Information and Application Materials
2020-2021
University of Wisconsin Health (UW HEALTH)
PGY-1 Pharmacy Residency

UNIVERSITY OF WISCONSIN (UW) HEALTH
600 Highland Avenue
G7/210
Madison WI, 53792

ASHP Program Code: 45100
National Matching Service Code: 177813,177822

Accreditation Status: Accredited

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Residency Program:
Duration/Type: 12-month PGY-1 Pharmacy Residency
Number of Positions: 7
Application Deadline: January 6, 2020
Starting Date: June 15, 2020
Estimated Stipend: $47,500
Interview Required: Yes

Special Features: This program provides residents with extensive experience in an advanced clinical practice setting along with opportunities to conceptualize, integrate, and transform accumulated experiences into skill and competence in providing patient care. Residents receive training in areas including internal medicine, cardiology, neurology/neurosurgery, solid organ transplantation, critical care, surgery, pediatrics, hematology/oncology, ambulatory care, managed care, drug information and drug policy development, emergency medicine, and pharmacy practice management. Residents present research, quality improvement, and drug usage evaluation projects at local, regional, and national meetings. The opportunity exists for a pharmacy practice resident's experience to be tailored in order to facilitate a second year of specialty residency training at UW Health.

Fringe Benefits: Health insurance (health/vision/dental), 6 days of legal holiday/10 days of paid time off, funding for professional meetings, travel days to visit other health systems, access to the University of Wisconsin’s recreation, educational and cultural facilities

Special Requirements for Acceptance: Graduation from an accredited school of pharmacy, achievement of licensure in Wisconsin no later than August 1, 2020, completion of all application materials by January 6th, 2020, and an onsite interview.
Training Site:
Type: Hospital/Health System
Owner/Affiliate: Public Authority
Model Type(s): Teaching, Tertiary
Patient volume: 68,594 admissions; 201,634 emergency room visits; 3,048,259 outpatient visits
Tax Status: Nonprofit
Leadership FTE: 32
Pharmacist FTE: 190
Technician and Support FTE: 244
Total Beds: 505 (UWHC); 56 (TAC-American Center); 111 (AFCH-Children’s Hospital)

Other statistics: Hosting 7 intensive care units (ICUs) with the following bed distributions (148 beds): 24 Medical/Surgical ICU, 19 Pediatric ICU, 12 Neonatal ICU, 7 Medical/Cardiac ICU, 8 Cardiothoracic Surgery ICU, 12 Burn ICU, 15 Neurology/Neurosurgery ICU. Additional services/units provided at UW Health include 18 bed Psychiatric Unit; 117 outpatient clinics; 649 house staff (physician residents/fellows) and accepts 1046 Med Flights per year.


The department’s drug distribution system is heavily supported using automation, innovative robotic and point-of-care technology, which is supported by a fully integrated information system and network. Pharmacist involvement at every step of the medication use process provides high levels of safety and quality in the provision of patient care. The department manages 15 retail pharmacies, a home care company, hospital and long-term care consulting services, Quartz Health Insurance, a specialty pharmacy, and a hospice center.

Major Programs
Critical Care — Med Flight critical care air transport service, established April 1985; trauma center with Level One status for both adult and pediatric care; burn unit; pediatric ICU; cardiac and medical ICUs.

UW Carbone Cancer Center (UWCCC) — One of 70 federally designated centers for cancer treatment and research. The UWCCC also has five affiliated regional cancer centers throughout Wisconsin and Illinois.

American Family Children’s Hospital (AFCH) — A 111 bed pediatric hospital adjacent to UW Health, nationally ranked for pediatric cardiology and heart surgery; gastroenterology and GI surgery, neonatology, nephrology among other pediatric specialties.

Organ Transplant — The nation’s 4th largest program, with patient outcomes consistently cited among the best in the nation. Recognized by US Department of Health and Human Services as an organ procurement best practice site.

Heart and Vascular Care — Offers a comprehensive program of prevention, expert diagnosis and treatment of full spectrum of heart-related diseases.

Stroke Center — Offers one of the most comprehensive sets of stroke studies in the nation, including testing of multiple surgical interventions, advanced diagnostic imaging and medications and therapeutic interventions for acute stroke and its after-effects. Certified as a Comprehensive Stroke Center by the Joint Commission and the American Heart Association/American Stroke Association.
Program Statement of Purpose:

PGY-1 pharmacy residency programs build on Doctor of Pharmacy (Pharm.D.) education and outcomes to contribute to the development of clinical pharmacists responsible for medication-related care of patients with a wide range of conditions, eligible for board certification, and eligible for postgraduate year two (PGY-2) pharmacy residency training.

