Challenging Multidisciplinary Programs

Duquesne University’s Graduate School of Pharmaceutical Sciences (GSPS) offers numerous degree programs that provide outstanding preparation to individuals seeking rewarding careers in pharmacy administration or the pharmaceutical sciences:

- **Masters of Science and Doctor of Philosophy**
  - Medicinal Chemistry
  - Pharmaceutics
  - Pharmacology

- **Masters of Science**
  - Pharmacy Administration

All graduate programs are designed for individuals who have earned an undergraduate degree in biology, chemistry, engineering, pharmacy, allied health sciences, the social and behavioral sciences or business.

**Areas of Research**

The graduate programs in pharmaceutical sciences are a blend of didactic courses and laboratory training/hypothesis-driven investigation. We use the scientific method, emphasizing the following research areas:

- The mechanisms of drug action (medicinal chemistry, Pharmacology)
- Drug discovery, formulation and delivery systems (medicinal chemistry, pharmaceutical chemistry, pharmaceutics)
- Quality assurance in pharmaceutical processing (pharmaceutics),
- The management of financial, physical and human resources involved in the practice of pharmacy and the healthcare industry (pharmacy administration)

**Superior Research Environment**

As part of Duquesne University in Pittsburgh, PA, the GSPS shares in all of the academic and technological resources of a doctoral university. The University supports a research environment that advances the frontiers of knowledge by finding new cures and treatments for diseases, by helping to develop new technologies and by training future generations of researchers and scholars.

Research laboratories for the GSPS are located in the Richard King Mellon Hall of Science and Bayer Learning Center. Mellon Hall facilities also include a fully equipped manufacturing laboratory/pilot plant and the Duquesne Center for Pharmaceutical Technology.

The Center for Pharmaceutical Technology is a focal point for the research interests of faculty and collaborators for the development and scientifically based implementation of pharmaceutical manufacturing technology. The Center utilizes Process Analytical Technology (PAT), a scientific, risk-based framework designed to help manufacturers develop and implement new efficient tools for use during pharmaceutical development and manufacturing. PAT also maintains or improves the current level of product quality assurance.

Modern animal facilities in the adjacent Bayer Learning Center provide students with the opportunity for physiological, pharmacological and toxicological evaluations of drugs and chemicals.

GSPS students also have full access to the Gumberg Library at Duquesne University. The library houses a state-of-the-art integrated, online library system complete with a computerized card catalog, advanced computer disk (CD-ROM) system, online networked databases and an array of technical support functions. The system enables students to access extensive local, national, and international databases and library catalogs around the world.

Duquesne University’s location in the heart of Pittsburgh, one of the nation’s leading medical and research hubs, enables students to take advantage of abundant ancillary resources, research libraries, and opportunities for integrated research.

“When I moved to Pittsburgh from Western Iowa to pursue my PhD, many people wondered why I chose Duquesne among the many options I had for graduate school. The choice for me was obvious—Duquesne’s program is leading the way in pharmaceutical process analytical technology (PAT).”

Robert P. Cogdill, Ph.D.
Industrial Research Coordinator
Center for Pharmaceutical Technology, Duquesne University
Outstanding Faculty Support

While the academic programs are rigorous, the atmosphere for students in the GSPS is supportive and positive. All students receive personalized attention and professional mentorship from faculty who are internationally acclaimed for their expertise, research and scholarship.

The GSPS faculty has training or experience from top academic and industrial organizations in the U.S. including the following:

- University of California at Berkeley
- Northwestern University
- The University of Maryland
- The University of Southern California
- The University of Iowa
- The Ohio State University
- Harvard University
- The University of Kentucky
- The University of North Carolina, Chapel Hill
- Aventis Pharmaceuticals
- Interneuron Pharmaceuticals

They will challenge you to enhance your intellectual growth and attain the highest academic credentials.

