



DUQUESNE
UNIVERSITY

MYLAN SCHOOL OF PHARMACY
AND THE
GRADUATE SCHOOL
OF PHARMACEUTICAL SCIENCES



DISCOVERY

INNOVATION

OUTREACH

PROFESSIONALISM

LEADERSHIP





Preparing Our Graduates for Pharmaceutical Careers

MISSION

The mission of the Mylan School of Pharmacy is to prepare students for careers in the profession of pharmacy. Consistent with the Duquesne University Mission, the values that guide the School are an appreciation for ethical and spiritual values, and a sense of personal, professional and social responsibility.

GOALS OF THE MYLAN SCHOOL OF PHARMACY

To prepare graduates of the professional program to apply the pharmaceutical, social, administrative, and clinical sciences to deliver pharmaceutical care in a manner which promotes positive health outcomes.

To provide programs, services and resources that foster an environment for the personal and professional growth of students, alumni, practitioners and faculty.

GOALS OF THE GRADUATE SCHOOL OF PHARMACEUTICAL SCIENCES

To prepare graduates to serve as pharmaceutical scientists and educators, and make contributions to the body of scientific knowledge through research and scholarship.

Message from the Dean

As the seventh dean of the Mylan School of Pharmacy and the Graduate School of Pharmaceutical Sciences, I am entrusted with a proud legacy—to prepare today's student pharmacists and pharmaceutical sciences graduate students to meet the challenges of tomorrow. This mission is shared by faculty, staff, preceptors and academic partners who know what it takes to make a difference in the educational experience of our students.

Our faculty provide enriching academic, clinical and research opportunities that challenge students to think critically and advance confidently along their professional paths. In addition to providing relevant connections between educational theory and practice, these teacher-scholars are also engaged in active, cutting-edge research. New compounds are being synthesized, new discoveries in drug addiction and the role of dopamine are being explored, and significant contributions to pharmacogenomic and translational research are being made. These accomplishments have brought us regional, national, and international recognition and hold the promise of producing positive impacts on health outcomes.

Our students excel in a culture of learning that encourages engagement, ethical behavior and problem solving. Promoting cultural competence and respect for diversity, preparing students to deliver medication therapy management services, establishing interdisciplinary research projects and supporting continuous professional development are key initiatives for the School. A commitment to these strategic objectives ensures continued development of scholarship, professionalism and leadership among students as well as faculty.

We also value the insights and contribution of our alumni, Advisory Board members and corporate and foundation sponsors. Together, they help develop and enhance a world-class pharmacy program for Duquesne University that provides an outstanding environment for learning, teaching and research. I am proud to share some program highlights with this report.



J. Douglas Bricker, Ph.D.
Dean



DR. J. DOUGLAS BRICKER, DEAN

“Our students excel in a culture of learning that encourages engagement, ethical behavior and problem solving.”

J. DOUGLAS BRICKER, Ph.D.
Dean

PREPARING OUR GRADUATES IN A CULTURE OF LEARNING

For more than 80 years, the Mylan School of Pharmacy has been one of the most respected schools of pharmacy in the country for its leadership in preparing graduates for rewarding careers as they face future challenges and opportunities. Strategic initiatives of the School focus on several key areas: progressive learning culture, continuous professional development, interdisciplinary research, cultural competence and medication therapy management.

Emphasizing a culture steeped in academic competence and diversity, the School has always been at the forefront of growth and change in its approach to developing new and innovative degree programs in the pharmaceutical and clinical, social-behavioral and administrative sciences. The Mylan School of Pharmacy is recognized as the first school in the nation to meet ever-changing healthcare needs by offering the only weekend Pharm.D. and Health Care Supply Chain Management degrees.

This cutting-edge approach is most evident in the Academic Research Centers. Here, translational research, teaching and practice are integrated in a culture that promotes student engagement, involvement in all areas of professional education and practice, ethical behavior and problem solving. The response to such continuous innovative approaches has been impressive, with students enjoying nearly 100 percent immediate placement in employment and advanced studies for more than two decades. Additionally, the School has received national recognition, with its faculty members ranking third among private pharmacy schools for National Institutes of Health research funding.

