PGY2 Solid Organ Transplant Residency
Medical University of South Carolina

1. **Purpose Statement:**

PGY2 pharmacy residency programs build on Doctor of Pharmacy (Pharm.D.) education and PGY1 pharmacy residency programs to contribute to the development of clinical pharmacists in advanced or specialized practice. PGY2 residencies provide residents with opportunities to function independently as practitioners by conceptualizing and integrating accumulated experience and knowledge and incorporating both into the provision of patient care that improves medication therapy. Residents who successfully complete an accredited PGY2 pharmacy residency should possess competencies that qualify them for clinical pharmacist and/or faculty positions and position them to be eligible for attainment of board certification in the specialized practice area (when board certification for the practice area exists).

2. **Program Description:**

The PGY2 Solid Organ Transplant Residency Program is designed to develop accountability; practice patterns; habits; and expert knowledge, skills, attitudes, and abilities in each respective advanced area of solid organ transplant pharmacy practice. PGY 2 solid organ transplant residents throughout the year will: acquire the needed knowledge for skillful problem solving of solid organ transplant related issues, refine their problem-solving strategies, strengthen their professional values and attitudes, and advance the growth of their clinical judgment. Specifically, this specialty residency is designed to train pharmacists to care for an organ transplant recipient. Training will be focused in immunology, infectious disease, and critical care, with opportunities to care for patients in the inpatient and outpatient setting. Therefore, the solid organ transplant residency provides residents with opportunities to function independently as practitioners by conceptualizing and integrating accumulated experiences and knowledge and transforming both into improved medication therapy for patients.

3. **Intended Outcomes:**

- To develop competent specialized transplant clinical specialists with an understanding of rational drug therapy and the ability to utilize and expand their experience in clinical pharmacy practice, research, and education.
- To provide a broad scope of in-depth transplant experiences, which will lead to an advanced level of knowledge and enhance the resident's ability to design, implement, provide, and improve clinical pharmacy services.
- To develop future leaders in clinical transplant pharmacy practice and education.
- To provide the resident an opportunity to participate in clinical and evaluative research in the solid organ transplant population.
- To enhance and expand the resident's skills in the overall management of the complex, critically ill transplant recipient.
4. **Listing of Current Preceptors:**

**Holly Meadows, Pharm.D., BCPS**
Clinical Pharmacy Specialist/Transplant
Practice/Research: Transplant

**James Fleming, Pharm.D., BCPS**
Clinical Pharmacy Specialist/Transplant
Practice/Research: Transplant

**Neha Patel, Pharm.D., BCPS**
Clinical Pharmacy Specialist/Transplant
Practice/Research: Transplant

**Andrew Mardis, Pharm.D., BCPS**
Clinical Pharmacy Specialist/Transplant
Practice/Research: Transplant

**Walter Uber, B.S., Pharm.D.**
Clinical Pharmacy Specialist/CTICU
Practice/Research: Cardiothoracic Surgery

**Joe Mazur, Pharm.D., BCPS, BCNSP**
Clinical Pharmacy Specialist/MICU
Practice/Research: Critical Care

**Tanna Hassig, Pharm.D., BCPS**
Clinical Pharmacy Specialist/MSICU
Practice/Research: Critical Care

**David Taber, Pharm.D., MS, BCPS**
Clinical Research
Practice/Research: Transplant

**Nicole Pilch, Pharm.D., MSCR, BCPS**
Quality and Compliance Director, Transplant
Practice/Research: Transplant

**Caitlin Mardis, Pharm.D., BCPS**
Assistant Director of Quality, Transplant
Practice/Research: Transplant

5. **Residency Program:**

The resident must have previously completed a pharmacy practice residency or have an equivalent level of experience in hospital pharmacy practice prior to entering this specialized residency program. The residency is designed to provide a diverse experience, while focusing on the needs of the individual resident. Residents may tailor elective rotations to meet their particular goals and career needs. Residents are provided with formal written evaluations following each monthly rotation in order to provide for an optimal experience. Residents will complete a quarterly self-evaluation to assure compliance with self-determined goals and the ASHP Residency Learning System. Residents will rotate through both adult and pediatric inpatient and ambulatory experiences.
6. **Residency Structure:**