Program Philosophy:

Residents who successfully complete the University of Wisconsin Hospital and Clinics Pharmacy Residency Program will be able to provide integrated pharmaceutical care at a patient-specific level as well as a patient population level across the continuum. This residency will provide residents with opportunities to conceptualize, integrate, and transform accumulated experiences and knowledge into skill, competence, and confidence in providing safe, efficient, and cost-effective patient care.

Residents will acquire a philosophy of practice that includes:

- Pharmacists’ responsibility and accountability for pursuing optimal drug therapy outcomes and medication safety in the provision of patient care
- Education and training of other health professionals and students
- A program of self-learning and continuing professional development
- A commitment to the profession and their community
- An appreciation for scholarly activity

Accreditation

The University of Wisconsin Hospital and Clinics PGY-1 Pharmacy Residency Program is accredited by the American Society of Health-System Pharmacists.

The Residency Year, Numbers, and “The Match”

The residency year runs from June 15th, 2020 to June 28th, 2021. Seven residents are accepted into the program. The program participates in the ASHP Residency Matching Program; therefore, applicants should be enrolled in the matching program to be considered for the residency. Application and matching services are managed through the PhORCAS website (portal.phorcas.org).

Program Director and Preceptors

The residency program director is Krista McElray, Pharm.D., Education & Development Coordinator

Clinical pharmacists and pharmacy administrative staff serve as preceptors for individual rotations and as advisors for research and professional development. Members of the clinical faculty affiliated with the UW School of Pharmacy work with residents on research projects, presentation advising, clinic involvement, and precepting pharmacy students.

Application Deadline

All application materials for the PGY-1 Pharmacy Residency at UW HEALTH must be received by January 6th, 2020.
Stipends & Benefits

Residents during 2020-2021 will receive a stipend of $47,500/year. Residents receive 6 paid vacation days and 10 paid time off days per year and are not required to use vacation time to attend meetings. As employees of UW Health, residents receive full health, vision, and dental insurance benefits and full access to the University of Wisconsin’s recreational, educational, and cultural facilities. Further information on benefits can be obtained at [www.uwhealth.org/careers](http://www.uwhealth.org/careers).

The Residency Experience

*Rotations:* Pharmacy practice residents complete one 4-week training period in the first staffing area, ten 4-week clinical rotations, a 4-week rotation in drug policy, one mini-training / project time rotation in December, and two longitudinal experiences in ambulatory care clinics.

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<thead>
<tr>
<th>Required/staffing Rotations</th>
<th>Elective Rotations (6)</th>
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<tbody>
<tr>
<td>Resident will first complete a training rotation in the first area they staff:</td>
<td>• Transplant: renal/pancreas, liver/medical</td>
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<tr>
<td>• Medicine</td>
<td>• Academia</td>
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<tr>
<td>• Neurology</td>
<td>• BMT, hematology</td>
</tr>
<tr>
<td>• Surgery</td>
<td>• Cards: cardiothoracic surgery, medical cards</td>
</tr>
<tr>
<td>• Cardiology</td>
<td>• Sterile products</td>
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<tr>
<td>• Pediatrics</td>
<td>• Clinical practice management</td>
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</table>

**Required Rotations (5)**

- Oncology
- Medicine
- Transplant
- Drug information/drug policy
- Precepting

**Elective Rotations (6)**

- Oncology
- Medicine
- Transplant
- Drug information/drug policy
- Precepting

**Duty hours:** The residency program follows duty hour definitions and recommendations from the ASHP, [https://www.ashp.org/-/media/assets/professional-development/residencies/docs/duty-hour-requirements.ashx](https://www.ashp.org/-/media/assets/professional-development/residencies/docs/duty-hour-requirements.ashx). Duty hours are defined as all clinical and academic activities related to the program; i.e., patient care (both inpatient and outpatient), administrative duties relative to patient care, the provision for transfer of patient care, time spent in-house during call activities, and scheduled activities, such as conferences. Duty hours do *not* include reading and preparation time spent away from the duty site.

- Duty hours must be limited to 80 hours per week, averaged over a four-week period, inclusive of all in-house call activities.
- Residents must be provided with one day in seven free from all educational and clinical responsibilities, averaged over a four-week period.
**Clinical Staffing:** Pharmacy services are provided by teams of pharmacists within an integrated practice model. These teams of pharmacists are decentrally based and provide care as part of the interprofessional team through patient care rounds, clinical monitoring, medication order review, admission histories, first-dose teaching, discharge teaching and care coordination, code and stroke response teams, drug information provision, and medication use stewardship. The table below depicts which medical services/units are covered by which pharmacist teams. Residents staff **in the same roles as their preceptors** on two teams (available teams are bolded) over the course of the residency year, developing confidence and competence. On average, the resident will staff 12 hours every week, including every other weekend.

