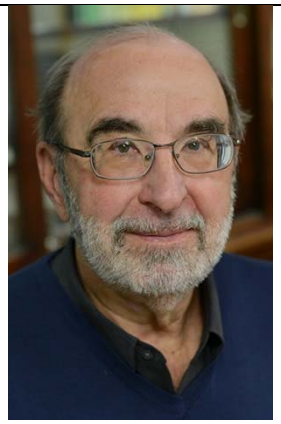
Name	Picture	Title	Interests
Balthasar, Joseph PhD		Professor, Associate Dean for Research	Research Interests and Current Projects: 1. Development of antibody conjugates for targeted, intra-cellular delivery of macromolecular toxins (CA204192) 2. Engineering monoclonal antibodies for improved pharmacokinetic properties 3. Investigation of sources of inter-individual variability in monoclonal antibody pharmacokinetics 4. Investigation of strategies to improve antibody distribution in solid tumors 5. Development of improved mathematical models for predicting the disposition and effects of monoclonal antibody drugs 6. Investigation of the role of FcRn in the absorption, distribution, and elimination of IgG antibodies 7. Development of antibody-based therapies to treat and prevent infection. Efforts are currently focused on prevention of infection by Treponema denticola (DE023080), S. aureus, and A. baumannii 8. Optimization of bispecific T-cell engagers, with primary focus on the application of PKPD modeling to guide discovery and development 9. Development of strategies to decrease off-target toxicity of antibody-drug conjugates and antibody-targeted nanoparticles
Balu-Iyer, Sathy PhD		Professor	Research interest is in the area of protein delivery and immunotherapy. Current research projects: 1. Development of lipidic nano particle containing therapeutic proteins and is supported by NHLBI/NIH. The overall goal of the project is to improve therapeutic efficacy of protein based therapies for bleeding and lysosomal disorders using a multidisciplinary approach involving Biophysics/Bioengineering, immunology and pharmacokinetics/Pharmacodynamics. 2. Re-activating Memory T Cells in the Microenvironment of Human Tumors and development of in situ vaccination. This project is supported by NCI/NIH (Dr. Bankert, PI, Balu-Iyer Co-PI). Our aim is to to rationally develop therapeutic intervention by understanding the molecular mechanism of TCR arrest. 3. Develop novel strategies to treat food allergies and autoimmune conditions using the tolerogenic properties of biomolecules. 4. Formulation and delivery of Monoclonal antibody based products: Understand and develop strategies to improve efficacy of antibody based therapeutics particularly given via sc route of administration

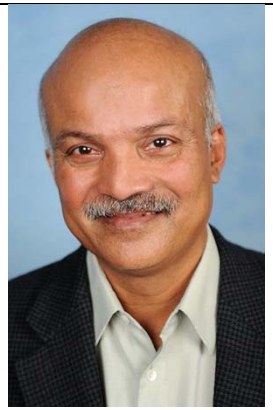
Bies, Robert PhD		Associate Professor	Research focuses on the application of pharmacometric approaches in psychiatry, oncology, neurology and cardiovascular disease and novel methods development including machine learning approaches to model selection and optimization methods for parameter optimization in dynamic systems.
Blanco, Javier G., Clin. Biochem., PhD		Professor	Dr. Blanco's group is involved in s translational research efforts in collaboration with colleagues from the Children's Oncology Group, Roswell Park Comprehensive Cancer Center, UB Research Institute on Addictions, and the Department of Pharmacy Practice. His team utilizes a combination of approaches based on: a) the analysis of biological samples from selected populations, b) the use of informative laboratory models, and c) translational studies in diverse clinical settings, to characterize molecular determinants for variable drug response. Ongoing projects: 1) Characterization of pharmacogenomic determinants in cardio-oncology. 2) Characterization of epigenetic determinants for the pharmacology of monoclonal antibody drugs. 3) Characterization of pharmacogenomic determinants in individuals with Down Syndrome. 4) Analysis of the clinical implementation of pharmacogenetic testing in the State of New York.

