THE UNIVERSITY OF TOLEDO

Recognized as an institution of excellence for more than 150 years, The University of Toledo expanded upon this reputation by merging with the Medical University of Ohio in July 2006. The University of Toledo is among the nation’s top universities with some of the most diverse offerings in the U.S.

With a spectrum of colleges, departments and professional programs matched only by institutions such as Ohio State and Michigan, The University of Toledo has more than 20,000 students, 7,000 employees and 100,000 alumni, in addition to the third largest public-university operating budget in the state. The University offers more than 150 academic programs from arts to medicine, pharmacy to law, and engineering to education. Its seven campuses throughout the Toledo area include the Health Science Campus, home of The University of Toledo Medical Center and clinics, and the Center for the Visual Arts, which has an on-site relationship with the world-renowned Toledo Museum of Art.

Research plays a major role in The University of Toledo’s success. Undergraduate, graduate and faculty-led research opportunities have resulted in 125 patents and more than $60 million in funding and grants. University researchers are working to improve the human condition through inquiry into issues at the forefront of national attention. Whether they study diabetes or Alzheimer’s disease, performance management or bio-fuels, UT researchers are making breakthroughs in the laboratory that are being translated into results in the real world.

The University of Toledo also hosts more than 200 events, performances and speakers each year. From the film and theatre season to Rocket football games, there is plenty to see and do at UT.

THE COLLEGE OF PHARMACY AND PHARMACEUTICAL SCIENCES

Founded in 1904, The University of Toledo College of Pharmacy and Pharmaceutical Sciences has a long history of producing successful pharmacists and pharmaceutical scientists, many of whom have become leaders in business, industry and academe. In 2010, the college expanded to a new facility on the University’s Health Science Campus. The college has markedly increased nationally competitive research funding and has developed a reputation for training pharmaceutical scientists at the master’s and doctoral levels. During the last 20 years, the college scholarship endowment has grown tremendously, allowing the college to award nearly $100,000
annually in scholarships. These measures of success have helped position the college for its nationally-prominent role in pharmaceutical education. With schools of pharmacy, medicine, nursing, and allied health, UT presents an excellent combination for academic success and interdisciplinary focus. The mission of the college is to educate students to meet the pharmaceutical needs of society, to advance pharmaceutical knowledge through research, and to serve the profession and the community. Guiding principles are personal integrity, respect for humanity and professionalism. In addition to residency programs, the college offers a six-year curriculum leading to the entry-level PharmD degree; a bachelor of science degree in pharmaceutical sciences with majors in pharmacology/toxicology, medicinal chemistry, pharmaceutics, or pharmacy administration; a master of science degree in medicinal chemistry or pharmaceutical sciences, and a Ph.D. in medicinal chemistry.

THE UNIVERSITY OF TOLEDO MEDICAL CENTER

The Health Science Campus is the premier training ground for current and future pharmacists, physicians, nurses and other health care professionals in northwest Ohio. The Health Science Campus is a 475-acre site that houses The University of Toledo Medical Center (UTMC) and many of UT’s health care and research programs. UTMC, a 220-bed, Level I trauma center; offers innovative treatments for stroke and cancer found nowhere else in the state and features the new Orthopedics Center. UTMC provides specialty care in cardiology, critical care, neurology, orthopedics, cancer, surgery, and kidney transplantation and was one of the first hospitals in Ohio to be designated a stroke center.

The faculty is comprised of practicing health care professionals at UTMC, one of 15 major teaching hospitals named on the national “Top 100 Hospitals: Performance Improvement Leaders” list. UTMC, with a commitment to university-quality, patient-focused care, is the only academic university hospital in the region. UTMC also is home to five of the seven northwest Ohio physicians listed as “America’s Top Doctors.” Fewer than one percent of physicians nationwide are recognized with this distinction.

