

Nurturing growth through partnerships and discovery

ANNUAL REPORT 2007-08



Message from the Dean

Partnerships, Recognition, and Growth

The 2007–08 academic year brought with it a renewing of partnerships and friendships and continued the recognition of outstanding academic and scholarly productivity.

The school enthusiastically welcomed the continued support and partnership of John Kapoor, '72. Kapoor's very generous \$5 million gift for our new building will give us the ability to create a state-of-the-art facility to ensure the continued success of our PharmD and pharmaceutical sciences students as we transition to our new home on the South Campus. Industrial partners Novartis, Sandoz, and Genentech provided funding for research and training, allowing the school to enlarge its programs in protein therapeutics; this funding also supported the official opening of the Center for Protein Therapeutics directed by Joseph Balthasar. The Pharmacotherapy Research Center's International Center for HIV/AIDS Pharmacotherapy Research and Training continued its strong partnership with the the University of Zimbabwe, hosting two trainees from Zimbabwe, who both completed laboratory training.

Faculty and students continued our strong tradition of academic and scholarly recognition. Donald Mager was appointed to serve on the Clinical Pharmacology Subcommittee of the U.S. Food and Drug Administration Advisory Committee for Pharmaceutical Sciences, and also received an AAPS 2007 Young Investigator Award. William Prescott was appointed a reviewer of the *Journal of the American Medical Association*. Robert Straubinger was appointed to the NIH Health and Drug Discovery and Molecular Pharmacology Study Section, Center for Scientific Review. Gene Morse brought further support to his internal HIV/AIDS work in securing a \$7.6 million contract with the National Institute of Allergy and Infectious Diseases.

Student recognition was equally robust. Charles Venuto, '10, received the 2007 American Foundation for Pharmaceutical Education Gateway to Research Scholarship; and Debbie Liana, '09, received the 2008 SUNY Chancellor's Award for Student Excellence and the Daniel H. Murray Memorial Professional Development Award. Pharmaceutical sciences students Ana Shilpa Gandhi, Dhaval Sha, and Melanie Felmlee were recognized at the third annual Great Lakes Symposium for their research presentations. A special group of PharmD students brought much attention and recognition to the school by winning the 2007 NCPA Pruitt Schutte Business Plan Competition. Team members Alexandra Centeno, '09; Kathryn Jones, '09; Christina Ramsay, '09; and Liliana Yohonn, '09 (with guidance from faculty advisor Karl Fiebelkorn), were awarded funds for support of our local NCPA chapter and funds to promote independent pharmacy study at the SoPPS.

The strength and support of our alumni, partners, and friends allows the SoPPS to continue to be one of the top-ranked schools in the country, and provides a solid foundation for the continued excellence of our students and faculty. We look forward to strengthening these bonds and beginning relationships with many old and new friends in the coming year.

With warm regards,



Wayne K. Anderson
Professor and Dean



OUR MISSION STATEMENT

The mission of the University at Buffalo School of Pharmacy and Pharmaceutical Sciences is to educate students in pharmacy practice and the pharmaceutical sciences, to create and disseminate knowledge in pharmacy practice and the pharmaceutical sciences, to provide patient care, and to provide services to the community-at-large based on this knowledge. This mission is to be achieved consistent with the highest ethical standards and with respect for diversity and cultural sensitivity.

The mission recognizes pharmaceutical care as a mode of pharmacy practice within the health-care team in which the patient is empowered "to achieve the desired outcomes of drug and related therapy."

The mission also recognizes that research in the broad area of the clinical sciences, the pharmaceutical sciences, and education is necessary to create and maintain a body of knowledge needed for professional education, health-care delivery, and the advancement of science. In this context, our goal is to enhance the School of Pharmacy and Pharmaceutical Sciences so that it will continue to be one of the strong components of the University at Buffalo and the State University of New York system. This will involve a focus on those areas of unique strength within the school and those areas that form unique, interdisciplinary bridges within the university.

JOHN KAPOOR HALL UPDATE

The creation and construction of John Kapoor Hall, the new home of the School of Pharmacy and Pharmaceutical Sciences on the South Campus, has made considerable progress in the past year. The school's new home will be built at the site of the former Acheson Hall, where demolition has begun to bring that building to its cement floors and outside columns.

Redesign of the new, cutting-edge facility includes a variety of professional, learning, and study spaces. The first two floors of the building will house two large lecture halls, two classrooms, the pharmaceutical care learning center, patient assessment suite, model pharmacy, student organizational and meeting spaces, study areas, computer lab, social gathering spaces, offices, conference rooms, apothecary, and a café. The upper two floors are the main research hub for the school. Educational labs and highly specialized labs for pharmaceutical research, sample processing, molecular genetics, bioinformatics, and protein

therapeutics will be included. Other spaces include a classroom, conference areas, lounges, and offices.

Design elements for all spaces have been completed; a contemporary interior design complements the glass and metal exterior of the building. Specialty academic spaces such as the seventy-five-seat compounding lab, twelve-room patient assessment center, and integrated pharmaceutical care learning center have been enhanced by this contemporary design focus, providing our PharmD students with sophisticated academic and community spaces. Our pharmaceutical sciences students will have the



John Kapoor Hall, School of Pharmacy and Pharmaceutical Sciences

advantage of working and learning in specially designed research labs and classrooms designed for their needs. An enhanced instrumentation laboratory, as well as analytical teaching spaces, will prepare them to carry on worldwide leadership in drug discovery, therapy, and design.

Building construction is projected to begin in summer 2009, with occupancy of John Kapoor Hall slated for the second half of 2012. We expect to welcome the class of 2016 to Kapoor Hall for the 2012-13 academic year.



Bench to Bedside, Bedside to Bench

Therapeutic Hope for Diverse Patient Populations

In the global community, access to optimal medical care correlates inextricably to the economics of its delivery. At the UB SoPPS, two faculty members are helping to redefine these parameters for practitioners, patients, and providers.

On the bench, SUNY Distinguished Professor William J. Jusko, PhD, chair of the Department of Pharmaceutical Sciences, continues his internationally acclaimed research into PK/PD modeling and the application of corticosteroid drug therapy.



“CORTICOSTEROIDS HAVE SO MANY diverse effects and are so potent that they’re used for many different disease conditions,” he explains. “The problem is they have many different side effects as well, so it’s difficult to balance the good and the bad that they do. We’re trying to better understand how to control that balance between generating the best therapeutic effects of the drug without patients developing the adverse effects.”

At bedside, Clinical Assistant Professor Robert Wahler, PharmD, has developed an academic model for palliative care designed to provide timely symptom relief while containing medication costs. The clinical practice at Niagara Hospice in Lockport, N.Y., integrates the pharmacy practitioner into an interdisciplinary patient-care team, and uses cost-effective drug therapy for pain management, such as methadone, a potent, inexpensive, but pharmacokinetically complex medication.

“Student rotations are part of the elective SoPPS Advance Pharmacy Practice Experience Program,” Wahler says, “and the activities of the students in this model are part of the curriculum. In fact, it is a major factor of why the pharmacy services program exists at Niagara Hospice.” The field experience elective began in 2001 with one student and now includes a postdoctoral pharmacy practice resident and two students per rotation. “Many of my students come away from this rotation saying, Wow, this is how medicine’s supposed to work! Even as a student they have the opportunity to make an impact on a patient, and that’s one of the most important aspects of this unique clinical practice site.”

Corticosteroids also offer potent and inexpensive drug therapy and are routinely prescribed for the treatment of rheumatoid arthritis, asthma, systemic autoimmune disorders, organ transplant recipients and many forms of cancer. But steroid therapy produces side effects that range from minor to maleficent; those of concern in Jusko’s research are muscle wasting, steroid diabetes, abnormal metabolism, and excessive immunosuppression.

Jusko’s most recent lab work—mounted through a complement of SoPPS and biology faculty scientists, postdoctoral fellows, graduate students, and technicians—explores the response of animals induced with rheumatoid arthritis to treatment with methylprednisolone, dexamethasone, prednisone, and other pharmaceuticals.

“Our ultimate purpose is to better appreciate how to dose the steroids to treat the condition,” Jusko explains. “We have only developed the ability in the last few years to measure genes and measure the cytokines that are important mediators of the disease and affected by the drugs.”

THE ONGOING STUDY is funded by a thirty-two-year-old grant from the National Institutes of Health, renewed in 2005 through a special MERIT Award. “Instead of the usual three to five years of support, they promised ten years of funding for this work. MERIT is an acronym for Method for Extending Research in Time,” Jusko says, adding, with a brief and modest smile, “but then, merit itself sounds good on its own level.”

The scholarly and scientific contributions of William J. Jusko to the pharmacy field fairly epitomize the idea of merit. Globally renowned for his groundbreaking research in the development and application of pharmacokinetic/pharmacodynamic knowledge, he is equally respected as a gifted academician and mentor in both the pharmaceutical sciences and clinical pharmacy disciplines.

Jusko joined the UB faculty in 1972, and was named a SUNY Distinguished Professor on November 18, 2008. In October 2008, he was honored with the Paul Ehrlich Magic Bullet Lifetime Achievement Award at the second World Conference on Magic Bullets celebrating the one hundredth anniversary of the Nobel Prize award to Paul Ehrlich in Nuremberg, Germany. He also presented a lecture on “Corticosteroids: Integrating Pharmacokinetics, Pharmacodynamics, Pharmacogenomics, and Disease Progression,” at the international summit.

“I enjoy the development of new modeling and mathematical concepts that explain the actions of important drugs,” Jusko confesses. His equations describe the three major components of drug action together: pharmacokinetics, pharmacology, and physiology of the body. When utilized through computers, these models predict diverse drug actions under specific circumstances.

“We’ve gotten a lot of attention for our development of these models,” he says. “They’re used as the major way of thinking nowadays about how drugs act and they are typically the first kind of model that would be applied in considering the action of most drugs. There are several companies trying to develop new corticosteroids, and they use our work for the basis of studying new agents.”

At the Niagara Hospice, Robert Wahler has his clinical eye focused on pharmacokinetics as it relates to the optimization of palliative pain management, and on embedding pharmacy practitioners in the patient-care team.

“Many hospices that don’t feel they can afford a pharmacist assign medication review to their medical director or nurse clinician,” Wahler explains, referring to federal guidelines for hospice operation. “But neither the physician nor the nurse has knowledge about how drugs are handled in a body, much less a dying patient’s body. A pharmacist can often determine that the patient’s liver is no longer working, or the kidneys are working poorly, and based on their understanding of pharmacokinetics, understand how the drugs are moved through the body.”

A Buffalo native, Wahler earned his undergraduate degree from the Albany College of Pharmacy and completed his PharmD at the SoPPS in 2000. A past recipient of the New York State American College of Clinical Pharmacy Clinical Practitioner of the Year Award, he gained clinical practice experience in a nursing home setting, with a focus on geriatrics, before shifting his attention to hospice care.

IN THE CLASSROOM, he teaches students that because there are no biological marker for pain, effective palliative drug therapy is critically dependent on talking with and listening to the patient. And effective pain management is the key to optimal hospice care, which typically includes the cost of a patient’s medications.