It is these successes that solidify the Duquesne experience for students, faculty and alumni as the Mylan School of Pharmacy strives to maintain and enhance its impressive reputation as partners and leaders in global pharmacy education.

The School has been at the forefront of growth and change in its approach to developing new and innovative programs.







“Our Academic Research Center for Pharmacy Care has conducted health screenings for more than 28,000 individuals.”

CHRISTINE K. O'NEIL, Pharm.D. BCPS, FCCP
Professor of Pharmacy Practice
Director, Academic Research Center
for Pharmacy Care

Division Programs:

- M.S. in Pharmacy Administration
- Continuing Professional Education
- Experiential Education for Doctor of Pharmacy students
- Pharmacy Management, Pediatrics and Geriatrics concentrations
- Fellowships and Residencies

PREPARING OUR GRADUATES IN DISEASE MANAGEMENT AND WELLNESS

Providing leadership in educating and training students in the changing world of health promotion and disease management is at the heart of the Division of Clinical, Social and Administrative Sciences. This Division combines the basic sciences with models and theories that provide the foundations of a pharmaceutical education. This education impacts positive health outcomes through effective drug use and improves the quality of life of patients.

The Division consists of pharmacy administration and pharmacy practice – two distinct, but complementary, groups that collaborate to improve the quality of education for students and the lives of the people they serve every day.

In pharmacy administration, focus is placed on educating students in pharmacoconomics, mental health-substance abuse, and health care ethics.

Pharmacy practice centers on factors that affect patient health: wellness and disease prevention, pain management and palliative care, diabetes self-medication, tobacco cessation, children and geriatric health, asthma education and medication, and infectious disease management.

Within the Division is the Academic Research Center for Pharmacy Care, which strives to educate students while:

- Developing and implementing pharmaceutical care and wellness programs for the University, surrounding communities, and the medically underserved.
- Partnering with clinical ambulatory and primary care preceptors to encourage them to provide similar wellness programs in their communities and develop exportable role model programs for their pharmacies.

- Measuring the impact of services on the various populations with which the Center has interacted through community-based clinical research.

The Center is a staple in the community and conducts individual health risk assessments and disease management screenings on campus, in neighboring communities, and across the western Pennsylvania region. Over the past several years, the number of clients screened has steadily increased as the need for pharmacist involvement in health care initiatives has been identified.

Additionally, the Duquesne Medication Management program provides an innovative approach to delivering medication therapy management to indigent and underserved populations in the Pittsburgh area. Throughout their time in this program, students follow families from diverse backgrounds in a hands-on learning experience that focuses on the issues and responsibilities of being a culturally competent practitioner.



PREPARING OUR GRADUATES IN EDUCATION & RESEARCH

The Division of Pharmaceutical Sciences is at the core of the educational experience for students training to become pharmacists and for graduate students seeking advanced pharmaceutical science education to prepare for careers as teachers and researchers in academic, industry and government settings. The Division is comprised of three pharmaceutical science disciplines: pharmaceutics, pharmacology, and medicinal chemistry.

Faculty and students are on the cutting edge of interdisciplinary research that has been enhanced by the intellectual exchange of ideas, development of relationships with other schools on campus, and involvement with community and industry partners.

- **Pharmacology:** Recent research has focused on the study of tumors, neuronal disorders, melatonin and breast cancer.
- **Pharmaceutics:** Research is centered on process analytical technology, pharmaceutical materials science and formulation and development of different dosage forms, especially pediatric anti-retroviral drug formulations.
- **Medicinal Chemistry:** Synthetic drug chemistry is the core research area, with a focus on nicotine antagonists, antifolates and various inhibitors that function as anti-cancer agents.
- **Pharmacy Administration:** Research areas are pharmacoconomics, including decision and cost-effectiveness analyses in health policy and medicine, mental health-substance abuse issues, and health care ethics.