THE UNIVERSITY OF TOLEDO MEDICAL CENTER
DEPARTMENT OF PHARMACY SERVICES

The department includes centralized, decentralized, and clinical pharmacists, technicians, and administrative offices in inventory control, managed care, research and investigational drug services, information systems, and operations, in addition to the director of pharmacy and support staff. The department also has clinical faculty personnel from The University of Toledo College of Pharmacy and Pharmaceutical Sciences. Clinical specialists from the Department of Pharmacy Practice and UTMC provide pharmaceutical care to hospital and ambulatory patients. Clinical services and direct patient care are provided with areas of specialization that include cardiology, infectious disease, HIV, nephrology, critical care (medical and surgical), and emergency medicine, in addition to internal medicine. Clinical pharmacists in each service interact with multidisciplinary teams and actively engage in medication monitoring, pharmacokinetic dosing, and physician/patient education. An outpatient pharmacy serves the needs of employees and ambulatory patients. Clinical rotations are offered to pharmacy students as part of the department’s ongoing commitment to pharmacy education.
The PGY1 Pharmacy Residency at UTMC is an intense 12-month, full-time curriculum program designed to provide residents with extensive training opportunities and to develop clinicians that practice independently and excel in patient care and teaching. The program provides a variety of experiences in different settings, focusing on the four areas of practice specified in the ASHP accreditation standards: acute care, ambulatory care, drug information and administration. A teaching certification program is available. This university-based program provides an opportunity to gain teaching experience in didactic, laboratory, small group instruction and experiential teaching.

This comprehensive residency will provide a structured experience with the flexibility to tailor training programs that meet residents’ individual needs. The PGY1 Pharmacy Residency Program offers broad experiences, including academic experience within the college and practice development at affiliated medical facilities. Residents will participate in rounds and drug therapy management, precept and teach PharmD students, and provide drug information to the health care team, patient, and the patient’s family members. Residents will also participate in teaching, staff development, medication utilization evaluation (MUE) projects, protocol/pathway development, and other departmental/institutional projects. Residents will complete at least one research project. Further scholarly activity is encouraged and supported.

Our program prepares pharmacists to provide high-quality, patient-focused care in a variety of clinical settings. Pharmacists completing this residency will be leaders in pharmacy practice and will be prepared to practice in diverse care environments. Graduates of this program will accept responsibility for patient outcomes and solve the problems or remove the barriers that prevent optimal outcomes for their patients. These pharmacists will promote and improve the pharmacy profession through practice, leadership, continuing education, and dedication to the advancement of patient care.

For additional information or application, visit utoledo.edu/pharmacy/residency or contact:

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The Pharmacy Residency at The University of Toledo is a patient-care focused program with strong emphasis on teaching and learning. At UT, residents “Learn, Do and Teach.” Rotations are offered in a variety of areas tailored to the interests of the individual resident. The following rotations are available during the Pharmacy Residency.

Internal Medicine
The resident participates in patient rounds as an integral part of a multidisciplinary team. The resident has direct patient contact and plays an important role in patient education and counseling. The resident provides evidence-based pharmaceutical care, including pharmacotherapeutic recommendations, pharmacokinetic dosing, drug information, monitoring for the appropriateness and cost-effectiveness of drug therapy, reporting adverse drug reactions, and assessing drug-drug, drug-disease state interactions.

Cardiology
The resident develops proficiency in providing pharmaceutical care to cardiovascular patients. This rotation allows pharmacy residents to round and interact with in-patient cardiology service. Common cardiovascular disease processes, including coronary artery disease, hypertension, hyperlipidemia, dysrhythmia and heart failure, are a major focus of the experience.

Critical Care
Core rotations are available in both medical and surgical intensive care. Each resident has extensive opportunities in these areas. Medical teams expect input from the residents, with emphasis on drug selection, pharmacokinetics and drug dosing, and nutrition. Critically ill patients are challenging, and residents play a direct role in pharmaceutical care for patients in the medical or surgical ICU. The resident is responsible for identifying, preventing, and resolving drug-related problems for all patients in the ICU. These rotations expand the resident’s knowledge of the important literature or landmark papers that define critical care practice.

Antimicrobial Stewardship/Infectious Disease
The resident reviews the appropriateness of prescribed antimicrobials. The rotation provides the opportunity to see a variety of indications for anti-infectives and to develop the knowledge and skill to assess the appropriateness of the prescribed therapy. This includes ensuring that patients are receiving the appropriate anti-infective therapies for the infection being treated at the appropriate dose and duration of therapy. Other responsibilities include multidisciplinary team education, targeted patient-care programs, and managing pharmacokinetic service. The goal of the Antimicrobial Stewardship program is to maximize patient outcomes while minimizing unwanted effects of inappropriate or unnecessary antimicrobial therapy, including development of antibiotic resistance and secondary infections.