Boje, Kathleen PhD		Associate Professor, Associate Dean	Research interests include the scholarship of teaching and learning, innovations in pedagogy and educational technologies.
Jusko, William PhD		SUNY Distinguished Professor	Research interests are in theoretical, basic, and clinical aspects of the pharmacokinetics and pharmacodynamics of various immunosuppressive agents including corticosteroids, as well as drugs used to treat diabetes, inflammation, and cancer. With Drs. Richard Almon and Debra DuBois, Dr. Jusko delves into the pharmacogenomics of diverse effects of corticosteroids and has evolved advanced mathematical models of receptor/gene-mediated responses. They have characterized the effects of corticosteroids on hepatic and muscle enzymes and tissue responses and have evolved advanced PK/PD models for cascade-type processes. Dr. Jusko has developed mechanism-based pharmacokinetic, pharmacodynamic, and disease progression models and computational methods describing the action of various drugs and utilizes mathematical models of drug action to determine optimal dosage regimens diverse drugs.
Krzyzanski, Wojciech PhD		Associate Professor	Research interests relate to the development of advanced pharmacokinetic and pharmacodynamics models.

Mager, Donald PharmD, PhD		Professor and Vice Chair	Research interest areas: 1. Integrative and Systems Pharmacology of Anti-Platelet and Anti-Cancer Drugs 2. Development and experimental validation of quantitative structure-pharmacokinetic/pharmacodynamic (PK/PD) relationships (QSPR) to optimize drug design, development, and therapeutic application of anti-cancer compounds. 3. Integration of QSPR and mechanistic PD models developed with several drugs to predict in vivo PK/PD profiles of chemically related compounds. 4. Development of models of pharmacological target-mediated drug disposition and dynamics, and the experimental validation of the primary determinants of PK/PD profiles of drugs that exhibit such phenomena. 5. Development of non-deterministic models such as neural networks, alone or in combination with traditional adaptive feedback control methods, for individual optimization of complex pharmacotherapeutic regimens. 6. Incorporation of biomedical signal processing tools into PK/PD models for characterizing the pharmacology of drugs that alter spontaneous variability of signals of the cardiovascular and autonomic nervous systems
Morris, Marilyn PhD		SUNY Distinguished Professor and Chair	Research interests are focused in the area of drug transporters and their role in the pharmacokinetics/pharmacodynamics (PK/PD) of drugs. Studies also focus on drug transporters as therapeutic targets. Current research projects: 1. Gamma-hydroxybutyric acid (GHB) Toxicokinetics and Toxicodynamics. GHB is a drug of abuse, known as a "club drug". We are characterizing the mechanisms underlying the toxicokinetics and toxicodynamics of GHB, and evaluating methods to treat overdoses of GHB. For these studies, we are characterizing transport of GHB by Monocarboxylic Acid Transporters (MCTs), transport proteins that determine the absorption, renal clearance, and distribution of GHB throughout the body, including its distribution to the brain, the site of action. Our goal is to devise treatment strategies to treat overdoses of GHB, in order to save lives. 2. Monocarboxylate Transport Proteins: Role in Drug Disposition and as Disease Targets. Our research focuses in two area: (a) Monocarboxylate Transporters 1 and 4 (MCT1, MCT4), are also known as lactate transporters, and responsible for the homeostatsis of L-lactate and pH regulation. These transporters are overexpressed in cancer, including in triple negative breast cancer and pancreatic cancer. We are examining novel inhibitors of MCT1/MCT4 as therapeutic approaches in the treatment of cancer. (b) Monocarboxylate transporter 6 (MCT6) is known as an “orphan” transporter since it’s physiological function is unknown. Our studies are investigating both the physiological role of MCT6 and its role in drug disposition. Our studies have demonstrated its significance in lipid and glucose homeostasis.

