Doctor of Pharmacy Program
Pharmacy is a well-respected profession for individuals with an aptitude in science and a desire to apply their knowledge of drug therapies to patient care in a variety of settings. Pharmacists are the "drug experts" among health professionals. They understand how a drug heals and how it can hurt, how it reacts with foods and other drugs. They know its desired effects and its side effects. More than 14,000 prescription drugs are available in the United States, and particularly because of the newer more potent drugs that have highly specific cellular "targets," the management of drug therapy is one of the most important challenges in health care.

With the lengthening lifespan of Americans, coupled with the increasing role of pharmaceutical treatment in today's healthcare environment, pharmacists currently enjoy a wealth of exciting career opportunities. Two out of three will be engaged in such community or ambulatory settings as professional pharmaceutical centers, clinics, physicians' offices, and neighborhood pharmacies; pharmacists are also in demand in such varied fields as institutional pharmacy practice, pharmaceutical journalism, research and product development, management, marketing, quality control, and education in university, hospital, or research foundation settings. PharmD graduates find a very favorable job market and easily locate positions in a variety of professional practice sites. Today's pharmacist enjoys more career options than ever before. Some areas of opportunity are:

- Biometrics
- Community Pharmacy (Ambulatory Care)
- Education
- Government
- Health-Care Administration
- Health Economics
- Health Informatics
- Health Maintenance Organization/Managed Care
- HMOs and PBMs
- Home care/Infusion therapy
- Hospice/Palliative Care/Pain Management
- Hospital Pharmacy
- Industrial/Pharmaceutical Companies
- Legal research
- Long-Term Care
- Primary Care/Pediatrics/Geriatrics
- Neuropharmacology
- Mail Order
- Management
- Patient Management
- Regulatory Affairs (e.g., FDA)
- Sales & Marketing
- Specialty Compounding
- Veterinary care
- Clinical Research (University and Pharmaceutical Industry)

Pharmaceutical Sciences
Graduates from the Department of Pharmaceutical Sciences enjoy a wealth of exciting career opportunities in academia, industry and government. Many of our BS, BS/MS, MS graduates have pursued advanced degrees, such as the PharmD, MD, and the PhD, or have joined the pharmaceutical industry as research scientists. Our PhD graduates have obtained dynamic and rewarding scientific and managerial positions with the pharmaceutical industry, university academia or the federal government. The “Buffalo product” is well known and widely acclaimed for his/her rigorous and comprehensive scientific training.

The breadth and depth of the program prepares graduates for a wide range of career opportunities. Pharmaceutical Sciences graduates may find opportunities in university, hospital or pharmaceutical industry settings as scientists in:

- Bioanalysis
- Clinical Research
- Drug analysts
- Drug Delivery
- Drug Metabolism
- Pharmacogenetics
- Pharmacokinetics
- Pharmacometrics
- Manufacturing/Production Technologists
- Marketing/Sales Drug Detail Representatives
- Regulatory Affairs

Our PhD graduates receive multiple offers from major research pharmaceutical companies such as Pfizer, Merck, Lilly, etc. Other graduates have accepted academic posts and government positions (e.g., FDA). PhD graduates of the department are highly sought after by research laboratories in academia, government and the pharmaceutical industry. Employment is invariably immediate upon completion of the academic requirements of the program.
Job Search Sites

- RPh On The Go: www.rphonthego.com
- Healthcare Consultants Pharmacy Staffing: www.pharmacy-staffing.com
- Great Pharmacy Jobs: www.greatpharmacyjobs.com
- Rx Recruiters: www.rxrecruiters.com
- Pharmacy Postings: www.pharmacypostings.com
- Rx Relief: www.rxrelief.com
- PharmacyMax: http://pharmacymax.net/en-us

External Links

Government Sites

  News and events, journals, grant information, and other resources.
  Resources and referrals, alcohol and drug information, and publications
- Occupational Safety and Health Administration (OSHA): www.osha.gov
  Regulations and compliance, outreach training, and publications
  Searchable databases for environmental health and hazardous substances. Includes FAQ's on toxicology, HazDat database, Science Corner, and hazardous substances
- Center for Disease Control and Prevention (CDC): www.cdc.gov
  Links to MMWR, health information, traveler's health, vaccination recommendations, statistics and epidemiology, publications, immunization information, training and employment
- Food and Drug Administration (FDA): www.fda.gov
  Information on food, drugs, biologics, devices, cosmetics, toxicology, news releases, legal briefs and more
  Official Federal Agency website, including recalls, reports, and alerts
  Information about USDA, food safety, home canning, news, legislation and much more.