- **Transplant on-call weekends and after hours coverage**
- **Clinical staffing in adult institution in solid organ transplant populations**
- **Minimum types of monthly rotations:**
  - Inpatient abdominal organ transplant (2 months – required)
  - Inpatient Heart/Lung Transplant, LVAD, advanced heart failure (2 months – required)
  - Ambulatory adult clinic (2 months – required)
  - Orientation if the resident did not complete PGY1 residency training at MUSC (1 month)
    - Limited orientation for residents who did complete PGY1 residency training at MUSC
  - The remainder of rotations are customized to fit the resident’s needs and interests, including MICU, MSICU, Cardiothoracic Surgery, Transplant Quality and Compliance
- **Teaching requirements**
  - ACPE-accredited seminar (1 hour)
  - 1 additional presentation is required (1 hour) and may include:
    - Transplant Grand Rounds
    - Resident Interactive Teaching Experience (RITE)
    - Internal Medicine Grand Rounds
  - Monthly in-service to transplant surgery medical students, interns, and residents regarding basic principles of immunosuppression and MUSC transplant protocols
  - Didactic lecture to P2 and P3 pharmacy students in transplant/immunology elective (2 hours)
  - Weekly small group discussions for all learners on transplant rotations
- **Transplant Protocol development**
  - Participate in the development of at least one new transplant protocol
  - Present protocol to transplant team
- **Resident Research Project**
  - Design and lead research efforts for the transplant research team
  - Expectation is for abstract with results to be submitted to international transplant meeting (ISHLT or ATC) by the Fall abstract deadline
- **Medication Use Evaluation**
  - Group project
  - Based on hospital or transplant service line needs
- **Manuscript**
  - Development of manuscript
  - Suitable for publication before the end of the residency year
7. **Residency Preceptor Expectations:**

Each clinical preceptor will be responsible for the coordination of their own learning experience, and be able to modify 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 (direct instruction, modeling, coaching and facilitation). The residency preceptor will guide and monitor the resident’s activity 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.

Specific preceptor responsibilities:
- Understand the resident’s responsibilities to the residency experience and to ongoing activities such as projects, lectures, 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. Modify the learning experience accordingly.
- Orient the resident to the rotation’s expectations and monitor/evaluate/critique the resident’s performance during the experience.
- Provide the resident with both a verbal and written midpoint and final evaluation; 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.

8. **Residency Advisor Role:**

The Residency Advisor (appointment by the RPD) will be responsible for the supervision, guidance and on-going evaluation of the resident’s progress throughout the residency, as well as serve in an informal professional mentoring role (examples include preparation for future career planning roles, work-life balance, residency experiences, and conflict-resolution).

9. **Specific Resident Responsibilities:**

The residents’ role is that of a student, novice practitioner, and emerging clinician. The resident is to participate in ongoing clinical services with the assistance of the residency preceptor and develop their skill set into a competent practitioner. The resident must accept and apply constructive criticism, in addition to performing honest and thoughtful 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.
- Complete PharmAcademic evaluations in a timely manner—outlined in the current MUSC residency manual. This involves project work, MUE work, seminar preparation, and any other lecture or in-service/presentation that will require preceptor feedback.
- Understand the preceptor’s expectations for daily activities, services provided and preceptor contact.
- Maintain the disease-state appendix for review at each quarterly discussion with the advisor and/or RPD.
- Participate in pharmacy activities (eg. rounds, patient care conferences, lectures, departmental meetings, clinical staff meetings, seminars, and RITEs) in accordance to the current MUSC residency manual.
- As outlined by the clinical preceptor, provide a detailed account of activities as they relate to the goals and objectives of the learning experience.
- Maintain active communication with the preceptor, advisor and/or RPD concerning any planned off-service activities (eg. meetings, seminars, projects, staffing, on-call commitments) that the resident will be participating in during the rotation.

10. Clinical Service Responsibilities:

- Monthly rotations
- 32 hours per month providing pharmaceutical care through following experiences:
  - On call weekend responsibilities
  - Weekend or Friday night clinical staffing

11. Individual Learning Experience Evaluations and Grading:

The resident is expected to successfully complete and achieve all of the required outcomes according to ASHP Educational Outcomes, Goals and Objectives for PGY2 solid organ transplantation residency. Please see the above documents for a list of these outcomes.

The resident is expected to demonstrate proficiency in 90% or above of all activities linked to these specific outcomes via the various goals and objectives assigned from the learning experiences to successfully complete the MUSC program. The resident will first observe, learn, act, and then master a particular activity, which will deem them having achieved that goal. This again will be highly individualized for each resident.
12. **Selection of Residency Candidates**

Qualified applicants must have completed a PGY1 residency or receive documentation of equivalent experience through ASHP. The MUSC Pharmacy Program uses the PhORCAS Application System through ASHP. All application materials must be submitted through the applicant portal on ASHP’s website. The deadline for receipt of a complete application packet is December 31.

Completed applications include:
- Letter of intent (uploaded with application)
- Curriculum vitae (uploaded with application)
- Three references completed by healthcare professionals in PhORCAS who can attest to the applicant’s practice abilities and aptitudes
  - At least one reference must be from an immediate supervisor
  - At least one letter must be from a clinical preceptor
- Official transcripts of all professional pharmacy education

The application, letter of intent, and curriculum vitae should be submitted via the PhORCAS applicant portal. References should be submitted via PhORCAS Reference Portal using the ASHP Reference Template directly from the authors no later than December 31.

Interviews will be offered to candidates based on the information submitted through PhORCAS. Approximately 3 to 6 candidates will be interviewed per available position. On site interviews will occur at the end of January through the beginning of March.

Internal candidates may apply for early commitment. If early commitment is appropriate, the candidate will be notified prior to attending the Midyear Clinical Meeting, but the applicant will not be asked to commit until after the meeting. Internal candidates may also be referred to the regular match process at the discretion of the RPD or based upon early commitment decision.

For further information contact:

Residency Program Director

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