“Many pain management medications are very expensive,” Wahler says. “A “morphine” (fentanyl) patch may cost anywhere from \$5 to \$20 per day. We’ve been able to use this old medication called methadone at pennies per dose. In our model, a symptom is presented by the nurse to either me or my pharmacy resident, and through discussion we determine the best course of drug therapy.”



To assess patient-care effectiveness of the model, Wahler and his student team tracked the number of times a home care hospice patient was sent to the hospital for management of nausea, vomiting, and, most often, unrelenting pain. They found there were fewer hospital admissions after pharmacy services were added to the team.

“**OUR VERY FIRST STUDENT** followed a woman who was in her thirties and had ovarian cancer that had spread all over her body,” he recalls. “We were able to get her stabilized on methadone and she was able to get her pain under control. The student was assigned this patient on his first couple of days and the patient passed away during his last week of rotation, in what is considered a ‘good death,’ comfortable, with no symptoms, and in the place where they want to be.”

The ideal hospice patient-care interdisciplinary team (IDT), maintains Wahler, includes social work, spiritual care, and bereavement staff, as well as physicians, nurses, and pharmacy practitioners, and involves both the patient and family members in education and decision-making. In addition to daily IDT collaboration, the teaching model at the Niagara Hospice site consists of clinical pharmacy rounds in Hospice House, pharmacy invoice review, and in-service presentations, among other components.

“When we boiled down all the information, we found that for every health-care dollar Niagara Hospice spent on clinical pharmacy services they saved \$5.25. We brought drug costs down from greater than \$20 per day to approximately \$8,” he says. This pharmacoeconomic insight can help senior health-care administrators make better-informed fiscal management decisions.

Academic excellence in pharmacokinetic applications is central to delivery of the palliative care model that Wahler is pioneering with SoPPS pharmacy practice students.

“Very few of our students will end up pursuing a practice as specialized as hospice and palliative care,” he concedes. “However, palliative pharmaceutical care can be provided in any pharmacy practice setting. A graduate of the SoPPS program will be able to understand the complexities of a multiple drug regimen and be better able to counsel the patient and their caregiver on the medications. In that way, the patient will be more likely to achieve their goals of pain and symptom relief. Similarly, a pharmacist working in an inpatient facility can be more proactive not only with addressing the symptoms presented by a terminally ill patient, but anticipate the adverse effects of pain medications and work to prevent serious complications from them.”

Ultimately, Wahler would like to see Niagara Hospice evolve into a premier teaching site. “Students deserve to be taught by experts in their field,” he says, “and this clinical practice site helps me to maintain my clinical skills and knowledge in my specific area. I am able to bring this expertise back to our students both in the classroom and in one-on-one interaction and rotations. It’s a high standard to adhere to, as what we teach is the ideal, and I would like to continue to identify pharmacy students who will go on to residencies that further the development of palliative pharmacy care.”

In contrast, Jusko continues to pioneer new PK/PD knowledge that will help to optimize the economy and effectiveness of drug therapies available to future pharmacy practitioners.

“Pharmacogenomics and pharmacogenetics is a major focus in the advancement of personalized medicine,” he says. “Our work provides clarity and efficiency in being able to appreciate how drugs are handled in the body and their effects on the body so that the study of any new drug can take place more quickly and more efficiently, creating greater safety for patients and considerable savings in drug development costs.

“Our department has an international reputation for graduate level teaching,” Jusko says. “I take a lot of pleasure in seeing students come through our program.”

—Jessica Thorpe,
Outside the Box Communications



Education

The SoPPS educates students in pharmacy and the pharmaceutical sciences, providing them with the critical thinking skills to allow them to achieve the desired outcomes of drug-related therapy and disease management through research and clinical intervention.

Admissions

A central mission of the Office of Admissions and Advisement is to advance the academic quality and diversity of the student body. This mission is supported by our continued review and enhancement of admissions policies and our ability to attract a robust applicant pool. Selection is based on scholastic achievement, aptitude, personal qualifications, and evidence of motivation toward pharmacy. The school's admissions committee also considers an applicant's communication skills, leadership ability, community service, health care-related or research experience, and motivation for pursuing a career in pharmacy.

ENROLLMENT (FALL HEADCOUNT)

	PharmD	BS	BS/MS	MS	PhD	Total
2003-04	433	31	0	13	30	507
2004-05	448	29	1	8	35	521
2005-06	467	34	4	6	35	546
2006-07	470	37	3	7	39	556
2007-08	481	32	11	5	35	564

The most talented and selective undergraduate freshman class in the university's history arrived in 2008 with the School of Pharmacy and Pharmaceutical Sciences contributing significantly to this trend with nearly 400 students indicating pre-pharmacy as their intended major, representing 12 percent of the incoming UB freshman class. In addition, UB's early assurance program offers outstanding pre-pharmacy undergraduates the opportunity to enter our PharmD professional program after completing two years of prerequisite coursework with a minimum GPA of 3.5. In 2008, the median GPA for early assurance students accepted into the PharmD program was 3.8.

APPLICANT OVERVIEW

Year of admission (expected year of graduation)	Number of completed applications	Number admitted	Average GPA	Average PCAT score	Percent (numbers) holding a baccalaureate or higher degree
2003 (2007)	384	117	3.24	376*	49% (57)
2004 (2008)	822	117	3.48	396*	39% (46)
2005 (2009)	1,051	120	3.55	395	34% (41)
2006 (2010)	1,375	124	3.54	395	28% (35)
2007 (2011)	1,196	122	3.50	398	51% (62)
2008 (2012)	1,401	119	3.60	395	52% (62)

*During this year, SoPPS accepted other scores (e.g., MCAT) and waived PCAT requirements for UB early assurance students.

Dean's Ambassador Programs

To help select and recruit the Class of 2012, the Office of Admissions and Advisement launched two new volunteer programs: Dean's Alumni Ambassadors and Dean's Student Ambassadors. These programs encourage the enrollment of a talented and diverse student community through the personalized efforts of our esteemed alumni and current students.

Our fifty-four Dean's Alumni Ambassadors are a select advocacy group that offers meaningful ways for our graduates to support their alma mater. Alumni have an opportunity to interact with prospective students through a variety of activities, including committee application review, on-site interviewing, letter writing, making congratulatory admission and scholarship contacts, and representing UB at college fairs and informational sessions. This volunteer corps will also maintain and increase our exposure at local, national, and international recruitment events while minimizing our travel related recruitment costs.

Selection for our prestigious Dean's Student Ambassadors began in 2007 and continues annually. Through the program, thirty-four current students interact with prospective students through activities, including hosting visitors, welcoming and mingling with applicants, leading guided tours of the campus and school, and posting admissions blogs. Upon graduation, it is the intent of the program to graduate Dean's Student Ambassadors to Dean's Alumni Ambassadors.

DEGREES GRANTED (2007–08)

PharmD	116
BS in Pharmaceutical Sciences	5
BS/MS in Pharmaceutical Sciences	2
MS in Pharmaceutical Sciences	4
PhD in Pharmaceutical Sciences	9
Total	136

DEGREE PROGRAM ENROLLMENT (2007–08)

P1 Year	127
P2 Year	121
P3 Year	119
P4 Year	114
PharmD Subtotal	481
BS in Pharmaceutical Sciences	32
BS/MS in Pharmaceutical Sciences	11
MS in Pharmaceutical Sciences	5
PhD in Pharmaceutical Sciences	35
Pharmaceutical Sciences Subtotal	83
Total Enrollment	564

Continuing Education

Office of Postgraduate Professional and Continuing Education

FISCAL YEAR 2007–08

UB Programs	8
UB Certificate Programs	1
Home Study Programs	2
Cosponsored	25
Teleconferences	3
Total	39

The Department of Pharmacy Practice, Office of Postgraduate Professional Continuing Education, accredited and conducted thirty-nine pharmacy continuing education programs over the past twelve months. Programming includes both live, home-study, and distance-learning offerings, including teleconferences which were offered at fifty-five sites throughout the nation.

The postgraduate office cosponsors educational activities by accrediting pharmacy programs for nonaccredited providers, increasing the offerings available to pharmacy professionals. Over the past year the CE office has worked in conjunction with various UB health science disciplines to offer increased inter-professional programming. An upcoming offering is an APhA Immunization Delivery Certificate Program. Certificate programs are designed to expand and enhance predetermined practice competencies through the systematic acquisition of specified knowledge, skills, attitudes, and performance behaviors.

Future programs include a two-part cardiology series, a pain management symposium, and Web-delivered CE opportunities.

UB Continuing Education Programs and Symposia

2/17/08	Diabetes Update: From Insulins to Incretins
3/9/08	The Pharmacist's Apprentice
3/27/08	HIV Pharmacotherapy CE Presentation 2008
3/30/08	Pharmacy Law Update 2008 Rochester
4/6/08	Pharmacy Law Update 2008 Buffalo
4/12/08	Medication Errors and Prevention: A Primer for Pharmacists (cosponsored with Kappa Psi)
5/21/08	Pharmacy Law Review Series Day 1
5/22/08	Pharmacy Law Review Series Day 2
6/18/08	Emerging Therapies
Ongoing	Online: Introductory Pharmaceutical Care Specialist Certificate Program
Ongoing	Online: HIV Pharmacotherapy Continuing Education Program
Ongoing	Online: 2008 Annual HIV CE Update

Residency Program Update

The Department of Pharmacy Practice maintained its commitment to providing postgraduate education through general (PGY-1) and specialty (PGY-2) residency training. During the 2007–08 academic year, our residency program was composed of five PGY-1 and four PGY-2 programs, and experienced growth in its PGY-2 training with the addition of a specialty residency in psychiatry. Residents are active members within the school, participating in research and teaching activities.

Residents' teaching skills are developed through participation in a unique teaching certificate program and by teaching didactically and clinically. The University at Buffalo School of Pharmacy and Pharmaceutical Sciences sponsors an annual Residency Presentation Day, which in 2008 continued to expand, now including three residency programs from other postgraduate training centers in the Western New York and Rochester areas.

