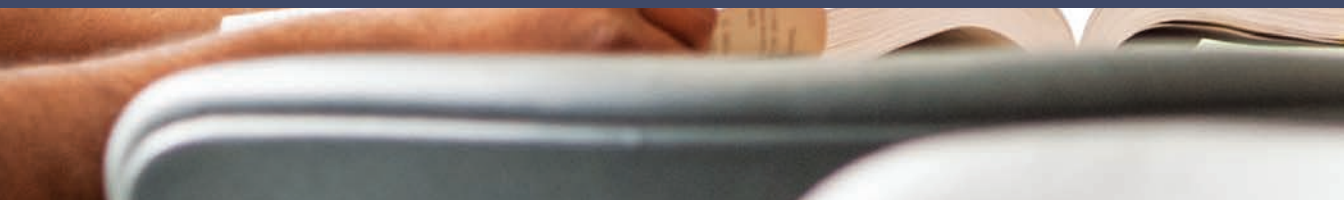




MYLAN SCHOOL OF PHARMACY
AND THE
GRADUATE SCHOOL OF
PHARMACEUTICAL SCIENCES

Lead the Future of
Pharmaceutical Science



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 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. Pittsburgh is consistently ranked as one of the most livable cities in the United States, with highly regarded cultural, business, health care and research offerings.

OUR MISSION

The School of Pharmacy educates and mentors students who advance the profession of pharmacy and pharmaceutical research to improve the health outcomes of patients and their communities.

**Professional. Challenging. Bold.**

With faculty who are leaders in NIH- and industry-funded research, the Duquesne University Graduate School of Pharmaceutical Sciences offers doctoral and master's degrees with outstanding opportunities for research, community service and professional and academic careers. Our students and faculty focus on the frontiers of new drug discoveries and treatments for diseases, helping to develop new technologies, and training future researchers and scholars. We offer rigorous, multidisciplinary degree programs in the following fields.

MASTERS OF SCIENCE AND DOCTOR OF PHILOSOPHY

Medicinal Chemistry
Pharmaceutics
Pharmacology

MASTERS OF SCIENCE

Pharmacy Administration

11:1

student-faculty
ratio

#48

*U.S. News & World
Report* ranking of
pharmacy graduate
programs (2013)

Our Community

We enroll approximately 60 graduate students— from both the United States and around the world—on a campus of 10,000 undergraduate and graduate students. Our small student-to-faculty ratio ensures that students benefit from support and mentoring from engaged faculty members, developing partnerships and networks that lead to professional opportunities. Admitted students typically hold undergraduate degrees in biology, chemistry, engineering, pharmacy, the health and social sciences and business.

Our Reputation

Recognized as a national leader, in 2013 we were ranked 48th in the nation among graduate schools of pharmacy by *U.S. News & World Report*. In that academic year, our faculty received more than \$1 million for research from the National Institutes of Health, while receiving four patents and two national appointments. In addition, they made 56 presentations and published 25 peer-reviewed journal articles, two non-peer-reviewed journal articles, and three book chapters or sections. That record gained the attention of a national education publication; the *Chronicle of Higher Education* ranked Duquesne 16th in a productivity survey of small research institutions.

Our graduate students are a vital part of the school's research community. In addition to working alongside faculty on funded research, they also conduct training for employees of the U.S. Food and Drug Administration in modern manufacturing methods including process optimization and control, gaining expertise on federal government priorities and standards.

Our graduates pursue research and executive positions with national and international pharmaceutical industry leaders as well as faculty appointments at U.S. universities.

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 PROBLEM SOLVING SKILLS VIA ENRICHED INDEPENDENT RESEARCH PROGRAMS AND PRESENTATIONS OF MY RESEARCH AT NATIONAL SCIENTIFIC CONFERENCES."

YIBIN ZENG, PH.D. | '02



#3

in the nation among private pharmacy schools for securing research funding from the NIH

#16

among small research universities, according to a *Chronicle of Higher Education* index measuring faculty productivity

#44

on the 2013 *Great Schools at Great Prices* list for offering high academic quality at a good price

Our Research Environment

With 10 schools of study, Duquesne offers superior academic resources. Shared campus resources include universal high-speed wireless Internet and the Gumberg Library, offering worldwide access to online journals and databases.

The School of Pharmacy's research laboratories include high-end, analytical instrumentation to support experimentation across the disciplines of pharmaceutical science.

In addition, the school houses a fully equipped manufacturing laboratory/pilot plant and the Center for Pharmaceutical Technology. This center, one of five academic centers within the School of Pharmacy, is a focal point for pharmaceutical research. The center employs Quality by Design and Process Analytical Technology, a contemporary industry benchmark. This scientific risk-based framework helps manufacturers develop efficient new tools for pharmaceutical development, manufacturing and quality control.

Modern, USDA-approved animal facilities housed at the Bayer Learning Center support student investigations into physiological, pharmacological and toxicological evaluations of drugs and chemicals.