Graduate Student Profile

Of Duquesne University’s 10,000 students, more than 4,000 are graduate students. They live both on and off campus, and are an active and vital part of the University community.

The Graduate School of Pharmaceutical Sciences typically enrolls approximately 60 students, representing a mix of U.S. and international students.

Graduate Student Outcomes

Alumni of the GSPS have found rewarding positions in academia, industry or public service. Our most recent M.S. graduates have continued their studies at the doctoral level or are employed in a variety of research laboratory settings. Graduates of our Ph.D. programs are employed in research and administrative positions in industry or higher education.

Companies that have employed GSPS graduates include:

- Bristol Myers Squibb Company
- Merck & Company
- GlaxoSmithKline
- DuPont Pharmaceuticals
- Center for Disease Control
- Pfizer Global Research & Development
- Mylan Pharmaceuticals

Universities that have employed GSPS graduates as post-doctoral fellows or faculty members include:

- University of Michigan
- University of North Carolina, Chapel Hill
- University of Pittsburgh
- University of Virginia
- Pacific University

Senior positions attained by GSPS graduates include:

- President and Chief Executive Officer
- Vice President of Business Development
- Vice President, Operations
- Vice President, Corporate Development
- Director, Product Development
- Dean, School of Pharmacy
- Vice President, Corporate Development

“My journey towards the Ph.D. degree at Duquesne was extremely rewarding. Duquesne not only provided a solid foundation in Medicinal Chemistry through an interactive teaching environment and seminars, but also instilled in situ problem solving skills via enriched independent research programs and presentations of my research at national scientific conferences.”

Yibin Zeng, Ph.D.
ChemoCentryx Inc
Application Requirements

The Graduate School of Pharmaceutical Sciences welcomes applications from individuals who meet the following requirements:

- Hold a baccalaureate degree in biology, chemistry, pharmacy, allied health sciences, or the social/behavioral or business sciences (depending on the proposed area of study) from an accredited college or university
- Provide official post-secondary transcripts indicating completion of undergraduate and graduate course work
- Provide a brief statement of purpose and intent with regard to the specific area of graduate study chosen
- Provide three letters of recommendation from persons acquainted with the academic abilities of the applicant
- Submit results of the GRE General Test

Applicants whose native language or principal language of instruction is not English are required to submit TOEFL scores to the Graduate School and to sit for on-campus English language competency testing. International students who are applying for a teaching assistantship are required to submit TSE scores.

Application Deadlines

- Fall semester: February 1
- Spring Semester: October 1

Teaching and research assistantships are typically awarded in the spring semester for the following academic year.

To Request an Application or More Information:

Director of Graduate Studies
Graduate School of Pharmaceutical Sciences
Duquesne University
409 Mellon Hall
Pittsburgh, Pennsylvania 15282
Telephone: 412-396-1172
gspsdadm@duq.edu
www.pharmacy.duq.edu/gd.html

About Duquesne University

Founded in 1878, Duquesne University is a private Catholic university in the Spiritan tradition. A coeducational university with more than 10,000 students, Duquesne offers an extensive selection of undergraduate and graduate degree programs across 10 schools of study. Duquesne is consistently ranked among the nation’s top Catholic universities for its award-winning faculty and 130-year tradition of academic excellence.

Students enjoy a self-contained, safe, easy-to-navigate and welcoming campus – as well as the city of Pittsburgh’s ample cultural, business, health care, education and research-related enterprises. For more information, visit www.duq.edu.

“Attending Duquesne’s Graduate School of Pharmaceutical Sciences Department of Pharmacology-Toxicology was one of the most important and rewarding decisions of my life. The faculty, course work, and research opportunities at Duquesne’s Graduate School of Pharmaceutical Sciences were top-notch. All were instrumental in preparing me for employment—and success—in academia and laboratory research.”

Michael E. Rhodes, Ph.D.
Assistant Professor, Biology Department
Saint Vincent College, Latrobe PA