Pharmacy Practice Residents/Fellows

Damir Begic, PharmD
*Fellow
Drug Development/
Novartis*

Yseult Brun, PharmD, PhD
*Fellow
Drug Development/
Novartis*

Holly Coe, PharmD
*PGY-2 Resident
Pharmacoinformatics*

Rustin Crutchley, PharmD
*PGY-2 Resident
HIVI/D*

Cara Felton, PharmD
*Resident
Pharmacoinformatics*

Misty Gonzalez, PharmD
*PGY-1 Resident
Psychiatry*

Yoriko Harigaya, PharmD
*Fellow
Drug Development/GSK*

Richard Kraft, PharmD
*PGY-1 Resident
Primary Care/Buffalo
Medical Group*

Charlemagne Lacza,
PharmD
*Fellow
ICPDI/Ordway*

Rachelle Lubin, PharmD
*Fellow
Drug Development/
Novartis*

Michael MacEvoy, PharmD
*PGY-1 Resident
Ambulatory Care/Lifetime
Health Medical Group*

Sarah McCabe, PharmD
*Fellow
Drug Development/
Novartis*

Joshua Sawyer, PharmD
*PGY-2 Resident
HIVI/D*

Patcharaporn Sudchada,
PharmD, BCPS
*Fellow
Immunosuppressive
Clinical Pharmacology*

Patrick Wood, PharmD
*PGY-1 Resident
Family Medicine*

Jenny Yang, PharmD
*Fellow
Drug Development/
Novartis*



Pharmaceutical Sciences Postdoctoral Fellows

Vamsi Addanki
Mechanisms of Nitrate Tolerance

Sebastien Bihorel
*Pharmacokinetics and
Pharmacodynamics in Diabetes*

Jurgen Bulitta
*Mechanistic PK/IPD Modeling
on Anti-Infective Drugs*

John Harrold
*Multi-scale Systems Analysis of Anti-
CD20 mAb Pharmacodynamics*

Ying Hong
*Population PK/IPD Modeling and
Simulation of Therapeutic Drugs*

Cornelia Landersdorfer
*Pharmacokinetics and
Pharmacodynamics of Antidiabetic
Drugs*

Xia Lin
*Characterization of Androgen-
regulated Myosin Heavy Chain
Expression*

Qiang Lu
*Antibody PK/IPD and New
Treatments for Auto-Immune
Diseases*

Anshu Marathe
*Systems Modeling of Bone
Homeostasis in IFN-beta PK/IPD*

Hongwu Shen
*Drug-Drug Interactions of
Indolealkylamines in Transgenic
Mice*

Dongweon Song
*The Mechanism of Intravenous IgG
(IVIg) in Autoimmune Disease*

Pei-Suen Eliza Tsou
Mechanism of Nitrate Tolerance

Jun Yang
*PK/IPD Modeling of Anti-Cancer
Drugs*

Jianping Zhang
*Pharmacogenetics of Human
Reductases*

Qi Zhang
*PK/IPD/IPG/DIS Models for Drug
Interactions with
Cytokines in a Rat Model of RA*

Weiyang Zhang
*Construction and Expression of
Chimeric Antibody*

Xiaoyan Zhang
*Development and Evaluation
of Immune Complex Therapies
in Rodent Models of
Thrombocytopenic
Purpura (ITP)*

*Investigation of the Influence
of FcγR on the Elimination of
Monoclonal Antibody (mAb)*

Student Supporters

The following supporters have provided generous funding for educational training of pharmacy postgraduate residents and fellows, as well as trainees in all levels of pharmaceutical sciences programming.

Pharmaceutical Sciences

PhD Students

Pfizer Inc.
*Lubna Abuqayyas
Abraham Anson
Surajkumar Bhansali
Jing Fang
Dipak Pisal
Melanie Tait*

Amgen Inc.
Wei Gao

Kapoor Foundation
Shweta Urva

Merck & Company
SoYoung Shin

Sankyo Pharma Inc.
Indranil Rao

Schering Corporation
Yang He

Eli Lilly & Company
Chao Xu

Postdoctoral Fellows

Pfizer Inc.
*Xia Lin
Cornelia Landersdorfer*

Johnson & Johnson Inc.
Jurgen Bulitta

Pharmacy Practice

Pharmacy Postgraduate Residents and Fellows

Lifetime Health Medical Group
Michael MacEvoy

Buffalo Medical Group
Richard Kraft

Novartis Pharmaceuticals Corp.
*Damir Bejic
Yseult Brun
Rachaelle Lubin
Sarah McCabe
Jenny Yang*

GlaxoSmithKline
Yoriko Harigaya

Metcare Rx Pharmaceutical Service
Group LLP
Cara Felton



Commencement Awards

Lilly Achievement Award

Matthew Duell

Phi Lambda Sigma of Achievement,
Chapter Member of the Year Award

Joette Bumbalo

GlaxoSmithKline Patient Care Award

Adam Saleh

Michael E. Crawford Award

Adam Field

Eino Nelson Award

Deborah Liana

Pharmacy and Pharmaceutical Sciences
Alumni Association Award

Matthew Duell

David E. Guttman Award

Jrace Rong

Renee A. Dederich Award

Lisa Garrity

Francis P. Taylor Award

Deborah Liana

APHA-ASP Mortar & Pestle
Professionalism Award (McNeil)

Libby Czajkowski

Robert H. Ritz Award

Lisa Garrity

National Community Pharmacists
Association Outstanding Student
Member Award

Jeremy Schrader

Roger Mantsavinos Award

Julia Houseknecht

Lori Esch Memorial Award

Amy Brilliant

Merck Award

*First, Devon Marks; Second, Deborah
Liana; Third, Lisa Garrity*

Roche Pharmacy
Communications Award

Nathan Johnson

Robert M. Cooper Memorial Award

Colleen Kingsbury

Mylan Pharmaceutical Excellence in
Pharmacy Award

Marina Wu

Facts and Comparisons Award of
Excellence in Clinical Communication

Sabrina Randazzo

Roy M. Barr Award

Lisa Garrity

Western New York Society of Health-
System Pharmacists Award

Nathan Johnson

Samuel J. Bauda Award

Jeremy Schrader

Pharmacists Society of the State of
New York

Erin Corica

Natural Medicines Comprehensive
Database Recognition Award

Kristin Gardner

McKesson Leadership Award

Benjamin Rok

NYS Chapter of the American College
of Clinical Pharmacy Research Award

Marina Wu

TEVA Pharmaceuticals USA

Outstanding Student Award

Binh Ha

Margaret C. Swisher Memorial Award

Julia Houseknecht

A. B. Lemon Memorial Award

Thomas Walsh

ASP Certificate of Recognition

Libby Czajkowski

Applied Pharmacotherapy Professional
Experience Program Award

*First, Lindsay Muller; Second, Sabrina
Randazzo*

Ambulatory Care Professional
Experience Program Award

Katherine Zawadzki

Pharmacists Association of Western
New York Student Leadership Award

Deborah Liana

Perrigo Award of Excellence in Non-
Prescription Medication Studies

Karen Koller

Excellence in Pharmacogenomics
Award

Devon Marks

Katherine Doyle Memorial Award

Joseph Couto

Excellence in Teaching Award

*Karl Fiebelkorn,
Clinical Associate Professor*



2008 Who's Who Among Students in American Universities and Colleges

Brianna Bowers
Amy Brilliant
Quynh-Huong Bui
Joette Bumbalo
Daniel Burger
Erin Corica
Joseph Couto
Jordan Csati
Libby Czajkowski
Melissa Donnelly
Matthew Duell
Jennifer Hedrick
Nathan Johnson
Colleen Kingsbury
Karen Koller
Deborah Liana
Bhavesh Patel
Stacy Reed
Benjamin Rok
Jeremy Schrader
Kathy Truong
Thomas Walsh
Tricia Lee Wilkins
Marina Wu

Student Achievements

2007 Celebration of Academic Excellence Student Research Poster Presenters

Christine Lee
Hoi Kei Lon
Thu Dung (Ariane) Nguyen
Nathan Page
Jenna Voelinger
Stephen Webster
Chia-Ching Wu

Excellence in Pharmaceutical Sciences 2007

P2 Students

Kofi Adjei
Kirsten Butterfoss
Andrea Carlson
Susan Chang
Julie Davis
Sarah Davis
Rachel Deppas
Nicholas Falco
Madlin Faria
Nicholas Fusco
Hany Geris
Jennifer Gremke
Zhibin Lai
Shirley Lau
Peggy Lee
Kristen Lim
Kim Tran
Natalie Travagliato
Chung Wong

P3 Students

James Bartlett
Caitlin Bower
Mary Butler
Amy Davis
Alina Eisen
Brent Footer
Michael Guskey
Debra Morris-Allen
Kristine Smith
Andrew Wohlrab

P4 Students

Christa Grabowski
Binh Ha
Jennifer Hedrick
Nicholas Jennings
Colleen Kingsbury
Deborah Liana
Stephanie McCutcheon
Lindsay Muller
Sabrina Randazzo
Marina Wu

2007 AAPS Great Lakes Symposia Presenters

Melanie Felmlee
Anu Shilpa Gandhi
Dhaval Shah

2008 UB Celebration of Academic Excellence Student Research Poster Presenters

Amy Brilliant
Vaishal Chudasama
Lisa C. Garrity
Debbie Liana
Neang S. Ly
Pui Yi Tam
Marina Wu

2008 SoPPS Student Research Poster Presenters

Vaishal Chudasama
Debbie Liana
Neang Ly
Ghislaine Ngo Ndjock Mbong
Stephanie McCutcheon

Individual Achievements

Sofia Gamerio, PhD candidate: *2007 AAPS Biotec Travel Award*

Julia Markov, Lauren Maroni, Kari Mergenhausen, and Julie Tracy: *Ethel J. Heath Award Recipients*

Tricia Wilkens: *2007 AMCP/Pfizer Managed Care Internship*

Charles Venuto: *2007 American Foundation for Pharmaceutical Education Gateway to Research Scholarship*

Nathan Page: *American Foundation for Pharmaceutical Education First Year Graduate School Scholarship*

Debbie Liana: *2008 SUNY Chancellor's Award for Student Excellence; Danile H. Murray Professional Development Award*

Alina Eisen: *Global Public Health/U.S. Pharmacopeia Summer Internship*

Tara Sidora: *Top-ten Placement at APhA-ASP Patient Counseling Competition*

Erin Corica: *United States Public Health Service Excellence Award in Public Health Pharmacy Practice Award*

UB TEAM WINS NCPA BUSINESS PLAN

The SoPPS Pruitt Schutte Business Plan student team won first place at the National Community Pharmacists Association (NCPA) 109th Annual Convention. UB team members are Alexandra Centeno (captain), Kathryn Jones, Christina Ramsay, and Liliana Yohonn; and faculty mentor Karl Fiebelkorn, associate dean for student affairs and professional relations.