			3. Membrane Transporters in Drug Resistant Breast Cancer. Multi-drug resistance (MDR) due to the overexpression of the efflux transport proteins, P-glycoprotein (P-gp) and Breast Cancer Resistance Protein (BCRP), represent a major cause for therapeutic failure and death in breast cancer. My laboratory is interested in dietary compounds (flavonoids, isothiocyanates) useful in reversing MDR to cancer chemotherapeutic agents. 4. Role of the Kidney Endocytic Proteins Megalin and Cubilin in Protein Therapeutics and Disease. Megalin and cubilin are transport proteins present in the kidney and responsible for the renal reabsorption of endogenous and therapeutic proteins and peptides. Our research is focusing on (1) the importance of megalin/cubilin in the renal clearance of therapeutic proteins, and (2) the role of megalin/cubilin in diabetes and diabetic nephropathy.
Nguyen, Juliane PharmD, PhD		Assistant Professor	The Nguyen Laboratory designs and engineers novel nano-scale carriers based on genetically encoded materials, lipids, and polymers for the treatment of myocardial infarction and cancer. These will target to the site of disease, respond to changes in the microenvironment, and deliver nucleic acids and drugs to subcellular compartments. Zip-code like sequences: Although great advances have been made in the field of nucleic acids and drug delivery, the specificity of delivery still remains a problem. We are utilizing cutting-edge technologies to identify zip-code like sequences for more efficient delivery of therapeutic molecules for the treatment of myocardial infarction and cancer. Regeneration of Cardiac Tissue: Coronary heart diseases are among the leading causes of death worldwide. After myocardial infarction, a significant number of cardiomyocytes undergo apoptosis and are replaced by non-contractile scar tissue. Our goal is to repair damaged cardiac tissue by re-establishing the muscle population with newly generated cardiomyocytes. In order to achieve this aim, we are designing novel biomaterials for reprogramming different types of cells to cardiomyocytes. Genetically Encoded materials: Nanoparticulate drug carriers allow the delivery of enzymatically susceptible, highly instable, and insoluble drugs to target tissues. One of the limitations of existing drug delivery systems is insufficient and non-specific drug release in the body that leads to toxic side effects for the patient. Our lab engineers genetically encoded nanomaterials that are able to disassemble and release therapeutic drugs when exposed to disease-specific microenvironments.

O'Donnell, James PhD		Professor and Dean	Research focuses on the relationship between the neurochemical and behavioral effects of drugs, primarily those used to treat neuropsychiatric illnesses. This work includes the study of noradrenergic mechanisms in the actions of antidepressant drugs and of cyclic nucleotide phosphodiesterases as potential targets for novel antidepressant, anxiolytic, and memory-enhancing drugs.
Qu, Jun PhD		Associate Professor	Research focus areas: Proteomics and Pharmaceutical Analysis. Major research programs in the proteomic field involve i) high-resolution and large-scale expression profiling of pathological proteomes (e.g. for cardiovascular diseases, colon cancer and infectious diseases) for the discovery of disease/therapeutic biomarkers by gel-free LC/MS methods; ii) Sensitive identification, localization and quantification of post-translational modifications in complex proteomes, with the emphases on arginine methylation and phosphorylation. Novel anti-PTM-peptides capture procedure and alternating collision induced dissociation (CID)/electron transferring dissociation (ETD) are employed to obtain abundant PTM information; iii) targeted quantification of regulatory, marker proteins for clinical study. Dr. Qu's lab possesses many state-of-the-art LC/MS instruments, including a high resolution/accuracy LTQ/Orbitrap XL with ETD, a highly sensitive TSQ Quantum Ultra EMR triple-quadrupole instrument, two ultra-high pressure nano-LC systems, and several HPLC instruments for pre-fraction and ion chromatography. A number of key analytical advances have been developed by his lab that greatly enhanced the proteomic coverage, sensitivity and throughput for proteomic research. As for the Pharmaceutical Analysis of small-molecule drug/markers, Dr. Qu's lab is focusing on the ultra-sensitive quantifications of drug, metabolites and endogenous markers (e.g. corticosteroids, di-hydroxyl-vitamin D metabolites, etc.) using a novel combination of selective enrichment and micro- or nano- LC/MS.