Administration
The resident gains experience in program planning and justification, decision-making, and problem-solving while working with the administrators of the Department of Pharmacy Services. Each resident also develops skills in personnel management and interprofessional/interdepartmental relations.

Drug Information
The resident has many opportunities to provide drug information in verbal and written format. Drug literature evaluation and writing skills are enhanced through presentations, drug monographs, medication use evaluations, performance improvement initiatives, and by contributing to the Pharmacy Department newsletters. The resident also assists in the development of pathways, guidelines, and computerized order sets for certain disease states and medications.

Integrated Care
The resident is partnered with a clinical staff pharmacist and pharmacy students to form a team to provide a variety of pharmaceutical care services to patients of UTMC. Activities of this rotation include but are not limited to: medication reconciliation, IV to oral conversion, renal dosing, discharge counseling, and education to nursing and medical teams. Experience will be gained in neurology, hematology, oncology, orthopedic and general surgery, renal transplant, pulmonary diseases as well as cardiology, infectious disease, and general internal medicine.
Sample PGY1 schedule with required rotations

- July: Orientation/Project (includes orientation to pharmacy operations, drug distribution)
- August: Internal Medicine
- September: Elective 1
- October: Critical Care (Medical Intensive Care Unit or Surgical Intensive Care Unit)
- November: Integrated Care
- December: Research / UHC Pharmacy Council & Resident Poster Session / ASHP Midyear Clinical Meeting
- January: Integrated Care
- February: Cardiology
- March: Elective 2
- April: Integrated Care
- May: Antimicrobial Stewardship
- June: Integrated Care

*Each resident’s experience will be tailored to individual interest to develop clinical and leadership skills. Elective rotations are available to allow the resident to obtain a broad clinical experience or develop a specialty interest.

Electives
- Neurology
- Cardiothoracic Surgery
- Nephrology
- Infectious Disease
- Teaching Skills / Emergency Medicine
- Nutrition
- Investigational Drug Service
- Pharmacy Benefits Management
- Information Technology
- Research
- Academia
- Trauma
- Neurosurgery
- Additional month within any of the required rotations

Professional Symposia
UT PharmD Seminars, TASHP Residency Showcase, Fall OCCP, SMSHP Residency Showcase, ASHP Midyear Clinical Meeting/Residency Showcase, UHC Pharmacy Council and Resident Poster Session, OSHP Residency Showcase, Ohio Pharmacy Resident Conference, and Spring OCCP

Longitudinal Experiences
Drug information, drug distribution, institutional committees, research, ambulatory care clinics (half-day once weekly), leadership, pharmacokinetics service, and educational presentations including journal clubs, topic discussions, and case presentations.

Teaching Opportunities
Residents take an active role in teaching pharmacy students in didactic and experiential training and active precepting of 4th year students on clinical rotation at UTMC. In addition, opportunities exist to serve as teaching assistants for didactic courses at the College of Pharmacy and Pharmaceutical Sciences. A teaching certificate program for residents is offered within The University of Toledo College of Pharmacy and Pharmaceutical Sciences.

Research Project
Each pharmacy resident completes at least one MUE or other smaller project along with a major research project. The major research project may be scientific-, practice-, or administrative-based research, but must demonstrate a value for clinical pharmacy services. Project is presented at the UHC resident poster session prior to the ASHP Midyear Clinical meeting, ASHP poster session, Fall OCCP meeting and Ohio Pharmacy Resident Conference. Publication is expected.
Pharmacy Residency Program Information (PGY1)

Accreditation: The University of Toledo Pharmacy Residency Program is accredited by the American Society of Health-System Pharmacists.

Duration: 12 months

Number of Positions: Eight 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. Applications for the matching program may be downloaded from natmatch.com/ashprmp. The deadline for match registration is usually in mid-January.

Application Deadline: All application materials must be received by Monday, Jan. 13, 2014

Starting Date: July 1

End Date: June 30

Estimated Stipend: $40,000 per year

On-site Interview Required: Yes

Training Site: The University of Toledo Medical Center and College of Pharmacy and Pharmaceutical Sciences

Owner/Affiliate: Government

Model Types: Teaching, Tertiary Care

Tax Status: Nonprofit

Total Beds: 220, acute care hospital

Clinical Staffing Requirement: Every eighth weekend

On-call Program: Every ninth night

Pharmacy Residency Fundamentals
- PGY1 residents are members of UTMC medical house staff.
- Residents interact regularly with College of Pharmacy and Pharmaceutical Sciences faculty and students, in addition to UTMC clinical pharmacists and pharmacy staff.
- The ASHP Resident Learning System will be used to direct resident learning.
- A resident research project is required, with results presented at Ohio Pharmacy Resident Conference and written in manuscript form.
- Teaching opportunities include didactic lectures, small group facilitation and precepting.
- Teaching certificate program

Travel
A travel stipend is available to residents for use to attend ASHP Midyear Clinical Meeting, Ohio Pharmacy Resident Conference, and/or additional meetings as approved by the Residency Advisory Committee (RAC).