2007–08 SoPPS Degree Recipients

Bachelor of Science in Pharmaceutical Sciences

June 2008

Vaishali Chudasama
William Eltosam
Neang Ly
Christopher Schweiger
Eunyoung Shin
Asnahech Yaya

Bachelor of Science/Master of Science in Pharmaceutical Sciences

June 2007

Jenna Voellinger

Master of Science in Pharmaceutical Sciences

February 2008

Julio Gaspar

June 2008

Puneet Gaitonde

Doctor of Pharmacy

September 2007

Bonnie Yu

February 2008

Nita Keluskar
Daniel Wachowicz

June 2008

Dana Anderson
Margaret Anderson
Sarah Anderson
Jonathan Anson
Jean Banh
Nicole Barone
Gautam Bhardwaja
Brianna Bowers
Amy Brilliant
Quynh-Huong Bui
Joette Bumbalo
Daniel Burger
Mary Butler
Raymond Chan
Won Jin Choi
Nicholas Clemente
Christopher Coleman
Michael Cook

Daniel Corcoran
Erin Corica
Joseph Couto
Jacinta Croom
Jordan Csati
Libby Czajkowski
Brian DeLorme
Daniel DiNicola
Melissa Donnelly
Matthew Duell
Michele Dutka
Dena ElSamahy
Adam Field
Gregory Frey
Kristin Gardner
Lisa Garrity
Lindsey Gendron
Joseph Genovese
Anastasia George
Andrzej Gozdziaik
Christa Grabowski
Ellie Green
Matthew Grimm
Pooja Gulati
Binh Ha
Sarah Hall
Jennifer Hedrick
Michael Holowachuk
Julia Houseknecht
Duik Hur
Amanda Johnson
Nathan Johnson
Mary Jollow
Andrea Keck
Colleen Kingsbury
Karen Koller
Emilia Kuczowski
Yat-Shing Lau
May Leong
Mei Li
Deborah Liana
Elizabeth Lyboul
Rachel Mangus
Cindy Mao
Devon Marks
Amy Martin
Nicholas Matteliano
Stephanie McCutcheon
Arfan Mohammed
Lindsay Muller
Alfonse Muto
Tiffanie Ng
Krystal Nieckarz
Krista Noto
Otto Ong
Tomasz Oszczypala
Krystal Otto
Mina Park
Bhavesh Patel
Danielle Patti
Jennifer Polito

Amanda Poworoznek
Fahim Rahman
Renney Raju
Sabrina Randazzo
Stacy Reed
Vineeta Risbood
Stephanie Roberts
Benjamin Rok
Daniel Roy
Marina Rozov
Adam Saleh
Louis Scarpello
Michael Schmidt
Jeremy Schrader
Maulik Shah
John Siejak
Amanda Smolen
Mark Stahl
Erin Staley
Melanie Tam
Pui Yi Tam
Thao Tran
Kathy Truong
Teena Varghese
Pamela Wachtel
Thomas Walsh
Carla Wiesner
Tricia Wilkins
Marina Wu
Patty Wu
Chung Yan
Stephen Yeager
Siu Hong Yuen
Katherine Zawadzki

Doctor of Philosophy in Pharmaceutical Sciences

September 2007

Amit Garg
Xiaodong Wang

February 2008

Kavitha Bhasi

June 2008

Justin Earp
Sofia Gameiro
Mirelle Covarrubias



Research and Training

Create cutting-edge research that enhances the body of knowledge needed for professional education, health-care delivery, and advancement of sciences that will improve the health and wellness of the global community.

Department of Pharmacy Practice: 2007–08 Annual Report

The 2007–08 year was one marked by exciting changes and activities within the department. The department has been in active faculty recruitment mode. Alice Ceacareanu, PhD, PharmD, has joined the department with a focus in oncology. Other offer letters are currently under review for specialty areas in cardiology, infectious disease, and oncology.

The department has embarked on preliminary collaboration with the Department of Health. We expect this to expand and provide substantial benefit in the care provided to Medicaid recipients in the state.

Experiential Programs

Peter Brody, clinical assistant professor, was appointed director of experiential education. Under Brody's leadership, the experiential program continues its transition with the standardization of P4 rotations to six weeks and continued refinement of the P4 rotation assessments. We have also increased the number of out-of-region rotations available to students, and begun rotation scheduling earlier, allowing for better student and site planning. Program evolution is continuing with the initiation of summer rotations for the P4 class expected in 2009. The introductory pharmacy practice experiences continue to be implemented, with a full phase-in completion for the P1-P3 years expected in academic year 2009–10. Faculty development programs continue to be expanded.

Office of Postgraduate Professional and Continuing Education

Our residency and fellowship programs continue to mature. Over the past year we have had eight fellows and nine residents (five PGY-1, four PGY-2) in training, including a new PGY-2 psychiatry residency. Residency Presentation Day continues to grow in popularity with programs throughout Western New York. A total of forty continuing education programs were administered through the office in the past year.

Research and Publication

The Department of Pharmacy Practice continues to perform well, exceeding the national averages for publication in the peer reviewed literature. In 2007, forty-one abstracts and forty-one peer reviewed journal articles were published or presented by department faculty. Significant grants were awarded to Gene Morse and Brian Tsuji over the past year.

Achievements and Recognitions

Gene Morse and Chiedza Maponga's work in addressing the global HIV/AIDS epidemic gained further momentum. The school's International Center for HIV/AIDS Pharmacotherapy Research and Training hosted its first two trainees from Zimbabwe. Tongia Chizanga and Tinashe Mudzviti, University of Zimbabwe students, both completed an extensive training program learning laboratory research protocols and technology to improve the quality and distribution of treatments for HIV patients.

William Prescott was appointed a reviewer of the *Journal of the American Medical Association*.

Erin Slazak received certification as a Board Certified Pharmacotherapy Specialist.

Patty Havard was featured in the *UB Buffalo Physician* for her work in establishing a regional HIV-in-Women Research Network.

South Campus Move

"Deconstruction" of Acheson Hall is underway, and the department is looking ahead to the move to John Kapoor Hall. The location is expected to afford increased interdisciplinary cooperation with colleagues in medicine, dentistry, and nursing, as well as access to the new patient simulation center being organized on the South Campus.

Department of Pharmaceutical Sciences: 2007–08 Annual Report

Our department has a well-established, international reputation for a tradition of excellence in teaching and research, and is well positioned to expand its prowess in pharmacokinetics, pharmacodynamics, and protein therapeutics. Moreover, the department is a leading academic institute for cutting-edge research and teaching in pharmacogenomics. The department strengths lie in biological applications of pharmaceutical sciences to traditional small molecules, as well as biotechnology products, particularly areas of systems pharmacology (pharmacokinetics, pharmacodynamics, pharmacogenomics), drug delivery, and development of new therapeutic approaches utilizing mechanistic studies with tools of genomics, proteomics, computation, and bioinformatics.

Of special note was our implementation of the Center for Protein Therapeutics, directed by Joseph P. Balthasar. With additional major input from Robert Straubinger and Sathy Balu-Iyer, and participation by several other members of the department, the center seeks to apply our capabilities in protein analysis, formulation, and pharmacokinetics and pharmacodynamics to address major questions regarding the delivery, pharmacokinetics, and in vivo effects of protein drugs such as monoclonal antibodies. Research sites are at the Center of Excellence in Bioinformatics and Life Sciences in the medical corridor, as well as in the Cooke-Hochstetter complex on the North Campus. Financial support of \$1.3 million for the first-year activities of the center was provided by Pfizer, Merck, Hoffman-LaRoche, Eli Lilly, and Genentech, as well as additional related funding provided by Novartis and Amgen.

We have excellent-to-outstanding faculty members over a range of academic levels with highly productive, largely NIH-funded research programs and some corporate support. Donations of over \$200,000 for graduate student training were provided by Merck, Eli Lilly, Daiichi Sankyo, Schering-Plough, Amgen, and the Kapoor Foundation, as well as continued funding for six students and four postdocs by the UB-Pfizer Strategic Alliance.

An active seminar program was offered with forty-eight presentations by local and visiting scientists. Peter J. Houghton, chairman of molecular pharmacology at St. Jude Children's Research Hospital, was selected for the 2007 Gerhard Levy Distinguished Lectureship in Pharmaceutical Sciences. His presentation was titled, "The Pediatric Preclinical Testing Program: Changing the Paradigm for Drug Development."

Other notable speakers during the academic year were Paolo Vicini from the University of Washington; Karthik Ramani from Biocon Ltd. in India; Robert O'Connor from Dublin, Ireland; John Carpenter from the University of Colorado; Bradley Anderson from the University of Kentucky; William Kielbasa from Eli Lilly; Peter Bugelski from Centocor; Rodney Ho from the University of Washington; Yo-Ming Wang from Amgen; Debra Hanna from Pfizer; and Varun Garg from Vertex. Joga Gobburu, senior pharmacometrician from the Food and Drug Administration, was selected by the graduate students for the Annual Pharmaceutics Alumnus Lecture. His topic was, "The Learn-Confirm Paradigm in Drug Development."

Our department faculty members were active in dissemination of our scientific accomplishments and knowledge. We had ninety-five research articles and book chapters published and gave 168 seminars, lectures, and research presentations at various scientific meetings and university and industrial venues. Five faculty members serve as editors of journals and many participate on numerous journal editorial boards and NIH study sections.

The department has offered annual courses in pharmacokinetic-pharmacodynamic modeling, trial simulations, and population pharmacokinetic modeling for visiting scientists from the pharmaceutical industry, academia, and the FDA each year in May, and gave our sixteenth session of the PK/PD modeling course. Similarly, the department offers an annual summer workshop in molecular genetic methodologies for pharmaceutical sciences. Some of these courses are also provided on site at various pharmaceutical companies and universities.

Ho-Leung Fung, professor, was given the Honorary Doctorate of Laws and served as commencement speaker at Monash University in Australia. Marilyn Morris served as chair of the pharmacokinetics, pharmacodynamics, and drug metabolism section of the American Association of Pharmaceutical Scientists. Javier Blanco was promoted to associate professor and Joseph Balthasar was promoted to professor of pharmaceutical sciences.

The department is poised for further growth of its research and training programs. We will add an additional faculty member and increase training of graduate students and post-doctoral fellows, and seek to expand capabilities in the areas of protein therapeutics and pharmacometrics.



Special Honors for Faculty Members

Gayle Brazeau, associate professor, pharmaceutical sciences, selected as a fellow in the Western New York Community Health Foundation's Health Leadership Program and also recipient of the SUNY Chancellor's Award for Excellence in Faculty Service.

Karl Fiebelkorn, clinical assistant professor, pharmacy practice, recipient of the SoPPS Teacher of the Year Award, and also elected chair of the 2008 New York State Pharmacy Conference.

Jennifer Hess, assistant dean, admissions, recipient of the SoPPS Senior Staff Award.

Kris Jordan, advanced pharmacy practice experience coordinator, recipient of the SoPPS Junior Staff Award.

Donald Mager, assistant professor, pharmaceutical sciences, appointed to serve on the Clinical Pharmacology Subcommittee of the U.S. Food and Drug Administration Advisory Committee for Pharmaceutical Sciences, and also a recipient of the AAPS 2007 Young Investigator Award in pharmacokinetics, pharmacodynamics, and drug metabolism.

Gene Morse, professor, pharmacy practice, appointed chair of the Hepatitis Function Working Group of the Hepatitis Research Committee NIH/NIAID AIDS Clinical Trials Group.

William Prescott, clinical assistant professor, pharmacy practice, appointed as a reviewer for the *Journal of the American Medical Association*.

Erin Slazak, clinical assistant professor, pharmacy practice, received certification as a Board Certified Pharmacotherapy Specialist.

Robert Straubinger, associate professor, pharmaceutical sciences, promoted to professor.