Much of the research is conducted in collaboration with top institutions nationally and internationally. In addition, the Division has benefited from increased NIH and industrial funding, which has resulted in the attraction of high caliber graduate students and increasing Pharm.D. student interest in research. All of these factors have ensured that the Division remains a teacher/scholar leader.



The Mylan School ranks third among private pharmacy schools for National Institutes of Health research funding.



PREPARING OUR GRADUATES IN ADVANCED ACADEMIC TRAINING



World class education and research are products of the Mylan School of Pharmacy and the Graduate School of Pharmaceutical Sciences at Duquesne University. The Schools provide the programs, services and resources that facilitate the personal and professional growth of students and faculty, while providing the infrastructure to enable our faculty and students to address timely issues in pharmaceutical science and pharmacy practice.

The six Academic Teaching and Research Fellowships offered by the Mylan School of Pharmacy are highly individualized, post-graduate programs designed to prepare the fellow for an academic career focused on teaching, research and pharmacy practice.

Four unique Residency Programs provide pharmacy residents with opportunities to experience evidence-based medicine, while developing skills in clinical research and leadership. The current cooperative Residency program partners are:

- **Conemaugh Health System:** Pharmacy Practice Residency
- **Giant Eagle Pharmacy/ Pfizer, Inc.:** Community Residency Program
- **Trinity Health System/Palliative Therapeutics, LLC:** Pharmacy Practice Residency, offering innovative hospice consulting and pain management experiences
- **Duquesne University Mylan School of Pharmacy:** Ambulatory Practice Residency

The faculty members of the Graduate School of Pharmaceutical Sciences provide education and pursue research in four disciplines: medicinal chemistry, pharmacology, pharmaceuticals, and pharmacy administration.

Funded by federal and state sources, the pharmaceutical industry and other resources, faculty pursue research in a number of critical areas:

- development of novel anticancer agents
- prevention and treatment of drug abuse
- development of pediatric dosage forms for the treatment of AIDS in children
- diagnosis and treatment of neurological deficiencies associated with Alzheimer's and Parkinson's disease
- evaluation of natural remedies for improving menopausal symptoms and treating cancer
- development of novel analytical methods for facilitation of process control systems enabling more efficient pharmaceutical manufacturing
- pharmaco-economic appraisal of drug entities involving quality of life considerations and cost effectiveness

The Academic Research Centers foster research and facilitate teaching for our professional and graduate/post-graduate programs. Each Center enhances the infrastructure for promoting research and education, while providing opportunities for multidisciplinary/interdisciplinary collaboration.

The Duquesne University Center for Pharmaceutical Technology (DCPT) is committed to the advancement of pharmaceutical manufacturing through the application of appropriate process analytical technologies for the improvement of safety, quality and efficiency throughout the pharmaceutical industry.

Graduates of our programs hold prestigious positions in the pharmaceutical industry, academia, health-system and community pharmacy practice, and professional organizations.

Academic Research Centers

- Center for Pharmacy Care
- Center for Pharmacy Practice
- Pharmaceutical Information Center
- Pharmaceutical Technology



Challenging Multidisciplinary Programs

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

Master of Science and Doctor of Philosophy

- Medicinal Chemistry
- Pharmaceuticals
- Pharmacology

Master 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.

“We support a research environment that advances the frontiers of knowledge by training future generations of researchers and scholars.”

JAMES K. DRENNEN III, Ph.D.
Associate Dean for Research and Graduate Programs
Research Director, Duquesne University Center for Pharmaceutical Technology

ACADEMIC PARTNERS PROGRAM AND COMMUNITY OUTREACH

PREPARING OUR GRADUATES THROUGH COMMUNITY OUTREACH

Creating and strengthening relationships with the community is vital to advancing the teaching, research and service activities of the School. The Academic Partners Program connects School resources, including practice-based faculty, with institutional and community-based pharmacy practice partners. The overriding goal is to improve the health and well-being of Pittsburgh and surrounding communities by enhancing pharmacy practice, education and research.