The school benefits from its location in the heart of Pittsburgh, one of the nation's leading medical and research hubs. Nearby research libraries and opportunities for integrated research

with other institutions extend Duquesne's academic and technological reach.

Graduate programs in the pharmaceutical sciences blend academic coursework with laboratory training and hypothesis-driven investigation. Graduate students work alongside faculty in the following research areas:

- The mechanisms of drug action (medicinal chemistry, pharmacology)
- Drug discovery, formulation and delivery systems (medicinal chemistry, pharmaceuticals)
- Quality assurance in pharmaceutical processing (pharmaceutics, industrial pharmacy)
- Management of financial, physical and human resources in the pharmaceutical and health care industries



WHEN I MOVED TO PITTSBURGH FROM WESTERN IOWA TO PURSUE MY PH.D., MANY PEOPLE WONDERED WHY I CHOSE DUQUESNE FROM THE MANY OPTIONS I HAD. THE CHOICE FOR ME WAS OBVIOUS—**DUQUESNE'S PROGRAM IS LEADING THE WAY IN PHARMACEUTICAL PROCESS ANALYTICAL TECHNOLOGY (PAT).**

ROBERT P. COGDILL, PH.D. | '07

Our Faculty

Our professors have gained outstanding professional reputations. They have earned their doctoral degrees from prestigious private universities such as Harvard University, the University of Southern California, Northwestern University, and from public institutions such as the University of California at Berkeley, The Ohio State University and the University of North Carolina, Chapel Hill. Many have chosen graduate-level research and teaching after careers with major firms like Aventis Pharmaceuticals and Interneuron Pharmaceuticals.

DR. ALEEM GANGJEE: CUTTING-EDGE RESEARCH IN THE FIGHT AGAINST CANCER

Dr. Aleem Gangjee—professor of medicinal chemistry; Rev. Adrian Van Kaam, C.S.Sp., Endowed Chair in Scholarly Excellence; and Distinguished Professor in the School of Pharmacy—is leading the charge to combat today's most challenging diseases. Dr. Gangjee, who has held five concurrent National Institutes of Health (NIH) R01 grants for cancer and other deadly diseases, has developed many new compounds and received more than 25 patents and \$18 million in NIH funding in his 30 years of research at Duquesne. He is Duquesne's first and only faculty member to have three patents issued within one month.

DR. CARL ANDERSON: IMPROVING THE QUALITY OF PHARMACEUTICAL PRODUCTS

Dr. Carl Anderson—associate professor of pharmaceutical sciences and director of the Center for Pharmaceutical Technology—serves as a consultant to the pharmaceutical industry and the U.S. Food and Drug Administration, promoting modern methods of pharmaceutical development and manufacturing. Dr. Anderson's graduate students enjoy real-world, hands-on experiences participating in industrial research projects and training programs.

DR. PAULA WITT-ENDERBY: FIGHTING OSTEOPOROSIS WITH MELATONIN

Dr. Witt-Enderby and Dr. Judith Balk of the University of Pittsburgh School of Medicine studied the effects of melatonin in perimenopausal women. Comparing women taking a small dose of the supplement with women taking a placebo over a six-month period, they found the melatonin group showed a trend toward normalization, in which bone breakdown equals that of bone formation. The study's findings indicate that melatonin treatment may re-establish the equilibrium disrupted during menopause. Dr. Witt-Enderby and Dr. Balk will expand the trials over the next two years.

OUR GRADUATES' CAREERS

In industry and in post-doctoral academic research, our graduates make outstanding contributions to individual and community health. Recent employers are:

Bristol Myers Squibb Company

The Centers for Disease Control and Prevention

Eli Lilly & Co.

GlaxoSmithKline

Merck & Company

Mylan Pharmaceuticals

Pfizer Global Research & Development

University of Kansas

University of Michigan

University of North Carolina, Chapel Hill

University of Pittsburgh

University of Virginia

THE APPLICATION PROCESS

WE WELCOME APPLICANTS WHO MEET THE FOLLOWING REQUIREMENTS:

- A baccalaureate degree in biology, chemistry, pharmacy, engineering, allied health sciences or the social/behavioral sciences (depending on the proposed area of study) from an accredited college or university
- An official post-secondary transcript indicating completion of undergraduate and graduate course work
- A brief statement of purpose and intent for a specific area of graduate study
- Three letters of recommendation from persons acquainted with the academic abilities of the applicant
- Results of the GRE General Test

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

For the most current list of application requirements, please visit www.duq.edu/pharmacy.

Mylan School of Pharmacy and
The Graduate School of Pharmaceutical Sciences

Duquesne University
Pittsburgh, PA 15282

412.396.6393 / www.duq.edu/pharmacy

PROFESSIONALISM

LEADERSHIP

INNOVATION

COMMUNITY

DISCOVERY



**DUQUESNE
UNIVERSITY**
MYLAN SCHOOL OF PHARMACY
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