Faculty Grants Awarded: 2007–08

July 1, 2007–June 30, 2008

Pharmaceutical Sciences

Joseph Balthasar

National Heart, Lung, and Blood Institute
Pharmacology and Bioengineering of New Treatments of ITP

University of Michigan
PTD-Mediated Protein or Drug Delivery for Cancer Therapy

Multiple Sponsors
Protein Therapeutics Consortium

Novartis Pharma AG
Laboratory for Protein Therapeutics

National Cancer Institute
Pharmacokinetic Strategies to Optimize IP Chemotherapy

Sathy Balu-Iyer

National Heart, Lung, and Blood Institute
Development and Pharmacology of Novel Lipidic RAHF

Javier Blanco

National Institute of General Medical Sciences
Pharmacogenetics of Human Carbonyl Reductases

City of Hope National Medical Center
Key Adverse Event After Childhood Cancer

Daniel Brazeau

Louisiana University Marine Consortium
Collaborative Research: Ecology of Deep Hermatypic Coral Reef Ecosystems

Ho-Leung Fung

National Heart, Lung, and Blood Institute
Organic Nitrate Metabolism, Tolerance and Action

American Foundation for Pharmaceutical Education
AFPE Fellowship for Nathaniel A. Page

William Jusko

National Institute of General Medical Sciences
Mathematical Models in Pharmacodynamics

Pfizer Inc.
Center of Excellence in Pharmacokinetics and Pharmacodynamics

Donald Mager

National Institute on Aging
IPA Agreement for Donald Mager

Marilyn Morris

National Cancer Institute
Dietary Isothiocyanates in Cancer Prevention: Effects on Estrogen Metabolism



National Institute on Drug Abuse
Gamma-Hydroxybutyrate: Toxicokinetics, Toxicodynamics and Treatment Strategies

Murali Ramanathan
 National Multiple Sclerosis Society
Brain-Derived Neurotrophic Factor in Multiple Sclerosis

Robert Straubinger
 National Cancer Institute
Drug Carrier Modulation of Blood/Tumor/Brain Permeability

Aiming Yu
 National Institute on Drug Abuse
Pharmacogenetics in Indolealkylamine Metabolism and Drug Interactions

Pharmacy Practice

Gene Morse
 University of Rochester
Adult Therapeutic Clinical Trials Program for AIDS

Erie County Medical Center
HIV Treatment Education

Yale University School of Medicine
Pharmacokinetic Interactions Between Buprenorphine and Lopinavir/Ritonavir (Kaletra)

Social and Scientific Systems Inc.
AIDS Clinical Trial Group

University of California-Berkeley
International AIDS Training Program

National Institute of Allergy and Infectious Diseases
Clinical Pharmacology Quality Assurance and Quality Control

National Institute on Drug Abuse
TDM & Drug Interactions in HIV Infected Substance Abusers

University of Rochester
Targeted Neuro Protection of HIV-1 Associated Neurologic Disease

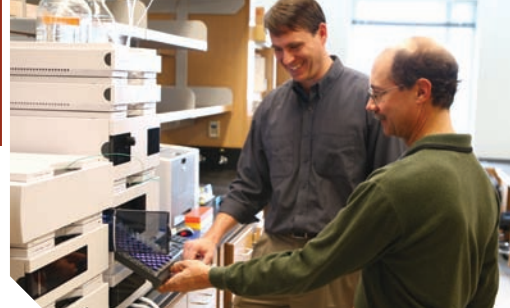
Brian Tsuji
 Pfizer Pharmaceuticals
Optimizing Linezolid Dosing to Prevent the Emergence of Resistance in Staphylococcus Aureus

Cubist Pharmaceuticals
Activity of Daptomycin Against Staphylococcus Aureus HEMB Mutants Expressing Small Colony Variant Phenotype

Affinium Pharmaceuticals Inc.
Novel Regimens to Combat Antimicrobial Resistance

New Technology Disclosures and Patents

Title	Name
<i>Compositions and Methods for Less Immunogenic Protein Formulations (patent issued)</i>	<i>Sathy Balu-Iyer and Robert Straubinger</i>
<i>Information Theoretic Metrics for Visualizing Gene Environment Interactions (patent application)</i>	<i>Murali Ramanathan</i>
<i>Compositions and Methods of Preparation of Liposomal Microparticulate Cytokines (patent application)</i>	<i>Sathy Balu-Iyer</i>
<i>Lipidic Formulation for Encapsulation of Growth Factor (patent application)</i>	<i>Sathy Balu-Iyer, Surajkumer Bhansali, Marilyn Morris</i>



Research and Training Awards Fiscal Year 2007–08

Pharmaceutical Sciences

Name	Sponsor	Program Type	Current Period	Project Period
J. Balthasar	University of Michigan	Continuation Research	\$35,000	\$135,000
J. Balthasar	National Cancer Institute	Continuation Research	\$255,609	\$1,044,002
J. Balthasar	Novartis Pharma AG	New Research	\$900,000	\$900,000
J. Balthasar	Multiple Sponsors	New Research	\$450,000	\$450,000
J. Balthasar	National Heart, Lung, and Blood Institute	Renewal Research	\$721,033	\$1,427,441
S. Balu-Iyer	National Heart, Lung, and Blood Institute	Continuation Research	\$311,047	\$1,085,688
R. Bankert and S. Balu-Iyer	National Cancer Institute	New Research	\$18,505	\$87,668
J. Blanco	National Institute of General Medical Sciences	Continuation Research	\$270,516	\$1,374,843
J. Blanco	City of Hope National Medical Center	New Research	\$10,000	\$10,000
D. Brazeau	Louisiana University Marine Consortium	New Research	\$20,315	\$20,315
J. Canty and J. Qu	National Heart, Lung, and Blood Institute	Continuation Research	\$9,355	\$47,849
H. L. Fung	National Heart, Lung, and Blood Institute	Continuation Research	\$384,759	\$1,935,286
H. L. Fung	American Foundation for Pharmaceutical Education	New Training	\$7,500	\$7,500
W. Jusko	National Institute of General Medical Sciences	Continuation Research	\$253,399	\$1,021,164
W. Jusko	Pfizer Inc.	Continuation Research	\$1,500,000	\$4,500,000
D. Mager	National Institute on Aging	Continuation Research	\$22,936	\$85,270
M. Morris	National Cancer Institute	Continuation Research	\$60,791	\$123,398
M. Morris	National Institute on Drug Abuse	New Research	\$323,529	\$1,315,220
J. Olson and A. Yu	Environmental Protection Agency	New Research	\$59,969	\$59,969
M. Ramanathan	National Multiple Sclerosis Society	Continuation Research	\$109,948	\$329,845
R. Straubinger	National Cancer Institute	Supplemental Research	\$290,879	\$1,596,708
A. Yu	National Institute on Drug Abuse	New Research	\$310,649	\$1,607,065
Pharmaceutical Sciences Totals			\$6,325,739	\$19,164,231



Pharmacy Practice

Name	Sponsor	Program Type	Current Period	Project Period
G. Morse	University of Rochester	New Research	\$106,783	\$106,783
G. Morse	University of Rochester	Continuation Research	\$77,683	\$77,683
G. Morse	Social and Scientific Systems Inc.	Supplemental Research	\$81,400	\$81,400
G. Morse	National Institute on Drug Abuse	Supplemental Research	\$61,287	\$2,338,899
G. Morse	Erie County Medical Center	New Research	\$54,675	\$54,675
G. Morse	Yale University School of Medicine	New Research	\$12,495	\$12,495
G. Morse	University of California-Berkeley	Supplemental Training	\$25,000	\$35,000
G. Morse	National Institute of Allergy and Infectious Diseases	New Research	\$1,190,870	\$7,695,741
B. Tsuji	Pfizer Pharmaceuticals	New Research	\$404,830	\$404,830
B. Tsuji	Cubist Pharmaceuticals	New Research	\$39,060	\$39,060
B. Tsuji	Affinium Pharmaceuticals Inc.	New Research	\$44,100	\$44,100
Pharmacy Practice Totals			\$2,098,183	\$10,890,666
School Totals			\$8,423,922	\$30,054,897



Scholarship

Pursue innovation, identify solutions, and present results to enhance the local, national, and international leadership of SUNY, UB, and the SoPPS.

Intellectual Contributions July 1, 2007–June 30, 2008

Pharmaceutical Sciences

Balthasar, Joseph P.

Shin, B. S., Shah, D., Balthasar, J. P. (2008). In Shayne Cox Gad (ed.), *Pharmacodynamics*. Hoboken, NJ: Preclinical Development Handbook: ADME and Biopharmaceutical Properties.

Chen, J., Lu, Q., Balthasar, J. P. (2007). Mathematical modeling of topotecan pharmacokinetics and toxicodynamics in mice. *Journal of Pharmacokinetics and Pharmacodynamics*, 34(6), 829-847.

Garg, A., Balthasar, J. P. (2007). Physiologically-based pharmacokinetic (PBPK) model to predict IgG tissue kinetics in wild-type and FcRn-knockout mice. *J Pharmacokinetics and Pharmacodynamics*, 34(5), 687-709.

Balu-Iyer, Sathy V.

Ramani, K., Miclea, R. D., Purohit, V. S., Mager, D. E., Straubinger, R. M., Balu-Iyer, S. V. (2008). Phosphatidylserine containing liposomes reduce immunogenicity of recombinant human factor VIII (rFVIII) in a murine model of hemophilia A. *J Pharm Sci*, 97(4), 1386-1398.

Miclea, R. D., Varma, P. R., Peng, A., Balu-Iyer, S. V. (2007). Development and characterization of lipidic cochleate containing recombinant factor VIII. *Biochimica Biophysica Acta*, 1768(11), 2890-2898.

Blanco, Javier G.

Blanco, J. G., Leisenring, W. M., Gonzalez-Covarrubias, V. M., Kawashima, T. I., Davies, S. M., Relling, M. V., Robison, L. L., Sklar, C. A., Stovall, M., Bhatia, S. (2008). Genetic polymorphisms in the carbonyl reductase 3 gene CBR3 and the NAD(P)H:quinone oxidoreductase 1 gene NQO1 in patients who developed anthracycline-related congestive heart failure after childhood cancer. *Cancer*, 112(12), 2789-2795.

Blanco, J. G., Vicente-Serrano, J., Caballero, M. L., Rodríguez-Pérez, R., Carretero, P., Pérez, R., Juste, S., Moneo, I. (2007). Sensitization to serum albumins in children allergic to cow's milk and epithelia. *Pediatr Allergy Immunol*, 18(6), 503-507.

Brazeau, Daniel A.

Chanda, P., Zhang, A., Brazeau, D. A., Sucheston, L. E., Freudenheim, J. L., Ambrosone, C., Ramanathan, M. (2007). Information-theoretic metrics for visualizing gene environment interactions. *Am J Hum Genet*, 81(5), 939-963.

Tsai, W. J., McCormick, K. M., Brazeau, D. A., Brazeau, G. A. (2007). Estrogen effects on skeletal muscle insulin-like growth factor 1 and myostatin in ovariectomized rats. *Exp Biol Med*, 232(10), 1314-1325.

Sligh, J., Ma, Q., Zingman, B. S., Reichman, R. C., Fischl, M. A., Gripshover, B., Forrest, A., Brazeau, D. A., Boston, N., Catanzaro, L. M., DiFrancesco, R., Morse, E. D. (2007). Assessing the impact of substance use and hepatitis coinfection on atazanavir and lopinavir through concentrations in HIV-infected patients during therapeutic drug monitoring. *Ther Drug Monit*, 29(5), 560-565.

Atchison, A. D., Sammarco, P. W., Brazeau, D. A. (2008). Genetic Connectivity in Corals on the Flower Garden Banks, Gulf of Mexico, and Surrounding Oil/Gas Platforms. *Experimental Marine Biology and Ecology*, 365(1), 1-12.