For more information regarding the Pharmacy Residency Program (PGY1), please visit:
utoledo.edu/pharmacy/residency/PGY1/pharmacy.html
Critical care residents have the opportunity to tailor a training program to fit their individual needs. The primary practice site for this program is The University of Toledo Medical Center. Areas of study in these facilities include surgical, medical, cardiac, cardiothoracic, neuro/neurosurgical, trauma intensive care, transplant, infectious disease, clinical microbiology, infection control and epidemiology, emergency medicine, and nutrition support.

Residents actively participate in multidisciplinary rounds, providing drug therapy management and drug information to members of the health care team, patients and patients’ family members.

Research is encouraged, and opportunities include basic and applied aspects of critical illness, basic and applied microbiology and infectious diseases, clinical pharmacokinetics, basic and applied pharmacodynamics, and multi-center clinical trials. The state-of-the-art laboratory and research facilities at UT are among the finest in the region.

In addition to patient care and scholarly activity, many educational activities are available. These include attendance at institution-sponsored seminars and workshops, clinical and didactic instruction of PGY1 residents and students, presentation of continuing education seminars at the College of Pharmacy and Pharmaceutical Sciences and across the Health Sciences Campus, and completion of advanced coursework in related areas.

For additional information or application, visit utoledo.edu/pharmacy/residency or contact:

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Critical Care Residency (PGY2)

**Experiential Training**
Surgical, medical, cardiac, cardiothoracic surgery, neurologic, neurosurgical, trauma intensive care, infectious disease, clinical microbiology, infection control and epidemiology, emergency medicine, and nutrition support.

**Teaching Opportunities**
Didactic discussions, reading assignments, case presentations, written assignments, student teaching, leading student case discussions and presentations, and attendance at grand rounds and other educational symposia.

**Emphasis on the Following Areas:**
- Hemodynamic and physiologic monitoring
- Shock and related problems
- Surgical and trauma critical care
- Pulmonary
- Cardiovascular
- Renal
- Neurologic
- Gastrointestinal/Nutrition
- Hepatic
- Endocrine
- Infectious diseases
- Analgesia and sedation
- Clinical Toxicology

**Research Project**
The resident will complete at least one project during the residency. The project may be administrative or scientific/practice-based research, and it must demonstrate a value for clinical pharmacy services in critical care.

**Travel**
UT will pay the expenses for attendance to at least one professional meeting in addition to the Ohio Pharmacy Residency Conference. Full or partial funding for additional meetings may be possible, particularly if the resident is presenting research or other material.

For more information regarding the Critical Care Specialty Residency, please visit:
utoledo.edu/pharmacy/residency/PGY2critical.html
The Community Pharmacy Residency program is committed to developing well-rounded clinicians who are able to provide advanced practice services in a variety of clinical settings. The program will equip residents to provide these services to diverse patient populations, collaborate with other health care providers as part of an integrated team, teach and mentor pharmacy students, develop and provide innovative services in the community setting and take an active role in advancing the practice of community pharmacy.

The community pharmacy resident has a variety of opportunities to deliver pharmaceutical care. Facilities include the UT College of Pharmacy and Pharmaceutical Sciences, UTMC Family Medicine Clinic, and the Kroger Company. The college currently partners with Kroger to develop and implement advanced pharmaceutical care services in the community practice setting. Initiatives are primarily focused on medication therapy management, collaborative drug therapy, immunization and health screenings. The college is also developing pharmacy services for the UTMC Family Medicine Clinic.

The resident will have opportunities for teaching within the college, and a teaching certificate program for residents is offered within the UT College of Pharmacy and Pharmaceutical Sciences. Residents will participate in the development of pharmacy care initiatives in each of our community practice facilities.