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<tr>
<th>UW HEALTH INPATIENT PHARMACY TEAM</th>
<th>MEDICAL SERVICES</th>
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| Team 1 (Trauma Life Support Center - TLC) | Medical/Surgical ICU  
Burn ICU                                   |
| Team 2 (Cardiology)               | Cardiovascular Surgery                                |
|                                   | Cardiovascular Medicine                              |
|                                   | Peripheral Vascular Surgery                           |
| Team 3 (Transplant)               | Abdominal Transplant                                  |
|                                   | (Kidney/Liver/Pancreas)                               |
| Team 4 (Pediatrics)               | General Peds                                          |
|                                   | Pediatric ICU                                         |
|                                   | Neonatal ICU                                          |
|                                   | Pediatric Hematology/Oncology                         |
| Team 5 (Neurology)                | Neurology (including ICU)                             |
|                                   | Neurosurgery (including ICU)                          |
|                                   | Psychiatry                                            |
|                                   | Stroke                                                |
|                                   | Epilepsy                                              |
| Team 6 (Medicine)                 | General Medicine                                      |
|                                   | Hospitalist Services                                  |
|                                   | Family Medicine                                       |
| Team 7 (Surgery)                  | General Surgery                                       |
|                                   | Trauma Surgery                                        |
|                                   | Gynecology/Oncology                                   |
|                                   | Specialty Surgery                                     |
| Team 8 (Oncology)                 | Adult Oncology                                        |
|                                   | Adult Hematology                                      |
|                                   | Bone Marrow Transplant                                |
|                                   | Hospice                                               |
|                                   | Palliative Care                                       |
| Team 9 (Emergency Department)     | Emergency Department                                  |

The primary focus of the residency is direct patient care, and for this reason residents are typically expected to be on the unit a majority of the day.

Activities while on the unit will include, but are not limited to:
- Collaboratively managing drug therapy with other members of the healthcare team
- Daily rounds with the healthcare team
- Admission histories (completed for all UW Health patients)
- Discharge teaching (completed for all UW Health patients)
- First-dose teaching
- Patient monitoring and documentation
- Pharmacokinetic calculations and dose adjustments
• Investigation of medication error reports and patient/medication safety follow-up
• Adverse drug event reporting
• Drug information; literature review; reading and contributing to team files
• Attending and participating in code situations
• Quality improvement activities
• Team-related research projects
• Communication and interaction with team preceptor and pharmacists
• Communication and interaction with physicians and nurses
• Working with students (1st, 2nd and 3rd year IPPE students, 4th year APPE students)
• Instructional and patient case presentations

Ambulatory Care: Residents participate in a full-day ambulatory care clinic every other week. Residents have the opportunity for two clinic experiences, each for half of the residency year. UW Health Clinics in which pharmacists participate include:

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<tr>
<th>Ambulatory Clinic Rotations</th>
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<tbody>
<tr>
<td>Hospice</td>
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<tr>
<td>Anticoagulation</td>
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<tr>
<td>HIV Clinic/Infectious Diseases</td>
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<tr>
<td>Neurology</td>
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<tr>
<td>Lung Transplant</td>
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<tr>
<td>Renal Clinic/Wisconsin Dialysis</td>
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<tr>
<td>Abdominal Transplant</td>
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<tr>
<td>Pediatric Pulmonary</td>
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<tr>
<td>Primary Care</td>
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<tr>
<td>Specialty Pharmacy</td>
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<tr>
<td>Oncology</td>
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Drug Policy: Residents spend 4-weeks in the Drug Policy Program as a required rotation. Here residents sharpen drug information skills, complete projects, coordinate a medication usage evaluation, write a drug monograph, and answer drug information questions. Residents will have the opportunity to present their drug monograph before the UW Health Pharmacy & Therapeutics Committee.

Pharmaceutical Research Center: Residents may spend time with Pharmaceutical Research Center staff learning about drug research, protocol activation and management, sponsor and federal regulations, drug accountability, educational tools, human subject protection, and development and management of investigational drug services.

Presentation Opportunities: Residents have ongoing opportunities to improve their speaking skills by preparing for and participating in "Resident GRILL (Grand Round Interprofessional Lunch and Learn)", which occurs weekly and is an opportunity for residents, preceptors and students to discuss patient cases and how to improve their clinical practice. In addition, residents provide educational presentations and in-services and can present in University of Wisconsin School of Pharmacy courses. All residents will present their research, quality improvement, and drug usage evaluation projects at local, regional, and national meetings.

Teaching Opportunities: Residents receive clinical instructor status at the University of Wisconsin School of Pharmacy. They have the opportunity to take an active role in teaching second- and third-year students in pharmacotherapy lab and precepting fourth-year students on clinical rotation at the hospital. A teaching certificate program for residents at area hospitals is offered in conjunction with the University of Wisconsin School of Pharmacy. Additional elective rotations with School of Pharmacy faculty are available.
Projects: Each resident completes at least one medication use evaluation (MUE) or other medication use process improvement project along with a major research project. Projects are presented at the UHC resident poster session prior to the ASHP Midyear Clinical Meeting and Great Lakes Pharmacy Resident Conference. Residents are strongly encouraged to submit a manuscript for publication. Projects are selected off a vetted list provided by the resident advisory committee, and usually 70–80 projects are available to select from. All PGY-1 projects include implementing changes that expand or enhance patient care or pharmacist roles at UW Health. Everything our department has accomplished is a result of resident projects.