Ramanathan, Murali PhD		Professor	My laboratory is involved in clinical and translational research in multiple sclerosis (MS). My laboratory has investigated the neuroimmunological and genomic mechanisms that contribute to the heterogeneity of clinical treatment responses for this chronic, disabling neurological disease. Currently, the broad focus of my MS research is to delineate the interactions among patient-specific, environmental and genetic factors that contribute to inter-individual differences in disease progression. We employ a unique multi-disciplinary approach to research by leveraging our strengths in pharmaceutical sciences and bioengineering and also through my productive collaborations with scientists from clinical disciplines, e.g., neurologists, neuroradiologists, neuropsychologists and from quantitative disciplines such as computer science and biostatistics. Through these collaborations, our group has been able take on challenging scientific problems that could not be undertaken by any one of us individually. My multi-disciplinary research spans two inter-related areas: i) clinical research on the roles of environmental factors in MS progression and, ii) molecular and quantitative clinical pharmacology. My recent work has focused on cholesterol and lipid biomarkers in multiple sclerosis disease progression. My group has investigated other compelling environmental factors in MS including immune responses to Epstein-Barr virus exposure, vitamin D metabolism and smoking. I have the necessary expertise and record in quantitating environmental factors and surrogate markers in MS. We also have extensive experience in pharmaceutical applications of "big data" and modeling analysis of large high-dimensional data sets containing environmental factors, genetic and immunological biomarkers, quantitative neuroimaging metrics and clinical measures in MS.
Shah, Dhaval PhD		Assistant Professor	Our research can be generalized as ‘Translational Research’ that is focused on the discovery, development, and bench-to-bedside translation of novel biotherapeutics using the principles of Pharmacokinetics-Pharmacodynamics (PK/PD) and mathematical Modeling and Simulation (M&S). The research efforts are mainly devoted towards treating various oncology indications, infectious diseases, and obesity. 1. Development of translational systems PK models for protein therapeutics: (A) Development of Quantitative Structure-Pharmacokinetic Relationships (QSPKR) for protein therapeutics, (B) Development of systems PK model for brain disposition of protein therapeutics, (C) Development of systems PK model for ocular disposition of protein therapeutics, (D) Development of systems model for solid tumor disposition of protein therapeutics, (E) Development of platform Physiologically-Based Pharmacokinetic (PBPK) model for protein therapeutics, (F) Development of pediatric PBPK model for protein therapeutics, (G) Development of translational PBPK model for antibody-drug conjugates (ADC), (H) Development of platform PBPK model for T-cells and T-cell redirecting bi-specific antibodies.