Research is encouraged, especially in the areas of medication therapy management, collaborative drug therapy management, assessment of cost benefit for pharmaceutical care, and reimbursement for the delivery of patient care services. State-of-the-art laboratory and research facilities at The University of Toledo are among the finest in the region.

In addition to patient care and research opportunities, a variety of other educational activities is available to the resident. These include attendance at institution-sponsored seminars and workshops, clinical and didactic instruction to PharmD students, presentation of continuing education seminars at the College of Pharmacy and Pharmaceutical Sciences, and completion of advanced coursework in related areas.

For additional information or application, visit utoledo.edu/pharmacy/residency or contact:

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Community Pharmacy Residency (PGY-1)

**Experiential Training**
- Participation in the development of pharmacy care initiatives with Kroger, one of the nation’s largest grocery and community pharmacies.
- Teaching experience within the UT College of Pharmacy and Pharmaceutical Sciences.

**Other Training Opportunities**
Didactic discussions, reading assignments, case presentations, written assignments, student teaching, leading student case discussions and presentations, and attendance at educational symposia.

**Emphasis on the Following Areas**
- Medication Therapy Management Services
- Immunizations
- Health Screenings
- Reimbursement for Patient Care Services

**Residency Details**
- Program length: 12 months July 1 - June 30
- Estimated stipend: $40,000
- On-site interview required

**Research Project**
The resident will complete at least one project during the residency. The focus of the project is determined in collaboration with Kroger and the residency project will be presented at the Annual Meeting of the American Pharmacists Association.

**Travel**
UT will pay the expenses for attendance at the Annual Meeting of the American Pharmacists Association. Full or partial funding for additional meetings may be possible, particularly if the resident is presenting research or other material.

**Residency Goals and Activities**
- Initiate and maintain Disease State Management (DSM) and Medication Therapy Management (MTM) programs
- Provide general health and wellness promotions, immunizations, and disease prevention programs
- Manage drug information services
- Develop a practice-oriented project, prepare and present findings at regional or national meetings, and submit a manuscript for journal publication
- Precept and teach Doctor of Pharmacy students

For more information regarding the UT/Kroger Community PGY1 Residency, please visit: utoledo.edu/pharmacy/residency/PGY1community.html.
Residency Program Benefits (all programs)

Benefits
• Medical
• Prescription
• Dental
• Vision
• Long-term disability
• Life insurance
• Pharmacy residents receive 10 paid vacation days, 10 sick days, and 10 paid holidays per year.
• The UT College of Pharmacy and Pharmaceutical Sciences Faculty Appointment
• Lab coats
• Parking
• Discounted meals
• Photocopying services
• Clinical offices
• Personal computer
• Certification in BLS/ACLS or CPR with AED
• Conferences: ASHP Midyear and Ohio Pharmacy Residency Conference
• Pharmacy continuing education
• Immunizations

Other Benefits Available
• Spousal coverage
• Flexible Spending Account
• 403(b) or 457 Accounts
• Tuition fee waiver
• Early Learning Center (daycare)
• The University of Toledo Federal Credit Union
• Fitness facilities (YMCA/Morse Center)

The University of Toledo is an Equal Access, Equal Opportunity, Affirmative Action employer and educator.

A detailed list of active preceptors may be found at utoledo.edu/pharmacy/residency.
How Do I Apply?

In order to be considered for the residency programs at The University of Toledo, you must:

1. Be a PharmD graduate of an accredited college of pharmacy by July 1, 2014.
2. Be eligible for licensure as a registered pharmacist in the state of Ohio, and complete the licensure process or apply for reciprocity by Sept. 1, 2014.
3. Be enrolled in the American Society of Health-System Pharmacists Residency Matching Program. Applications for the matching program may be downloaded from natmatch.com/ashprmp. The deadline for match registration is usually in mid-January 2014.
4. Complete an online application through PhorCAS:
   a. PGY-1 Deadline: Monday, Jan. 13, 2014
   b. PGY-2 Deadline: Monday, Jan. 13, 2014
5. Once your completed application is received and you are selected for an interview, you will be contacted to discuss dates. At this time, you will be given the name and phone number/e-mail address of a current resident who can be contacted to answer any questions you may have. You may also contact the program director regarding any questions about the interview or the program.
6. The ASHP Matching Program results are announced in mid-March 2014. If you match at UTMC, you will receive a letter of acceptance soon afterwards.