Pharmacy Websites and Publications

- Pharmacy Week: www.pharmacyweek.com
- Pharmacy Times: www.pharmacytimes.com
- Pharmacy OneSource: www.pharmacyonesource.com
- U.S. Pharmacist: www.uspharmacist.com
- Diversion Control Program Publications: www.deadiversion.usdoj.gov/pubs/index.html
- DRUGFACTS.com: www.drugfacts.com
- Drug Stores News: www.drugstorenews.com
- Drug Topics.com: http://drugtopics.modernmedicine.com
- The Merck Manual: www.merckhomeedition.com

Pharmacy Licensing Boards

- National Association of Boards of Pharmacy (NABP): www.nabp.net
  Independent and impartial association that assists its member boards in developing, implementing, and enforcing uniform standards for the purpose of protecting the public health
- New York State Board of Pharmacy (OSBP): www.nysed.gov
  Regulates and enforces the laws regarding to the practice of pharmacy and the manufacturing, sales, distribution and storage of drugs, medicines, chemicals and poisons.

National and International Organizations

- American Association of Colleges of Pharmacy (AACP): www.aacp.org
  National organization representing the interests of pharmaceutical education and educators.
- American Pharmacists Association (APhA): www.aphanet.org
  First-established national professional society of pharmacists.
- American Association of Pharmaceutical Scientists (AAPS): www.aapspharmaceutica.com
  National organization for scientists to exchange knowledge with more than 12,000 professionals worldwide.
- **American College of Clinical Pharmacy (ACCP):** [www.aapspharmaceutica.com](http://www.aapspharmaceutica.com)
  Professional and scientific society that provides leadership, education, advocacy, and resources enabling clinical pharmacists to achieve excellence in practice and research.

- **American Society of Consultant Pharmacists (ASCP):** [www.ascp.com](http://www.ascp.com)
  International professional association that provides leadership, education, advocacy, and resources to advance the practice of senior care pharmacy.

- **American Society of Health-System Pharmacists (ASHP):** [www.ashp.org](http://www.ashp.org)
  30,000-member professional association that represents pharmacists who practice in hospitals and in other health care systems.

- **International Society for Pharmacoeconomics and Outcomes Research (ISPOR):** [www.ispor.org](http://www.ispor.org)
  International organization promoting the science of pharmacoeconomics and health outcomes research.

- **National Association of Chain Drug Stores (NACDS):** [www.nacds.org](http://www.nacds.org)
  The country's largest pharmacy organization and has served as the voice for chain pharmacies since 1933.

- **National Community Pharmacists Association (NCPA):** [www.ncpanet.org](http://www.ncpanet.org)
  Founded in 1898 as the National Association of Retail Druggists (NARD), represents the pharmacist owners, managers, and employees of nearly 25,000 independent community pharmacies across the country.

- **The United States Pharmacopeial Convention, Inc. (USP):** [www.usp.org](http://www.usp.org)
  Establishes state-of-the-art standards to ensure the quality of medicines for human and veterinary use. USP also develops authoritative information about the appropriate use of medicines.

### Organizations in New York

- **Pharmacists Society of the State of New York:** [www.pssny.org](http://www.pssny.org)
- **Pharmacists Association of Western New York:** [www.pawny.net](http://www.pawny.net)
- **New York State Council of Health Systems Pharmacists:** [www.nyschp.org/index.cfm](http://www.nyschp.org/index.cfm)

### Alumni Comments

**James G. Baxter, Pharm D 1984, PhD, 1990**
Research Scientist, Pfizer, Inc.

“Graduates of the UB Department of Pharmaceutics are highly regarded throughout the pharmaceutical industry. The foundation for this experiences the exceptional scientific education and relevant research experience offered by the Department. The Department also provides important experiences for students for development of skills in written and oral communications, grantsmanship, and teamwork. All of which provide a UB graduate with the experiences that we value so much in the pharmaceutical industry.”