			2. Investigation of the determinants for PK/PD of novel anticancer protein therapeutics: (A) Quantitative evaluation of the bystander effect of ADCs, (B) Investigation of the mechanism-of-action for the faster clearance of high DAR ADCs, (C) Evaluation of antibody co-administration as a strategy to overcome the binding-site barrier for ADCs, (D) Investigation of the effect of CD3 arm affinity and plasma half-life on the efficacy of T-cell engaging bi-specific molecules, (E) Investigation of the synergistic potential between T-cell engaging bi-specific molecules and immune-checkpoint inhibitors. 3. Discovery of novel therapies for orphan and deadly diseases: (A) Discovery of novel drug-linker combination for ADCs, (B) Discovery of novel ADC for retinoblastoma, (C) Discovery of novel ADC for glioblastoma, (E) Discovery of novel immunotherapy against bacteria, (F) Discovery of novel protein therapeutics to eliminate bacterial toxins, (G) Discovery of targeted therapy for obesity. 4. Optimization of existing treatment options: (A) Validation of PK/PD M&S as a tool to guide the dosing regimen of chemotherapy. (B) Evaluation of tumor burden and tumor growth rate as markers for precision medicine. (C) Optimizing vancomycin dosing regimen in cystic fibrosis patients. (D) Enabling therapeutic drug monitoring in pediatric patients using saliva.
Straubinger, Robert PhD		Professor	Our research program involves the application of drug carriers for the treatment of infectious diseases and cancer. Recent past efforts have been directed toward improving the therapy of brain tumors (as well as others) by targeting tumor blood vessels. Currently we are investigating strategies in increase the perfusion and drug permeability of pancreatic cancers by compromising the ability of cells within the tumor stroma, or extracellular matrix, to maintain the very low tumor blood supply and impermeability to drugs and nanoparticles We employ a variety of experimental approaches, including high-resolution magnetic resonance imaging, liquid chromatography/mass spectrometry, confocal fluorescence microscopy and image analysis, pharmacokinetic/dynamic analysis, and molecular techniques such as quantitative RT-PCR and proteomics. With these techniques, we examine the effects of treatment upon tumor vascular permeability and drug deposition, the localization of the carrier-delivered drug within the tumor, and the molecular mechanisms involved when tumor blood vessels or tumor stroma are attacked during therapy. Additional interests of the lab that are being pursued actively include understanding the mechanisms of anti-cancer drug action and how they may be modified by changing exposure profile (time vs. concentration). Both genomic and proteomic analysis approaches are utilized in this work, but an approach of increasing importance to our research is the implementation of comprehensive proteomic investigations in order to understand in detail how tumors respond to standard-of-care drugs and new molecularly-targeted drugs.

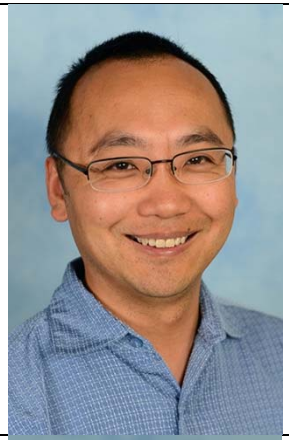
Name	Picture	Title	Interests
Albanese, Nicole PharmD		Clinical Associate Professor	
Bednarczyk, Edward PharmD		Director, Center for Health Outcomes, Pharmacoinformatics and Epidemiology	Research interests are focused to the application of molecular imaging techniques such as positron emission tomography (PET) to assessing drug effects, including the study of migraine headache where we have looked at treatment as well as induction of headache. We have also had recent work looking at opiate receptors in the human brain using 11C-carfentanil, a radiopharmaceutical that binds to the mu opiate receptor. The characteristics of positron emitting radio nuclides often make them ideal tracers for measuring drug effects. This includes the labeling drugs with PET radio nuclides such as C-11, or F-18. These nuclides allow for creation of labeled drugs nearly identical to their unlabelled counterparts. We have also used ³workhorse¹ radiopharmaceuticals such as FDG in a variety of settings ranging from measuring the uptake of glucose into white blood cells, to oral administration of this radiopharmaceutical, to application in the assessment of response to drugs in dementia. Other research areas include migraine headache, and neuroreceptor binding studies.

Brody, Peter PharmD		Director of Experiential Education, Clinical Assistant Professor	Dr. Brody is the Director of Experiential Education for the School of Pharmacy and Pharmaceutical Sciences, which provides oversight for all IPPE and APPE activities conducted by all levels of our PharmD students locally, nationally, and internationally. Scholarly and teaching interests are in the areas of outpatient care, immunization, medication therapy management, osteoporosis, IPE, and community education programs. Student research opportunities are available in the following areas: poison prevention, bone density screening, and various educational outcome assessments involving student and preceptor development, patient care, and interprofessional initiatives.
Catanzaro, Linda PharmD		Clinical Assistant Professor	Primary research interests are in the fields of drug information and managed care pharmacy. Currently, Dr. Catanzaro staffs the UB SPPS Drug Information Response Center which supports the NY State Medicaid Prescriber Education Program. She is also continuing to work in collaboration with other UB SoPPS faculty on additional projects for the NY State Department of Health (DOH). These projects involve post-marketing drug utilization literature evaluation as well as retrospective drug utilization review (DUR) research for the NY State Medicaid DUR Program. Students interested in this type of research will have the opportunity to develop their literature retrieval and evaluation skills and professional writing skills. The DUR research component will provide the opportunity to learn how to analyze insurance claims databases to identify prescribing patterns and opportunities for optimizing appropriate medication use. Participation in the project may also lead to the opportunity for the student to become a published author.