Chanda, P., Sucheston, L. E., Zhang, A., Brazeau, D. A., Freudenheim, J. L., Ambrosone, C., Ramanathan, M. AMBIENCE: A Novel Approach and Efficient Algorithm for Identifying Informative Genetic and Environment Interactions Associated with Complex Phenotypes. *Genetics*.

Renzi, S. E., Krzeminski, M. A., Sauberan, M. M., Brazeau, D. A., Brazeau, G. A. (2007). Prepharmacy years in college and academic performance in a professional program (4th ed., vol. 71, pp. 69). *Am J Pharm Educ*.

Brazeau, Gayle A.

Kranz, H., Yilmaz, E., Brazeau, G. A., Bodmeier, R. (2008). In vitro and in vivo drug release from a novel in situ forming drug delivery system. *Pharm Res*, 25(6), 1347-1354.

Brazeau, G. A., Dipiro, J. T., Fincham, J. E., Boucher, B. A., Tracy, T. S. (2008). Your role and responsibilities in the manuscript peer review process. *Am J Pharm Educ*, 72(3), 69.

Rungseewijitprapa, W., Brazeau, G. A., Simkins, J. W., Bodmeier, R. (2008). Myotoxicity studies of O/W-in situ forming microparticle systems. *Eur J Pharm Biopharm*, 69(1), 126-133.

Tsai, W. J., McCormick, K. M., Brazeau, D. A., Brazeau, G. A. (2007). Estrogen effects on skeletal muscle insulin-like growth factor 1 and myostatin in ovariectomized rats. *Exp Biol Med*, 232(10), 1314-1325.

Smesny, A. L., Williams, J. S., Brazeau, G. A., Weber, R. J., Matthews, H. W., Das, S. K. (2007). Barriers to scholarship in dentistry, medicine, nursing, and pharmacy practice faculty. *Am J Pharm Educ*, 71(5), 91.

Brazeau, G. A. (2008). Leadership and learning (3rd ed., vol. 72, pp. 56). Am J Pharm Educ.

Renzi, S. E., Krzeminski, M. A., Sauberan, M. M., Brazeau, D. A., Brazeau, G. A. (2007). Prepharmacy years in college and academic performance in a professional program (4th ed., vol. 71, pp. 69). Am J Pharm Educ.

Dubois, Debra

Hazra, A., Pyszczyński, N. A., Dubois, D. C., Almon, R. R., Jusko, W. J. (2008). Modeling of corticosteroid effects on hepatic low-density lipoprotein receptors and plasma lipid dynamics in rats. *Pharm Res*, 25(4), 769-780.

Hazra, A., Dubois, D. C., Almon, R. R., Snyder, G. S., Jusko, W. J. (2008). Pharmacodynamic Modeling of Acute and Chronic Effects of Methylprednisolone on Hepatic Urea Cycle Genes in Rats. *Gene Regulation and Systems Biology*, 2, 1-19.

Hazra, A., Pyszczyński, N. A., Dubois, D. C., Almon, R. R., Jusko, W. J. (2007). Modeling receptor/gene-mediated effects of corticosteroids on hepatic tyrosine aminotransferase dynamics in rats: dual regulation by endogenous and exogenous corticosteroids. *J Pharmacokinet Pharmacodyn*, 34(5), 643-667.

Yao, Z., Dubois, D. C., Almon, R. R., Jusko, W. J. (2007). Pharmacokinetic/pharmacodynamic modeling of corticosterone suppression and lymphocytopenia by methylprednisolone in rats. *J Pharm Sci*.

Yao, Z., Hoffman, E. P., Ghimbovski, S., Dubois, D. C., Almon, R. R., Jusko, W. J. Mathematical modeling of corticosteroid pharmacogenomics in rat muscle following acute and chronic methylprednisolone dosing. *Mol Pharm*, 5(2), 328-339.

Yang, E., Almon, R. R., Dubois, D. C., Jusko, W. J., Androulakis, I. P. (2008). Extracting global system dynamics of corticosteroid genomic effects in rat liver (3rd ed., vol. 324, pp. 1243-1254). *J Pharmacol Exp Ther*.

Almon, R. R., Dubois, D. C., Yao, Z., Hoffman, E. P., Ghimbovski, S., Jusko, W. J. (2007). Microarray analysis of the temporal response of skeletal muscle to methylprednisolone: comparative analysis of two dosing regimens (3rd ed., vol. 30, pp. 282-299). *Physiol Genomics*.

Fung, Ho Leung

Turowski, S. G., Jank, K. E., Fung, H. (2007). Inactivation of hepatic enzymes by inhaled nitrite—in vivo and in vitro studies. *AAPS J*, 9(3), 298-305.

Fung, H., Tsou, P. S., Bulitta, J. B., Tran, D. C., Page, N. A., Soda, D. M., Fung, S. M. (2008). Pharmacokinetics of 1,4-butanediol in rats: bioactivation to gamma-hydroxybutyric acid, interaction with ethanol, and oral bioavailability (1st ed., vol. 10, pp. 56-69). *AAPS J*.

Jusko, William J.

Mager, D. E., Jusko, W. J. (2008). Development of translational pharmacokinetic-pharmacodynamic models. *Clin Pharmacol Ther*, 83(6), 909-912.

Woo, S., Krzyzanski, W., Jusko, W. J. (2008). Pharmacodynamic model for chemotherapy-induced anemia in rats. *Cancer Chemother Pharmacol*, 62(1), 123-133.

Hazra, A., Pyszczyński, N. A., Dubois, D. C., Almon, R. R., Jusko, W. J. (2008). Modeling of corticosteroid effects on hepatic low-density lipoprotein receptors and plasma lipid dynamics in rats. *Pharm Res*, 25(4), 769-780.

Hazra, A., Dubois, D. C., Almon, R. R., Snyder, G. S., Jusko, W. J. (2008). Pharmacodynamic Modeling of Acute and Chronic Effects of Methylprednisolone on Hepatic Urea Cycle Genes in Rats. *Gene Regulation and Systems Biology*, 2, 1-19.

Landersdorfer, C. B., Jusko, W. J. (2008). Pharmacokinetic/pharmacodynamic modelling in diabetes mellitus. *Clin Pharmacokinet*, 47(7), 417-448.

Woo, S., Krzyzanski, W., Duliege, A. M., Stead, R. B., Jusko, W. J. (2008). Population pharmacokinetics and pharmacodynamics of peptidic erythropoiesis receptor agonist (ERA) in healthy volunteers. *J Clin Pharmacol*, 48(1), 43-52.

Woo, S., Krzyzanski, W., Jusko, W. J. (2007). Target-mediated pharmacokinetic and pharmacodynamic model of recombinant human erythropoietin (rHuEPO). *J Pharmacokinet Pharmacodyn*, 34(6), 849-868.

Hazra, A., Pyszczyński, N. A., Dubois, D. C., Almon, R. R., Jusko, W. J. (2007). Modeling receptor/gene-mediated effects of corticosteroids on hepatic tyrosine aminotransferase dynamics in rats: dual regulation by endogenous and exogenous corticosteroids. *J Pharmacokinet Pharmacodyn*, 34(5), 643-667.

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Tooley, Kathleen

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Development

Despite the beginnings of a downward trend in financial markets worldwide, 2007–08 brought good news for the UB School of Pharmacy and Pharmaceutical Sciences. The school had its most successful fundraising year ever, raising \$3,057,559, a 56 percent increase in collections over the previous fiscal year. Commitments also increased to \$7,035,459, bolstered by a \$5 million pledge from John N. Kapoor, PhD '72, to the new pharmacy building; in honor of his generosity, the university will name the school's new home on the South Campus **John Kapoor Hall**.

The new building also attracted two more lead gifts in the past year. Faye Panasci, widow of Henry A. Panasci Jr., '48, '52, and namesake of her husband's and father-in-law's successful chain of drugstores, Fay's Drugs, along with her son, David Panasci, and daughter, Beth Leventhal, gave \$1 million to name the building's atrium the **Panasci Atrium**. Additionally, Ronald Isaacs, '56, answered the call to contribute, giving \$250,000 for one of two lecture halls included in the building plans. To honor his gift, UB will name the room the **Ronald J. Isaacs Lecture Hall**.

Also during this period, the school's 20 percent alumni participation rate was the highest among the UB health sciences schools and the second highest university-wide. The school also welcomed 199 new pharmacy donors and twenty new members to the Willis G. Gregory Society, which honors distinguished donors who give \$1,000 or more to support the school's commitment to innovative pharmacy practice, pharmaceutical and clinical research, and high-quality instruction.

Historic \$5 million gift

AS A TEENAGER LIVING WITH HIS FAMILY IN INDIA, John N. Kapoor, PhD '72, could see what he wanted in life—to attend graduate school in the United States. But Kapoor, who was born in Amristar and later lived in Bombay, said there was no extra money for his dream.

"I come from a very modest family back in India and my parents couldn't afford to send me here. The only way I could have come to this country was if I got an opportunity for financial support," he recalled.

That opportunity arrived in the form of a fellowship from the University at Buffalo. "I was fortunate to get accepted by the University at Buffalo pharmacy school, which was one of the best institutions, one of the leading pharmacy institutions. That was really good for me and I'm very obligated to the school," he said.

Considered a visionary leader in the pharmaceutical industry, Kapoor has given back to the pharmacy school, grateful for having been given the means to earn a doctoral degree and begin his highly successful career.

In 2008, Kapoor made a \$5 million investment in the school through the John and Editha Kapoor Charitable Foundation. The gift will support construction of a new home for the school, as well as faculty research, student financial aid, and an emerging technologies fund. In light of Kapoor's generosity—this gift and his past gifts to UB together total more than \$10.8 million—the university has named the pharmacy school's new home **John Kapoor Hall** in his honor.

UB president John B. Simpson praised Kapoor for his history of giving to the university. "It's a point of substantial pride for UB that our pharmacy school provided the foundation for Dr.



names school's new home

Kapoor's remarkable career in the pharmaceutical industry. It is very significant to our university that he has chosen to honor his alma mater with another truly extraordinary gift that will help us take the school to even greater heights of excellence," President Simpson said.

"It is my privilege to help UB continue at the leading edge of innovation in pharmaceutical sciences education," Kapoor said.

"The School of Pharmacy and Pharmaceutical Sciences has played a significant role in shaping my career, and it is my honor to be part of its future."

Kapoor said he continues to give to the UB pharmacy school because he sees how his gifts are put to their best use.

"I have an attachment to the school, and once I got in a position where I could be helpful, we started with the fellowships. As I got to know the school better from a different perspective, not as a student, but as an alumnus, I was very impressed with how the funds were used," he said.

The UB pharmacy school is preparing for its eventual move to its new home on the South Campus, where it will join the four other health science schools—dental medicine, medicine, nursing, and public health—that comprise the UB Academic Health Center. It will be the first UB professional school to relocate back to the City of Buffalo since the construction of the North Campus in Amherst during the 1970s.

Wayne K. Anderson, dean of the UB School of Pharmacy and Pharmaceutical Sciences, noted that Kapoor's support has directly contributed to the pharmacy school's world-class status.

