University of Wisconsin Health
UW HEALTH
PGY-1 Pharmacy Residency

UNIVERSITY OF WISCONSIN (UW) HEALTH
600 Highland Avenue
F6/133 CSC; Mail Code 1530
Madison, Wisconsin 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: 7-9
Application Deadline: January 2, 2019
Starting Date: June 11, 2019
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), 5 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, 2019, completion of all application materials by January 2nd and an onsite interview.
**Training Site:**

- **Type:** Hospital/Health System
- **Owner/Affiliate:** Public Authority
- **Model Type(s):** Teaching, Tertiary
- **Patient volume:** 50,190 admissions; 157,414 emergency room visits; 2,797,865 outpatient visits
- **Tax Status:** Nonprofit
- **Leadership FTE:** 32
- **Pharmacist FTE:** 159
- **Technician and Support FTE:** 195
- **Total Beds:** 648
- **Other statistics:** 7 intensive care units with the following bed distributions (99 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; 18 bed Psychiatric Unit; 117 outpatient clinics; 649 house staff (physician residents/fellows); 1046 Med Flights

**Special Features:** Ranked as a top 5 hospital for quality among 333 ACOs. Named the top hospital in Wisconsin by U.S News & World Report magazine in 2012-2018. Ranked among the top 10 academic health centers nationwide in a University Health System Consortium benchmarking study of safety, mortality, clinical effectiveness and equity in delivery of care. Named among the “100 Best Companies” in the nation by Working Mother magazine for nine consecutive years (2008-2016). One of the top 100 Great Hospitals in America (Becker’s Hospital Review).

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 telepharmacy mail order service, and a hospice hospital.

**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 intensive care unit; cardiac and medical intensive care units.

**UW Carbone Cancer Center**—One of 69 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**—An 87 bed pediatric hospital adjacent to UW Health, nationally known for treatment of children’s lung diseases, cardiac surgery and other pediatric specialties.

**Organ Transplant**—The nation’s fourth 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:**

PGY1 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 (PGY2) 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 17th, 2019 to June 21st, 2020. Seven to nine 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 David R. Hager, Pharm.D., Director, Clinical Pharmacy Services

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 PGY1- Pharmacy Residency at UW HEALTH must be received by January 2, 2019.
Stipends & Benefits

Residents during 2019-2020 will receive a stipend of $47,500/year. Residents receive 5 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.

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 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>
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<tr>
<td>• Surgery</td>
<td>• Cards: cardiothoracic surgery, medical cards</td>
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<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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<tr>
<td><strong>Required Rotations (5)</strong></td>
<td>• Emergency medicine</td>
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<tr>
<td>• Oncology</td>
<td>• General internal medicine</td>
</tr>
<tr>
<td>• Medicine</td>
<td>• Pediatrics: general, Heme/Onc/BMT, PICU, NICU</td>
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<tr>
<td>• Transplant</td>
<td>• Surgery: general, specialty</td>
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<tr>
<td>• Drug information/drug policy</td>
<td>• Hospice, palliative care</td>
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<tr>
<td>• Precepting</td>
<td>• Infectious diseases</td>
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Duty hours: The residency program follows duty hour definitions and recommendations from the Accreditation Council for Graduate Medical Education, www.acgme.org. 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, 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.

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

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:

<table>
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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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</tbody>
</table>

**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 drug 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 as they prepare for and participate in “ Resident Report,” 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 at Pharmacy Grand Rounds or 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 pharmacy 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 implementation of change that expands or enhances patient care or pharmacist roles at UW Health. **Everything** our department has accomplished is a result of resident projects.

**Past PGY-1 resident projects (2015-2017):**
- RPh to RPh Handoff Collaboration to Determine Impact on Readmissions and Patient Outcomes
- Development and implementation of optimizing pegaspargase utilization for adult and pediatric patients
- Implementation of Afib Triage in ED to Cardiology Clinic
- Implementation of hyperlipidemia management in primary care
- Standardization of Prevention and Treatment of Veno-Occlusive Disease in Adult and Pediatric Bone Marrow Transplant Patients
- Therapeutic Drug Monitoring and Dosing of Infliximab
- Improving treatment of pediatric pneumonia
- Development and implementation of diabetes transitions of care best practices
- Development and Implementation of SNF Discharge Handoff and Follow-up
- 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

**Pharmacy Leadership Development:** Residents have the opportunity to complete a four-week rotation in pharmacy practice management and leadership. Additionally, built into our weekly PGY-1 meetings residents learn about 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, financial management and planning.

**Other activities:**
- Weekly resident seminar – local and national speakers discussing clinical and administrative topics
- Participation in clinically-focused committees
- Advanced Cardiac Life Support 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 2, 2019.

**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, Mary Demski at mdemski@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 2019. 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.