Cieri-Hutcherson, Nicole PharmD		Clinical Assistant Professor	Dr. Cieri-Hutcherson's research is focused on: Anticoagulation: specifically, special populations (women, genetic disorders, organ dysfunction, orthopedics, reversal) Women's Health: specifically, natural product evidence-based reviews for treatment of disorders specific to women, access to over the counter contraception and medication management during pregnancy and lactation
Coe, Holly PharmD		Clinical Assistant Professor	
Daly, Christopher PharmD, MBA		Clinical Assistant Professor	Dr. Daly's faculty charge is to lead the innovation of new practice opportunities for advanced clinical outpatient pharmacy. His work seeks to establish a Community Pharmacy Practice Based Research Network developing various pharmacy models in the Western New York region. This is integrated into his educational and research responsibilities. His academic and research passions are innovative community pharmacy models, entrepreneurialism, social and administrative pharmacy practice sciences, and clinical based outcomes research.

Doloresco, Fred PharmD		Director of Assessment; Clinical Associate Professor; Research Assistant Professor	Research interests in pharmacoeconomics, outcomes research, and health services research. Specific areas of research include cost-effectiveness clinical pharmacy services.
Dunn, Terry PharmD		Clinical Assistant Professor	Interests include Health Outcomes Research, supported by the Department of Health.
Fiebelkorn, Karl MBA, BS		Senior Associate Dean for Student, Professional, and Community Affairs	1. Research and application of the laws, rules and regulations, both federal and state affecting pharmacy practice issues in NYS. These include current legislative issues affecting the expansion of pharmacist‘s responsibility in patient care along with the application of business models for improving the corresponding revenue streams that any legal changes may create. 2. Studying areas to improve the recognition, and reporting of medication errors and systems for improvement of practice sites for enhancement of patient outcomes. 3. Business plan modeling for pharmacy related businesses to improve efficiency and profitability.

Fusco, Nicholas PharmD		Clinical Assistant Professor	His research interests include infectious diseases, cystic fibrosis and inter-professional education (IPE).
Gengo, Francis PharmD		Associate Professor of Pharmacy and Neurology	Research conducted at the Neurologic Institute focused to neuropharmacology and a clinical research interest in PK-PD of neuroactive compounds. 1. Ethanol Pharmacology: Conducts clinical studies to examine the pharmacokinetic and pharmacodynamic models of ethanol pharmacologic effects. 2. Headache: Clinical management models for headache pharmacotherapy. 3. Alzheimer‘s: Clinical management models for Alzheimer‘s pharmacotherapy.
Jacobs, David PharmD		Clinical Assistant Professor	The focus and application of Jacobs' research program is centered on the intersection of pharmaceutical health services and outcomes research, pharmacoepidemiology, comparative effectiveness research and implementation science. His research approach emphasizes multi-disciplinary and collaborative research strategies encompassing both observational and interventional methods across a variety of therapeutic areas. Specifically, his current research has 3 main areas of focus: 1) use of large data sets, data mining techniques, and comparative effectiveness research to predict and evaluate outcomes of acute and chronic medications, 2) implementation of pharmacist collaborative services to improve quality of care and patient safety, and 3) optimizing chronic disease management and treatment adherence through cost-effective approaches.

