceptors and the RPD consider overall program changes based on evaluations, observations, and direct resident feedback and surveys.

Table 2. Program Preceptors

PROGRAM PRECEPTORS				
Nicole Bohm	Ashley Dean	Amy Hebbard	Kathryn Noyes	Walt Uber
Carolyn Bondarenka	Caroline Dees	Julia Heh	Meredith Oliver	Margaret Wheat
John Bosso	Tracie Delay	Deanna Kidwell	Nicole Pilch	Donald Wiest
Jeff Brittain	Shannon Drayton	Julie Leal	Dominic Ragucci	Barbara Wiggins
Kristy Brittain	Heather Easterling	Cathy Letton	Sophie Roberts	Christopher Wisniewski
Wendy Bullington	Kathy Edwards	Jennifer Mazur	Kathy Sprott	
Madelyne Bean	Anastasia Finn	Joe Mazur	Aaron Steele	
Katherine Chessman	James Fleming	Holly Barrier	Samantha Swinhart	
Robyn Coefield	Sandra Garner	Andy	Jill Thompson	
Brittany Cogdill	Kelli Garrison	Maldonado	Lynn Uber	
Jason Cooper	Lauren Haney	Jason Mills		
Toby Cox	Rebekah Hartwell	Jean Nappi		
	Jeni Hayes			

RESIDENCY ADVISOR

A Residency Advisor may be appointed by the RPD and is responsible for the supervision, guidance and on-going evaluation of the resident's progress throughout the residency. The advisor also provides an informal professional mentoring role (e.g., preparation for future career planning roles, advice on other issues that maybe impacting on the resident's performance).

RESIDENT RESPONSIBILITIES

The role of the resident is that of a student, novice practitioner, and emerging clinician and/or administrator. The resident is to participate in ongoing clinical and administrative services with the assistance of the residency preceptor and develop their skill set into a competent clinical practitioner and/or future administrator. The resident must accept and apply qualitative feedback in addition to performing self- evaluations on their performance.

In order to promote an effective and productive residency experience, the relationship between a resident and rotation preceptor must be highly communicative, and a meaningful dialogue must be achieved. Specifically, the resident will:

- Sign off on the learning experience orientation form on the first day of each new clinical rotation,
- Maintain strict deadlines as far as PharmAcademic requirements are concerned – outlined in the MUSC Residency Manual,
- Understand the preceptor's expectations for daily activities, services provided, and preceptor contact,
- Maintain a project list with associated time lines,
- Participate in department and organizational functions (e.g., departmental meetings, divisional staff meetings, seminars, RITEs) in accordance to the MUSC Residency Manual and the expectations of the preceptors and RPD,
- Provide a detailed account of activities as they relate to the goals and objectives of the learning experience, and
- Maintain active communication with the preceptor, advisor and/or RPD concerning any planned off-service activities (e.g. meetings, seminars, projects, staffing) that the resident will be participating in during the rotation.

LEARNING EXPERIENCE EVALUATIONS AND GRADING

The resident is expected to successfully complete and achieve **95%** of the required outcomes according to ASHP Educational Outcomes, Goals and Objectives for the PGY1 Pharmacy Residencies. The required outcomes for this program listed in Table 3 should all be achieved for successful completion of the program.

Each learning experience will be evaluated using PharmAcademic. A typical evaluation schedule is included in Appendix A. The resident will be assigned at least one formative (snapshot) evaluations as determined through the customized plan process. The formative evaluations may be evaluated through PharmAcademic or as other written/verbal communication (eg, editorial feedback on a writing assignment). All competencies and assignments/project with associated feedback will be maintained in the resident's online folder.

Table 3. Competency Areas, Goals, and Objectives for Successful Completion of the Program (refer to updated ASHP 2015 goals)

REQUIRED OUTCOMES	
Goal R1.1	In collaboration with the health care team, provide safe and effective patient care to a diverse range of patients...following a consistent patient care process.
Goal R2.1	Demonstrate ability to manage formulary and medication-use processes, as applicable to the organization.
Goal R2.2	Demonstrate ability to evaluate and investigate practice, review data, and assimilate scientific evidence to improve patient care and/or the medication use system.
Goal R3.1	Demonstrate leadership skills.
Goal R4.1	Provide effective medication and practice-related education to patients, caregivers, health care professionals, students, and the public.

SELECTION OF RESIDENCY CANDIDATES

Potential candidates must complete an application via the PhORCAS online application system by the published deadline each year. Typically the deadline is December 31st. Details regarding the application process can be found on the MUSC/SCCP Residency Program Web site or directly [HERE](#). For this program the candidate is asked to submit a writing sample for review as part of the interview process.

Criteria for Interview

MUSC has developed pre-screening criteria that assigns points to various aspects of a candidate's application. The RPD uses a pre-screening tool to review for all applicants. The tool aims to identify various experiences a resident candidate may have had, which would lend well to a successful residency year at MUSC (e.g., previous research experience, strong clinical rotations, previous work experience in a pharmacy). In addition to the standard pre-screening tool for PGY1 residencies, this program also looks at experiences that may benefit the candidate for early match into the PGY2 Drug Information Residency (eg, previous drug information experience, writing skills).

We offer an interview to the candidates with a top score based on the PGY1 interview selection criteria and previous drug information experience. If some candidates towards the bottom of the pool all have the same score, we will use other criteria such as letters of recommendation and letters of intent to identify which of those candidates will receive an invitation for an on-site interview.

Criteria for Selection

On-site interview will be conducted with the preceptors for the program, using an established scoring system with behavioral-based questions. In addition to the standard interview process, candidates are asked to submit a writing sample and complete a clinical case. The content of the writing sample can be the candidate's choice. For the pre-determined clinical cases, candidates prepare a SOAP note assessing the chosen patient/case, and then develop an action plan for the top 3 medication-related problems in the case. The SOAP note is scored, and incorporated into the total score for the resident selection process.