Since its beginning, the School has formally partnered with regional acute care-based pharmacy, and ambulatory and community-based practices to collaboratively augment pharmacy practice throughout the region. Our inaugural network of academic partners includes UPMC-Mercy, Ohio Valley General Hospital, Excella Health System, Conemaugh Health System, Trinity Hospital, Jefferson Regional Medical Center, Catholic Charities, and Sisters of St. Francis Spirit of Health.

The Academic Partners Program includes:

- Relationships with community and hospital pharmacies that facilitate the advancement of pharmacy care through medication therapy management; staff development programs; performance indicator systems; state licensing preparation; pharmacist recruitment strategies; drug information and patient education; health and economic research; and software and related technology for medication therapy management and medication safety management
- Wellness and disease prevention and management programs
- A network of pharmacy care in which patients transition between different levels of care and health providers
- Faculty development that includes scholarship and practice opportunities that enhance health outcomes and clinical research; recruitment that encourages qualified individuals to teach in the School of Pharmacy; and residencies and fellowships that enhance teaching outcomes and foster mutually beneficial collaborative research that will improve regional health outcomes
- Student pharmacist learning opportunities that include clinical pharmacy clerkships and partner participation in the development of student pharmacist competency testing methods and materials
- Partner and faculty publications and presentations of research and process development outcomes.





“Through the Academic Partners Program, we can facilitate the process for our partners to access the most up-to-date information and pharmaceutical resources to enhance patient care.”

THOMAS J. MATTEI, Pharm.D.
Associate Dean of Professional Programs

Community Outreach Advances Mission

Advancing cultural competency and diversity of student pharmacists as well as of the populations they serve is a key initiative of the Mylan School of Pharmacy and the Graduate School of Pharmaceutical Sciences. The Schools have devoted critical resources to outreach projects that integrate this initiative into the curriculum through various courses in pharmacy practice, pharmacy law and ethics, therapeutics, service learning, and experiential education. Through numerous programs and partnership, we aspire to:

- increase the presence of under-represented minorities in pharmacy education and practice
- provide pharmacy services to, and research on, underserved and unserved groups, regionally, nationally and globally
- raise awareness and tolerance of patient populations with gender, generational, racial, ethnic, cultural, religious and socio-economic differences.

CONTINUING PROFESSIONAL EDUCATION

PREPARING OUR GRADUATES WITH PROFESSIONAL DEVELOPMENT

The Mylan School of Pharmacy is dedicated

to ongoing professional development of its students, faculty, staff and alumni to ensure that life-long learning remains an integral part of the academic environment at Duquesne.

The goal of continuing professional education is to encourage application, knowledge and practice through activities that are self-directed, practitioner centered, structured and systemic. An Accreditation Council for Pharmacy Education (ACPE) provider of Continuing Pharmacy Education (CPE) for more than 30 years, the School focuses on developing and maintaining proficiency for its professionals in:

- Delivering patient-centered care
- Working as part of interdisciplinary teams
- Practicing evidence-based medicine
- Focusing on quality improvement
- Using informational technology.