Ma, Qing PhD		Assistant Professor	Research interests areas: 1. Pharmacogenomics of antiretrovirals in patients with HIV-associated neurocognitive disorders 2. Mechanisms of drug-drug interactions in patients with HIV infection 3. Incorporating pharmacokinetics, pharmacodynamics and pharmacogenomics in studying the effects of antiretrovirals on the central nervous system
Meaney, Calvin PharmD		Clinical Assistant Professor	Dr. Meaney‘s research is focused on the optimization of drug therapy through the application of quantitative clinical pharmacology. He leads a multidisciplinary group of researchers to address novel personalization of erythropoiesis-stimulating agents in hemodialysis patients. Other work has focused on drug-induced nephrotoxicity where he was one of the first researchers to identify vancomycin and piperacillin/tazobactam as a nephrotoxic combination.
Monte, Scott PharmD		Clinical Assistant Professor	

Morse, Gene PharmD		SUNY Distinguished Professor	Dr. Morse has been actively involved in drug development research since the introduction of antiretrovirals for HIV in 1986, with more recent emphasis on HCV infection and drug development. He has National Institute of Allergy and Infectious Diseases support for the UB AIDS Clinical Trials Group, Pharmacology Specialty Laboratory and a contract for the HIV Clinical Pharmacology Quality Assurance Program. These programs integrate with the NIH Fogarty International Center AIDS International Training and Research Program, which Dr. Morse directs with the University of Zimbabwe and is home to the Center of Excellence in Clinical Pharmacology. Dr. Morse also directs the UB HIV Clinical Pharmacology Laboratory, which has gained an international reputation for its work in bioanalysis, pharmacokinetics, and pharmacogenomics. In addition, Dr. Morse is director of the Empire State Patient Safety Assurance Network, a federally certified patient safety organization and a network for health information technology innovation. Dr. Morse is the director of the UB Translational Pharmacology Research Core. He is also associate director for the Clinical Trials Methods and Technologies Pillar for the Clinical and Translational Sciences Institute at the University of Rochester Medical Center. Dr. Morse is co-founder of the Buffalo Jamaica Innovation Enterprise, a partnership between UB the University of the West Indies and the Jamaica Ministry of Health. This project has established the Jamaica Center for Infectious Diseases Research. Dr. Morse has more than 25 years of NIH, industry and philanthropic research support with extensive experience in grant applications and mentoring. Dr. Morse received the 2012 Volwiler Research Achievement Award from the American Association of Colleges of Pharmacy.
Paladino, Joseph		Clinical Professor, Director, Clinical Outcomes & PharmacoEconomics	Research interest areas: 1. Pharmacoeconomic evaluation of antimicrobial therapy for pneumonia and geriatric therapy. 2. Clinical trails of developmental antibacterial agents.

Pasko, Mary PharmD		Clinical Associate Professor	Research interests are in the area of Infectious Diseases, specifically antimicrobial pharmacotherapeutic issues.
Prescott, Gina PharmD		Clinical Associate Professor	Dr. Prescott is the Global Health Outreach Coordinator for the School of Pharmacy and Pharmaceutical Sciences. Scholarly and teaching interests are in the area of global health, refugee health/underserved patient care, and education. Student research experiences are available in the following areas: refugee health, analysis of clinical short term experiences in global health, clinical considerations with underserved populations, and educational assessments of global health curriculum and program development.
Prescott Jr, William PharmD		Interim Department Chair, Clinical Associate Professor	Clinical Research: Pediatric infectious diseases and pulmonary disease, with a focus on immunizations and cystic fibrosis. Scholarship of Teaching and Learning: Descriptive and survey-based research focusing on curriculum and active learning.