Interview scores are collated and added to the pre-interview screening score. Candidates are then ranked and discussed by the Medication Use Policy and Informatics group to determine the final ranking of candidates.



MUSC Residency Program
a collaboration between the MUSC Medical Center and the South
Carolina College of Pharmacy (MUSC Campus)

RESIDENCY PROGRAM DIRECTOR CONTACT INFORMATION

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APPENDIX A: EXAMPLE EVALUATION PLAN

Table 1. Required Learning Experiences/Evaluations

Type of Evaluation	Responsible Party	Time
ASHP Standard Entering Interests Self-evaluation	Resident	June/July
Goal-based Entering Interests Self-evaluation	Resident	June/July
Customized Plan	Resident	Mid July
	RPD	July 31 st (final)
PGY1 Psychiatry – midpoint	Preceptor	August 15 th
PGY1 Psychiatry – summative	Preceptor	August 31 st
PGY1 Psychiatry – self-evaluation	Resident	August 31 st
PGY1 Psychiatry – preceptor/learning experience	Resident	August 31 st
PGY1 Practice Mgmt/DI – midpoint	Preceptor	September 15 th
PGY1 Practice Mgmt/DI – summative	Preceptor	September 30 th
PGY1 Practice Mgmt/DI – self-evaluation	Resident	September 30 th
PGY1 Practice Mgmt/DI – preceptor/learning experience	Resident	September 30 th
PGY1 IPR – midpoint	Preceptor	October 15 th
PGY1 IPR – summative	Preceptor	October 31 st
PGY1 IPR – self-evaluation	Resident	October 31 st
PGY1 IPR – preceptor/learning experience	Resident	October 31 st
PGY1 Acute Care/Medicine I – midpoint	Preceptor	November 15 th
PGY1 Acute Care/Medicine I – summative	Preceptor	November 30 th
PGY1 Acute Care/Medicine I – self-evaluation	Resident	November 30 th
PGY1 Acute Care/Medicine I – preceptor/learning experience	Resident	November 30 th
PGY1 Informatics (elective) – midpoint	Preceptor	December 15 th
PGY1 Informatics (elective) – summative	Preceptor	December 31 st
PGY1 Informatics (elective) – self-evaluation	Resident	December 31 st
PGY1 Informatics (elective) – preceptor/learning experience	Resident	December 31 st
PGY1 Pediatrics – midpoint	Preceptor	January 15 th
PGY1 Pediatrics – summative	Preceptor	January 31 st
PGY1 Pediatrics – self-evaluation	Resident	January 31 st
PGY1 Pediatrics – preceptor/learning experience	Resident	January 31 st
PGY1 Critical Care – midpoint	Preceptor	February 15 th

Type of Evaluation	Responsible Party	Time
PGY1 Critical Care – summative	Preceptor	February 28 th
PGY1 Critical Care – self-evaluation	Resident	February 28 th
PGY1 Critical Care – preceptor/learning experience	Resident	February 28 th
PGY1 Clinical Elective – midpoint	Preceptor	March 15 th
PGY1 Clinical Elective – summative	Preceptor	March 31 st
PGY1 Clinical Elective – self-evaluation	Resident	March 31 st
PGY1 Clinical Elective – preceptor/learning experience	Resident	March 31 st
PGY1 Drug Information – midpoint	Preceptor	April 15 th
PGY1 Drug Information – summative	Preceptor	April 30 th
PGY1 Drug Information – self-evaluation	Resident	April 30 th
PGY1 Drug Information – preceptor/learning experience	Resident	April 30 th
PGY1 Acute Care/Medicine II – midpoint	Preceptor	May 15 th
PGY1 Acute Care/Medicine II – summative	Preceptor	May 31 st
PGY1 Acute Care/Medicine II – self-evaluation	Resident	May 31 st
PGY1 Acute Care/Medicine II – preceptor/learning experience	Resident	May 31 st
PGY1 Ambulatory – midpoint	Preceptor	June 12 th
PGY1 Ambulatory – summative	Preceptor	June 20 th
PGY1 Ambulatory – self-evaluation	Resident	June 20 th
PGY1 Ambulatory – preceptor/learning experience	Resident	June 20 th
Early Commitment	K Garrison/J. Cooper	November (TBD)
Quarterly evaluations	Resident Advisor/RPD	October; January; April June
Quarterly Progress Report	Resident	October; January; April June
Quarterly – preceptor/learning experience	Resident	January; June
On-call	TBD	TBD
Manuscript/project – quarterly	Project preceptor APP mentor	October; January; April June
Manuscript/project – self-evaluation	Resident	October; January; April June
Operations – quarterly evaluation	Preceptor/Coordinator	October; January; April June
Operations – preceptor/learning experience	Resident	October; January; April June
Operations – self-evaluation	Resident	October; January; April



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Type of Evaluation	Responsible Party	Time
		June
Seminar	2-3 preceptors APP Mentor	TBD
Seminar – self evaluation	Resident	TBD
RITE	2-3 preceptors APP Mentor	TBD
RITE – self evaluation	CHanrahan	TBD
MUE evaluations - summative	DI and Clinical Liaisons	Concentrated - TBD
MUE – preceptor/learning experience	Resident	Concentrated - TBD
MUE – self-evaluation	Resident	Concentrated - TBD
APP – Small group discussions	APP Mentor	TBD
APP - Lecture	APP Mentor	TBD
Advisor/RPD evaluation	Resident	End of year
Residency program	Resident	End of year