"His gifts have transformed the school," Anderson said. "His generosity has allowed us to leverage core support for research programs and has enabled us to provide seed grants for young faculty, who, in turn, have achieved a very significant level of success in research activities. His new gift will help vault the school into the future with an improved, high-tech facility where we will continue the important work of educating generations of pharmacy professionals."



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John & Edith Kapoor
Charitable Foundation

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W. James & Ardythe Weston
Brian D. White '82
M. Guill Wientjes '85 & Jessie Au
John T. Wiernikowski '87
Robert M. Wojton '90 &
Shreen Beshures '96
Angela Sui Yee Wong '96
Sum-Yee Woo '77
James E. Wood '59
Kristy Wood '06
Dan & Lisa Woods
James J. Zahra '76
Anne M. Zajicek '85
F. Christopher Zusi '79

Panasci family gift continues legacy of giving to UB

DAVID PANASCI HAS FOND MEMORIES of his family's business—Fay's Drugs—founded in 1958 by his father and grandfather, and named for his mother, Faye Panasci. He also had his own name for the business.

"I never called it Fay's. I called it 'Dad's' because it's where my dad worked," Panasci recalled. "I always thought 'this is a neat place to be.'"

Panasci remembers how his grandfather and father were often giving back to their community through their work.

"One of the things that attracted them to the profession was that they would be community pharmacists. They were in touch with people and were able to help them every day. Their work spilled out into the community," he said.

David's grandfather, Henry A. Panasci Sr., graduated from the University at Buffalo in 1924 and worked long hours, saving "every penny he made," Panasci recalled.

"He worked ridiculous hours because quality of life issues weren't a factor. He was an immigrant, trying to make money and living the American dream. The money that he saved during the Depression was the seed money for Fay's," Panasci said.

His grandfather thrived on helping his customers. "Every time a patient came to see him, he wanted to make sure they walked out of the store with what they needed to get better," Panasci said.

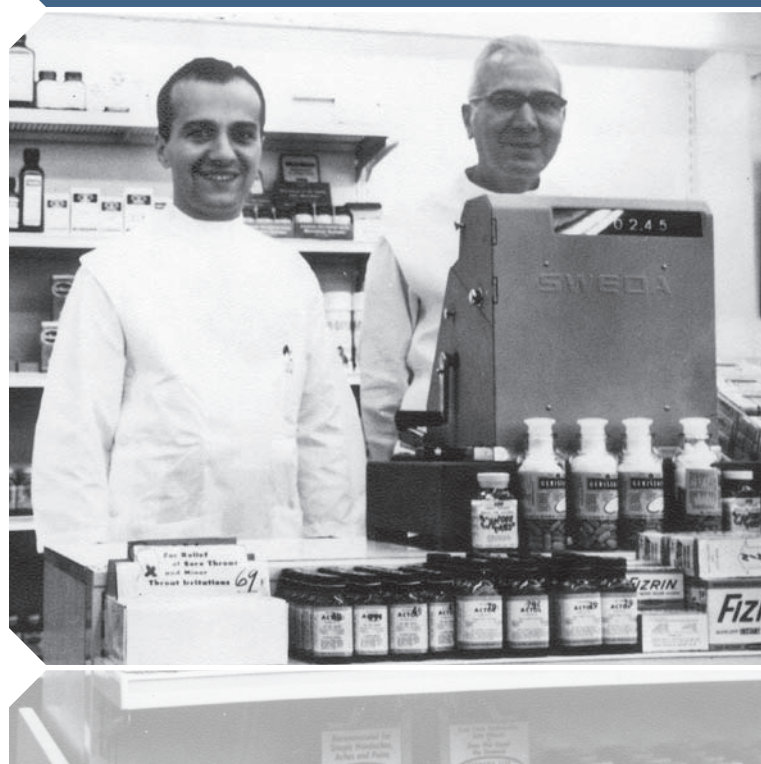
David's father, Henry Jr., who earned a UB degree in chemistry in 1948 and a UB pharmacy degree in 1952, "was more enthused by the business aspects of the pharmacy profession." His father's dream was to build a company that would provide "one-stop shopping" in order to cater to the customer's every need.

In 1958, the father-son team fulfilled their dream in cofounding Fay's, named after David's mother, but without the e in order to save space and expense on the store signs. With Henry Panasci Jr.'s keen business sense, the business grew to 280 locations and \$1 billion in annual sales by the time it merged with a large national retailer in 1996.

"He had a methodical view of where the opportunities always were—and the opportunities were where the people lived. He had a very good nose for choosing locations," Panasci said.

The more success they experienced, the more his grandfather and father emphasized the obligation to give back to their communities, he said.

Henry Panasci Jr. and Sr. behind the pharmacy counter at the first Fay's Drug Store in Syracuse, N.Y., 1958.



"I don't remember how young I was, but my father would say, 'You have to do this.' It was a value that he regularly emphasized to my sister and me," Panasci said.

Giving to one's community, and, in particular, supporting education, has been a longtime tradition in the Panasci family. Both Henry Panasci Sr. and Jr. gave to their alma mater in order to support student scholarships. In 1999, Henry Jr. gave \$1 million to UB to create the popular annual technology entrepreneurship competition that bears his name.

Now the tradition continues. Faye Panasci, along with her son, David, and daughter, Beth Leventhal, is giving \$1 million to fund the atrium of the new home for the School of Pharmacy and Pharmaceutical Sciences.

"Knowing how important the pharmacy school was to Henry and his father, I am delighted to be able to support the construction of the new building and the future of the school," Mrs. Panasci said.

David Panasci said his grandfather, who died in 1993, and his father, who passed away in 2005, would be "thrilled to be giving once again to the University at Buffalo and to the pharmacy school."

"UB and the pharmacy school were a positive experience for my grandfather and father, no question about that. They had a very strong sense of loyalty," he said. "My father especially would be so

excited about giving back because of the growth the university and the school have seen in the past few years."

Panasci said the atrium is very fitting for his family to support, because no such space exists currently and it "offers the school a renewed sense of community for the students and faculty."

Panasci said he also hopes that the gift from his family will inspire others to support the UB School of Pharmacy and Pharmaceutical Sciences because of the educational opportunities it offers future generations.

"I have no hesitation asking others to give to the university," he said. "I feel so positive about the future of the pharmacy school and UB overall. I think it is just a tremendous investment. For students, especially those in upstate New York, I think it offers a wonderful opportunity to get the best education."

THE HAYES SOCIETY

The Hayes Society honors individuals who have made legacy gifts to the School of Pharmacy and Pharmaceutical Sciences through a bequest or other method of deferred giving.

Thomas J. Bardos
Allen Barnett
Thomas Blanchard '61
Daniel & Gayle Brazeau '89
Robert '53 & Nina Doran '53

Pamela Maude Emerson '52
Joseph Figlow '70
Edward '52 & Jean Frank '54
Carol Gloff '75
Joel Goodrich '59

Jan '59 & Rose Mary Madejski '59
Robert '59 & Sharon Miller
DeWitt C. Niles '62
Robert Ravin '57
Irving Sultz '55

To learn more or to notify the school of a legacy gift that you have planned, please call the development office at (716) 645-3432 or visit pharmacy.buffalo.edu/school_development_ed_soc.

GOLF TOURNAMENT SPONSORS

Fifth Annual Student Scholarship Golf Tournament Sponsors

The Fifth Annual Student Scholarship Golf Tournament sponsors generously gave \$27,750, allowing the school to award five scholarships to Class of '09 students Alina Eisen, Amy Hall, and Lisa Nichols, and Class of '08 students Benjamin Rok and Tricia Lee Wilkins.

Tournament (\$5,000)

Rite Aid Pharmacy

Platinum (\$3,500)

CVS Pharmacy
Rochester Drug Cooperative

Gold (\$2,500)

Kinney Drugs
McKesson

Bronze (\$1,000)

Fillmore Fisher Pharmacy
Forster's Pharmacy
Kenmore Prescription Center
Middleport Family Health
Niagara Hospice
Omnicare
J. Rutowski Pharmacies Inc.
Walgreens Pharmacy

Hole (\$500)

Independent Health

Cart (\$250)

Akron Pharmacy
Bailey Prescription Center
Ellicottville Pharmacy
Holland Pharmacy

Lockport &
Medina Medicine Shoppes
Parkview Health Services
PAWNY
Peterson Drugs of Newfane
Prizel's Pharmacy

Dean Wayne K. Anderson with the 2008 Golf Tournament scholarship recipients.



ENDOWED STUDENT SCHOLARSHIP AND FELLOWSHIP SUPPORT

Thank you to the many donors who gave to support academic and need-based scholarships and fellowships, which totaled \$356,516 during 2007-08.

Aversano-Strozzi Scholarship Fund

Jeremy Schrader
Tara Sidora

Jeannie Bauda DeMuth Scholarship

Kristen Gawronski

Robert M. Cooper Memorial Award

Deanna Cartenuto
Susan Chang

Crimaldi-Madejski Scholarship Fund

Lisa Lederhouse

CVS Scholarship Fund

Ellie Green
Tyler DiMenna
Timothy Lyons
Christopher Miller
Maria Trinanes
Brian Wetzel

X. Dave DiAmbrosio Scholarship Fund

Christopher Coleman

Lyle A. Graves Scholarship Fund

Anwar Ahmed
Ann Andrasik
Monika Baltaziuk
Bao Jun Chen
Nicole Cieri
Rachel Deppas
Nghi Dinh
Graziella Furnari
Melissa Mackey
Bethany Markert
Miranda Minhas
Teresa Li
Dong Liu
Wing Liu
Seon Jo Park
Chi Ki Poon
Amanda Skinner

Deanna Stengel
Caroline Suczynski
Sierra Wolford
Chung Wong

Independent Health Scholarship

Joseph Coutu
Jamie Kaminski
Elizabeth Lybault

Gilbert J. Kulick Scholarship

Brianna Bowers

John Kapoor Fellowship in Pharmaceutical Sciences

Shweta Urva

Lorren Larwood Scholarship Fund

Darowan Akajagbor
Jean Banh
Gautam Bhardwaja
Isabel Chen
Shuming Chen
Binh Ha
Michael Holowachuk
Lisa Imbrogno
Krystal Otto
Benjamin Rok
Pui Yi Tam
Siu Hong Yuen

Francis & Edward Mayer Scholarship Fund

Christopher Coleman
Tyler DiMenna
Ellie Green
Jennifer Hedrick
Lisa Lederhouse
Timothy Lyon
Christopher Miller
Basant Riwes
Tara Sidora
Brian Wetzel

National Association of Chain Drug Stores Foundation Scholarship

Basant Riwes

Edward Eli Neeman Scholarship Award

Alina Eisen

Cecil & Violet Newton Scholarship Fund

Anthony Alteri
Jonathan Anson
Nicole Barone
James Bartlett
Amanda Blum
Quynh Bui
Joette Bumbalo
Mary Butler
James Catanese
Alexandra Centeno
Nicholas Clemente
Michael Cook
Joseph Couto
Jordan Csati
Sheetal Desai
Jonathan Dittmar
Gifty Edusei
Dena ElSamahy
Adam Field
Kristin Gardner
Lindsey Gendron
Anastasia George
Pooja Gulati
Amy Hall
Sarah Hall
Erica Herman
Julie Houseknecht
Nicholas Jennings
Nathan Johnson
Kathryn Jones
Naga Kalidoss
Cherae Keicher
Lisa Kenny
Colleen Kingsbury
Karen Koller
Kristie Ann Kowalski
Emilia Kuczkowski
May Leong