**Suk-Jae Chung, PhD 1992**
Associate Professor, Pharmaceutical Sciences, Seoul National University

“The graduate training that I have received at State University of New York at Buffalo had a great impact on my career. Knowledge in pharmaceutical sciences that I gained from the training enabled me to identify pharmaceutically relevant research objectives and to carry out.”

**Jordan Csati, PharmD, 2008**
Staff Pharmacist, Lakeside Health System, Brockport, New York

“UB's PharmD program curriculum prepares students for a lifetime of learning and provides essential professional experience. From the extensive research opportunities and variety of practice sites offered, I am ready to conquer anything as a new practitioner.”

**Tetyana Lysiak, PharmD 2003**
Pharmacist, Suburban Drug Mart

“I had the time of my life! The PharmD program at UB opened my eyes to what I am capable of doing and it showed me can make a difference in the pharmacy profession and health care in general research projects. More importantly, my interactions with prominent faculty and alumni members have been the foundations in the realization of my personal and professional goals.”

**Kathleen Giacomini, PhD 1979**
Chairperson, Biopharmaceutical Sciences, University at California, San Francisco

“The doctoral education that I received at State University of New York at Buffalo was outstanding. I learned about various aspects of the pharmaceutical sciences including the sciences that comprise the underpinnings of pre-clinical and clinical drug development. Graduates in Pharmaceutical Sciences from SUNYAB are recruited for positions in the pharmaceutical and biotechnology industry as well as in academia.”
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<th>Name</th>
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<td>Swati Patel, PharmD, 2003</td>
<td>Managing Consultant, Navigant Consulting, Inc.</td>
<td>“What makes us great? Small classes, the best students, faculty who are specialists in their field—it’s like a private school education with public school costs.”</td>
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<td>Daniel Salazar, PhD 1989</td>
<td>Vice President, Medicine/Clinical Translational Pharmacology, Sankyo Pharmacology</td>
<td>“I selected Pharmaceutics at SUNY Buffalo in order to enrich my knowledge of chemistry, math, and pharmacology. Clearly, pharmacokinetics and pharmacodynamics as taught at SUNY Buffalo integrates these basic sciences into a universal framework for understanding drug action. In addition, the departmental values, excellence, collegiality, trailblazing, and performance are an important part of my personal values. So, bottom line: Unique science plus sound values = success!”</td>
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<td>Dhaval Shah, PhD Pharmaceutical Sciences, 2009</td>
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<td>“It has been extraordinarily rewarding to witness my doctoral research using pharmacokinetic theory at UB translate from the bench to the bedside. By evaluating certain drug combinations, my research provides substantial benefits to patients with cancer, particularly for treatment of peritoneal tumors including those found in ovarian cancer.”</td>
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<td>Tyler Smith-Strutz, PharmD, 2007</td>
<td>Community Pharmacist, Walgreens, Florida</td>
<td>“I chose the PharmD program at UB because it is a small school inside of a large university. It is the best of both worlds. With smaller class sizes and closer relationships with fellow students and faculty, you enjoy the benefits of a large, diverse campus. I also chose UB for the excellent value with world class faculty and facilities for public university prices. I came from out of state and qualifying for in-state tuition was easy and convenient.”</td>
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<td>Keith Wagner, PharmD, 2000, MBA, 2003</td>
<td>Trade Account Executive, Lilly USA, LLC</td>
<td>“You cannot beat the value that the UB School of Pharmacy and Pharmaceutical Sciences provides. Graduating from a top-notch, nationally ranked pharmacy program sets you on the path of a long and rewarding career - for a very reasonable comparative price. For those who wish to take a more business-oriented approach to pharmacy, UB offers the joint PharmD/MBA in conjunction with the School of Management which is recognized as one of the best programs in the world.”</td>
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