Past PGY-1 resident projects (2017-2018):
- Evaluation and implementation of desensitization protocols for carboplatin
- Optimization of outpatient management of neutropenic fever in patients with solid tumors
- Standardization of practice surrounding infectious disease prophylaxis in UW Health stem cell transplant patients
- Clinical decision support alerts for pediatric antibiotic dosing/prescribing in ED/AFCH
- Development and implementation oncology emergency order sets
- Implementation of a HAP/VAP guideline and standardization of duration of treatment
- Implementation of a pre-operative medication management protocol
- Evaluation of clinical pharmacy ICU services and practice standards development
- Evaluating the impact of discharge medication reconciliation: a UHC multicenter project
- Development and implementation of an oral alkalinization regimen prior to admission for high dose methotrexate
- Implementation of a decision support program for adults and pediatrics for HIT testing
- Evaluation of drug related causes of AKI in pediatric patients
- Evaluation of the impact of pharmacist oral chemotherapy follow-up calls
- Implementation of a novel thromboelastography based cardiothoracic surgery protocol for the replacement of factor and blood products
- Immune checkpoint inhibitors: Optimization of pharmacy services in toxicity management
- Implementation of caregiver vaccine screening and smoking cessation screening in a pediatric hospital
- Optimization of the pharmacist admissions process
- Implementation and utilization of a pharmacogenomics program for acute leukemias
- Pharmacist driven prediction of community-acquired pneumonia caused by drug-resistant pathogens: guideline, screening tool and order set implementation
- Adult AKI detection and intervention
- Implementation of meds to beds for enhanced recovery programs
- Vaccine compliance rates in post-splenectomy patients at an academic medical center

Pharmacy Leadership Development: Residents have the opportunity to complete a four-week rotation in pharmacy practice management and leadership. Additionally, a variety of topics including medication-use system structure, process and outcomes quality and regulatory standards/metrics, professional development, time management, organizational politics, leadership philosophies, and financial management and planning are built into our weekly PGY-1 meetings.

Other activities:
- Weekly resident seminar – local and national speakers discussing clinical and administrative topics
- Participation in clinically-focused committees
- Advanced Cardiac Life Support (ACLS) training
- Every resident is provided a mentor to meet with monthly for guidance and support
- Interprofessional mock codes in the state-of-the-art simulation center
- Participation in resident group service projects/volunteering
• Interact with your co-residents (~29 residents / year currently – programs include critical care, infectious disease, oncology, transplant, administration, medication systems and operations, specialty pharmacy, ambulatory care, internal medicine, drug policy, pediatrics and informatics)

**Travel:** Residents receive travel support to attend the ASHP Midyear Clinical Meeting, the Great Lakes Pharmacy Residents Conference, the Midwest Residency Exchange, and a spring visit to other health systems and residency programs in order to observe, learn, and share ideas.

**Extended leaves of absence:** All resident leaves of absence and sick leaves are governed by University of Wisconsin Hospital and Clinics Policies and Procedures. In situations of an extended leave of absence, the resident may petition the Resident Advisory Committee for an extension of their residency end date to complete required residency goals and objectives. All decisions related to extensions are made on a case-by-case basis. Please contact the program director if you have additional questions about our leave of absence or sick leave policies.

**How Do I Apply?**

Applicants should submit a standard application (personal statement/letter of intent, 3 references, and a CV) through the Pharmacy Online Residency Centralized Application Service (PhORCAS). Please encourage reference writers to add a brief program specific comment when able.

To do so, follow the steps below:

1. Go to the PhORCAS portal page.
2. If you have not created an account, select the Create New Account link and complete the account registration.
3. From the PhORCAS portal page, log in and complete the application process.

**Application Deadline**

The application deadline for all residency programs is January 6th, 2020.

**On-Site Interviews**

Applicants selected for an on-site interview will be contacted by the current resident(s) to discuss available dates. Interviews are typically scheduled on Mondays and Fridays as full-day interviews. You may also contact the administrative assistant, Jen Heyer at jheyer@uwhealth.org or (608) 263-1290, to direct you to the residency program director regarding any questions about the interview or the program.

The ASHP Matching Program results are announced in March 2020. If you match at UW Hospital and Clinics, you will receive a letter of acceptance from the program director and an official job offer from UW Hospital and Clinics Human Resources with salary/benefit information, including preliminary on-boarding information.