Elizabeth Lybault
Ka Leong Mak
Jessica Massey
Arfan Mohammed
Man Chi Mui
Lindsay Muller
Alyssa Murphy
Tiffanie Ng
Krystal Nieckarz
Krista Noto
Krystal Otto
Mina Park
Danielle Patti
Amanda Poworoznek
Kristen Pregizer
Fahim Rahman
Sarah Rake
Sabrina Randazzo
Shannon Rotolo
Marina Rozov
Elaine Rzadca
Jeremy Schrader
Cheryl Smith
Kelly Smith
Amanda Smolen
Stephen Spencer
Erin Staley
Joseph Steblein
Heather Stickle
Paul Stoyell
Thao Tran
Maria Trinanes
Timothy Vink
Hong En Wu
Stephen Yeager
Cella Yung
Anthony Zupelli

Organon Inc. Scholarship

Anthony Alteri
Joette Bumbalo
Lisa Imbrogno
Krista Noto
Erin Staley

Henry A. Panasci Scholarship Fund

Caitlin Bower
Amy Brilliant
Jill Jessmer

Copel & Max Rubenstein Scholarship Fund

Daniel Roy

UB School of Pharmacy and Pharmaceutical Sciences Golf Scholarship

Alina Eisen
Amy Hall
Lisa Nichols
Benjamin Rok
Tricia Lee Wilkins

UB School of Pharmacy and Pharmaceutical Sciences Scholarship Fund

Xiao Chen
Travis Dangelo
Jamie Kaminski
Shirley Lau
Chung Wong

Walgreens Scholarship

James Bartlett
Erica Herman
Alyssa Murphy
Cheryl Smith
Anthony Zupelli

Walmart Scholarship

Brent Footer
Jennifer Hedrick

Women's Club of Columbia College Scholarship Fund

Ann Andrasik
Monika Baltaziuk
Xiao Chen
Travis Dangelo
Shirley Lau

Alumni Relations

The support of our alumni community has been invaluable in the various student events and outreach efforts that have contributed to the continued success of our school.

2007–08 Alumni Association Activities

The association's annual alumni reunion recognizing the classes of 1952, 1957, 1982, and 1997 was held in September 2007 and was very well attended with 120 in attendance. Class of 1957 representatives Bruce Moden and Harry Shifton presented a slide show of memories from their class years and provided the P4 students in attendance with prudent advice as to how to prepare for their professional careers. P4 students were welcomed into the association via the special Candlelight Induction Ceremony.

One of the primary missions of the Alumni Association is to provide financial support to students. In 2007–08 the association was pleased to offer \$500 checks to six PharmD students through the association's Grants-in-Aid program. Student recipients were Basant Riwes, P2; Deanna Cartenuto, P3; Stephen Yeager, P4; Adam Field, P4; Christopher Coleman, P4; and Sabrina Randazzo, P4.

Our premier national event is our annual alumni outreach reception at the 2007 American Society of Health Pharmacists midyear meeting, which occurred in Las Vegas. This reception is always very well attended; we encourage all our alumni to attend this event. Future meetings will be held again in Las Vegas in 2009 and Anaheim in 2010.

Local alumni attended the association's final wine and cheese party to benefit alumni-supported student programs. The university's Jacobs Executive Development Center was

the host site for a February function. A gift basket auction was held to raise funds for student programming.

The school's annual awards ceremony, held in April 2008, gave the association the opportunity to recognize two outstanding alumni members who have improved the profession of pharmacy through their practice and scholarly pursuits. Patricia Kroboth, Class of 1971, was the Willis G. Gregory Memorial Award recipient, and John DeAngelis, Class of 1997, was the Orville C. Baxter Professional Practice Award recipient. The association congratulates these two outstanding alumni.

The association continued to support many student programs in 2007–08. Support from our dues paying members allowed the association to support Career Pathways Alumni Dinner Program, Half Way Dance, Commencement Award, Pizza Lunches, and other student programs. The association thanks all its dues paying members and encourages all other alumni to consider becoming a dues paying member.

The Alumni Association values the important role it plays in the school and its support of bringing our alumni colleagues together through various activities and programs.



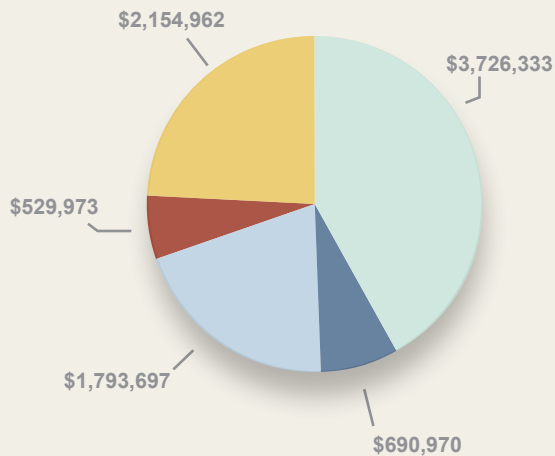
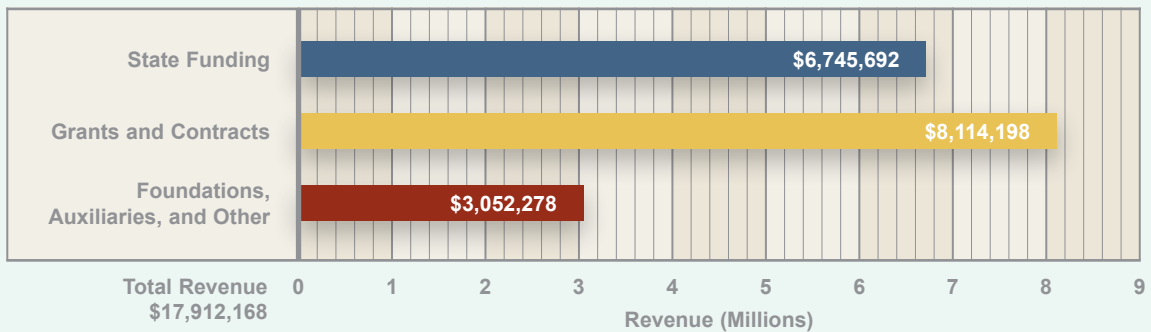
2008 Award Ceremony

The Class of 1982, 2007 Reunion

Financial Reports

The support to achieve our goals, the security to reach for the future, and the impetus for creativity are allowed through our well-positioned financial portfolio.

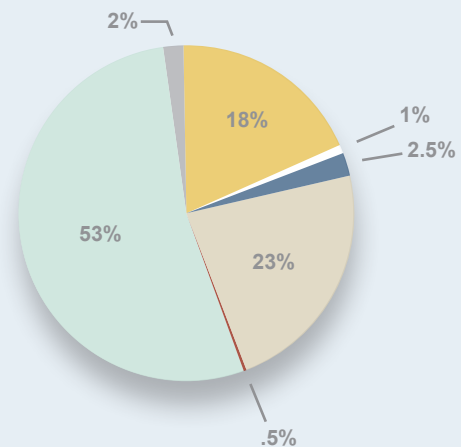
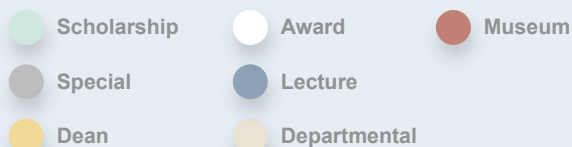
AMOUNT OF TOTAL SCHOOL REVENUE BY FUNDING SOURCE



EXPENDITURES BY FUNDING SOURCE FOR RESEARCH AND TRAINING



ENDOWMENT MARKET VALUE JUNE 30, 2008 (\$14.8M TOTAL MARKET VALUE)



School-wide Committees

Our school-wide committees give governance and oversight to our school. The structure, composition, and charges of the school's standing committees are prescribed in the bylaws of the School of Pharmacy and Pharmaceutical Sciences.

Executive Committee

Wayne Anderson (chair), Edward Bednarczyk, Kathleen Boje, Gayle Brazeau, Rebecca Brierley, Karl Fiebelkorn, Patty Havard, Jennifer Hess, William Jusko, Cindy Konovitz, Candise Morris, Gene Morse, Robert Wahler, Leigh Yates

Student Academic Affairs Committee

Karl Fiebelkorn (chair), Kathleen Boje, Gayle Brazeau, Nicole Paolini, William Prescott

Admissions Committee

Jennifer Hess (chair), Gayle Brazeau, Peter Brody, Linda Catanzaro, Karl Fiebelkorn, Fran Gengo, Cindy Konovitz, Donald Mager, William Prescott, Murali Ramanathan, Gina Zurick

Curriculum Committee

Gayle Brazeau (chair), Karl Fiebelkorn (ex officio), Cindy Konovitz (ex officio), S. V. Balu-Iyer, Deborah Chiarella, Robert DiCenzo, Patricia Grace, Marilyn Morris, Nicole Paolini, William Prescott, Robert Goris (P1), Kirsten Butterfoss (P2), Liliana Yohonn (P3), Daniel Burger (P4)

Safety Committee

Alfred Reiman (chair), Wayne Anderson, S. V. Balu-Iyer, Vicki Rink, David Soda, Kathleen Tooley

Tenure and Promotion

William Jusko (cochair), Gene Morse (cochair), H. L. Fung, Marilyn Morris, Kathleen Tornatore

National Industrial Advisory Council

Members

Wayne Anderson

Dean
UB School of Pharmacy and
Pharmaceutical Sciences

Melton Affrime

Senior Vice President
Global Clinical Pharmacology
ICON Development Solutions

Allen Barnett '65

Chief Executive Officer
Kinex Pharmaceuticals LLC

Lisa Benincosa '93

Executive Director,
Clinical PK/IPD
Pfizer

James Daly '84, '85

Senior Vice President,
North American
Commercial Operations
Amgen

Karl Donn '79

Vice President,
Global Project and
Portfolio Management
GlaxoSmithKline

Ronald Evans '69

President
MAPS for Biotec

Pramod Gupta

Vice President,
Global Development
Bausch & Lomb

Christoph Hergersberg

Global Technology Leader,
Biosciences
General Electric

Margaret McGlynn '82, '83

President,
Vaccine Division
Merck & Co.

David Panasci

President
DHP Consulting LLC

Mario Rocci Jr. '76, '81

Council Chair,
Chief Executive Officer
Prevalere Life Sciences

Daniel Salazar '89

Vice President,
Translational Medicine and
Clinical Pharmacology
DaiichiSankyo Pharma

Michael Taylor '81

President and CEO
Ensemble Discovery Corp.

Avi Yacobi '75

President
Taro Research Institute
Senior Vice President
Taro Pharmaceutical
Industries Ltd.



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 **School of Pharmacy and Pharmaceutical Sciences**
University at Buffalo *The State University of New York*

Office of External Affairs
University at Buffalo
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Buffalo, NY 14260-1200

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