Reilly, Irene PharmD		Clinical Assistant Professor	Interests include the assessment of the safety of agents used in pharmacotherapy and imaging.
Reiman, Alfred		Clinical Assistant Professor	Research interests include design of new and innovative drug delivery systems. Current projects include the development of an automated (robotic) filling, metering and dispensing system for transdermal gels.
Sawyer, Joshua PharmD		Clinical Assistant Professor	Interests include the development of an International Health Information Technology Network for HIV medication management research

Slazak, Erin PharmD		Clinical Assistant Professor	Research interests include: • The impact of ambulatory clinical pharmacy services on patient outcomes on chronic disease states such as diabetes, hypertension, hyperlipidemia, asthma/COPD, and osteoporosis • The impact of pharmacist-led transitions of care services on patient outcomes and the cost of healthcare.
Tornatore, Kathleen PharmD		Professor	Research works focuses in the area of Clinical Pharmacokinetic and Pharmacodynamic Research of Immunosuppressive Regimens in Renal Transplantation. This clinical research program has been an ongoing collaborative program with the Division of Nephrology at Erie County Medical Center for over 15 years focusing on the pharmacokinetics, pharmacodynamics and pharmacogenomics of immunosuppressive agents during renal transplantation: Current and upcoming clinical research endeavors focus upon pharmacokinetics of immunosuppressive drugs in relationship to pharmacodynamics of immunologic markers and targeted pharmacogenomic endpoints in relation to race and gender of the renal transplant recipient. Research projects may provide the student with exposure to a variety of biomedical technologies including LCMSMS, flow cytometry and Q-PCR. These projects provide Pharm.D. students with an opportunity to explore clinical and translational research projects though a clinical research team (i.e. Pharm.D.s, physicians, nurse clinicians, immunologists, geneticists, biostatisticians, etc.) by participation in clinical pharmacology sub-studies in renal transplant patients with the endpoint to provide safe and efficacious immuosuppression (e.g. cyclosporine, prednisone, mycophenolic acid) among different patient groups. In addition, this funded clinical research program has focused on the pharmacokinetics and dynamics of glucocorticoids with specific emphasis on the impact of the factors of gender, race, acute rejection, time post-transplant, immunologic response and chronic adverse effects in the renal transplant population

Tsuji, Brian PharmD		Associate Professor	I am Clinical and Translational Pharm.D. Scientist and PI of R01AI111990 which seeks to investigate the Pharmacokinetics and Pharmacodynamics of Polymyxin Combinations. This R01 is interdisciplinary and blends diverse areas including microbiology and antimicrobial pharmacology with next generation sequencing and a number of infection models with an outstanding team of Pharm.D., M.D., and Ph.D. Co-Investigators. I am an internationally leading expert on antimicrobial pharmacology. In my early work in at Wayne State University, I completed new studies to optimize vancomycin dosing to combat heterogeneous resistance in Staphylococcus aureus by using PK/PD approaches to evaluate novel dosage regimens and antibiotic combinations. With the recent spread of multidrug-resistant Gram-negative bacteria, at the University at Buffalo, I developed an independent, federally funded research program, and expanded my research to refine exposure response approaches in a number of agents including colistin, polymyxin B, beta-lactams, and new combinations involving beta-lactam inhibitors against these very problematic pathogens. From 2008 to 2012, I have been a Co-investigator and PI of a subcontract at the University at Buffalo for R01A1079330 (PI Nation), a $2.3 million award from NIH. I am currently Principal Investigator of R01AI111990 a $4.4M grant which seeks to investigate the Pharmacokinetics and Pharmacodynamics of Polymyxin Combinations.
Wahler, Robert PharmD		Clinical Assistant Professor	Research interests focus on identifying and reducing medication related fall risk in the elderly. Using the Medication Therapy Management (MTM) model, he is developing clinical decision support tools to access medication falls risk, medication cognition impairment and inappropriate medications in the elderly. Collaborative Drug Safety Management (CDSM) with Frail Elders & Caregivers for Successful Aging in which deprescribing of potentially inappropriate medication is implemented across the health care system by incorporating pharmacists within primary care practice.

Woodruff, Ashley PharmD			Interests include the scholarship of teaching and learning & the evaluation of team- and case-based learning models