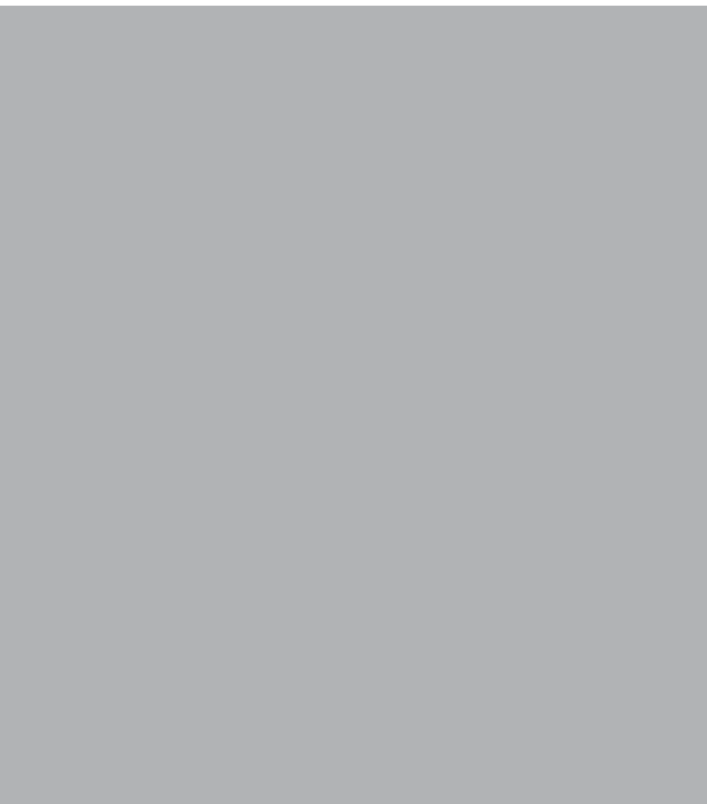
Pharmacists who are seeking to develop and maintain competencies to practice effectively and safely are provided with the highest quality programming designed to improve their personal progression and outcome-based results, instead of only mandated hourly requirements for license renewal. In addition, student pharmacists are introduced to life-long learning through professional development seminars throughout the curriculum.



“Pharmacists are medical professionals who guard against potential drug interactions or overdoses. We are in the position to save lives.”

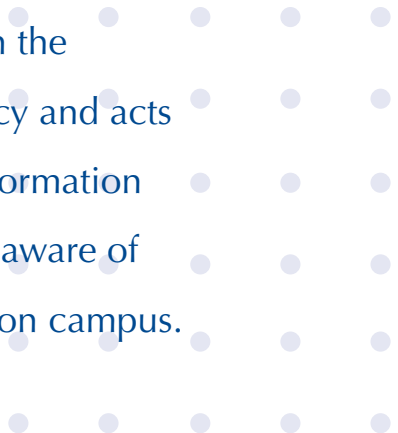
CAMILLE MOUKWA, Pharm.D.
Class of 2003

The School has been at the forefront of growth and change in its approach to developing new and innovative programs.





The Alumni Association works closely with the School of Pharmacy and acts as a conduit of information to keep graduates aware of what is occurring on campus.



PHARMACY ALUMNI ASSOCIATION

PREPARING OUR GRADUATES FOR THE FUTURE

Duquesne Pharmacy Alumni are part of a prestigious group who have achieved academic and professional success as a result of their education and experiences at the School and University. For many of these graduates, giving back to the School and its current students is an important aspect of their ongoing growth in the field of pharmacy.

The Duquesne Pharmacy Alumni Association, which is open to all graduates of the Mylan School of Pharmacy, currently has more than 750 active members. Always actively seeking new members, the Association sponsors many social and continuing education activities throughout the year. One of its largest events is the Annual Conference, which offers valuable continuing education credits and the opportunity to reunite with old friends and make new acquaintances.

The Association works closely with the School of Pharmacy and acts as a conduit of information to keep graduates aware of what is occurring on campus. It also provides a channel for graduates to stay in contact with each other while offering networking opportunities that are second to none.



DISCOVERY

INNOVATION

OUTREACH

PROFESSIONALISM

LEADERSHIP



pocket


Founded in 1878, Duquesne is a private, coeducational university with more than 10,000 students. The University 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 tradition of academic excellence.

www.duq.edu

CONTACT INFORMATION

Office of the Dean
Mylan School of Pharmacy
Graduate School of Pharmaceutical Sciences
Duquesne University
306 Bayer Learning Center
Pittsburgh, PA 15282
412-396-6393
www.pharmacy.duq.edu

 **DUQUESNE UNIVERSITY**
MYLAN SCHOOL OF PHARMACY
AND THE
GRADUATE SCHOOL
OF PHARMACEUTICAL SCIENCES

 **DUQUESNE
UNIVERSITY**
MYLAN SCHOOL OF PHARMACY
AND THE
GRADUATE SCHOOL
OF PHARMACEUTICAL SCIENCES

www.duq.edu

