The University of Wisconsin Hospital and Clinics is an integrated health system consisting of University Hospital, Unity Health Plans, and Chartwell of Wisconsin Home IV Therapy service.

**University of Wisconsin Hospital and Clinics (UWHC)** [www.uwhealth.org](http://www.uwhealth.org) is a 493-bed, tertiary-care teaching facility, located on the edge of the University of Wisconsin-Madison campus. The hospital is equipped with the most advanced facilities to provide extensive inpatient, emergency, ambulatory, and home care services. UW Hospital and Clinics has been long recognized as a national leader in many specialized fields of health care including critical care, cardiology, hematology/oncology, pediatrics, ophthalmology, surgical specialties, organ transplantation, orthopedics, neurology, infectious diseases/HIV, and geriatrics. **Unity Health Plans** provides insurance coverage and pharmacy benefit services for approximately 85,000 members. To provide home IV services for UWHC patients, the pharmacy department and hospital have formed a partnership with **Chartwell of Wisconsin**.

The **Pharmacy Department** ([https://www.uwhealth.org/pharmacy](https://www.uwhealth.org/pharmacy)) at UWHC includes a professional staff of 113 clinical pharmacist FTEs, 16 residents. The department employs approximately 178 technicians, students, and support staff.

Pharmacy personnel provide around-the-clock progressive and comprehensive pharmacy services. Decentralized pharmacists are an integral part of the health care team and provide clinical and distributive services on the patient care unit. Inpatient teams, consisting of pharmacists, residents, students/interns, and pharmacist assistants, care for specific patient populations, and pharmacists are specialists in their practice areas. Clinical pharmacy services are provided to every patient and include medication history interviews, formal and informal medication teaching during the patient's stay, participation in work and attending rounds with the medical team, therapeutic drug monitoring, documentation of outcomes, and discharge medication teaching. Pharmacists and residents also participate in drug usage evaluations and cost-containment efforts, and have the opportunity to serve as preceptors for students from the University of Wisconsin School of Pharmacy, and teach in the school’s pharmaco­therapy lab.

**The Drug Policy Program (DPP)** was founded in 1994 to develop, implement, maintain, and monitor policies related to the use of pharmaceuticals and to conduct applied drug policy research. As an essential part of the Center’s mission, an active research program has been developed, focusing on clinical economic analyses (pharmacoeconomics) and outcomes studies. The DPP also provides drug information support to decentralized pharmacists, as well as to the Pharmacy and Therapeutics Committee, Medication Use Evaluation Committee, and health care professionals within Wisconsin.

The **Pharmaceutical Research Center (PRC)** currently coordinates over 350 clinical drug research protocols, offers over 600 square feet of controlled-access storage space dedicated to clinical drug supplies, and provides a variety of comprehensive services including:

- Feasibility assessment of and consultation on clinical drug design from a pharmaceutical care and health care environment perspective
- Facilitation of protocol implementation and maintenance in full compliance with sponsor and federal regulations
- Availability of an innovative pharmaceutical environment responsive to research needs (24 hrs/day; 7 days/week study drug preparation; gene therapy; phase I – IV; etc)
- Drug accountability data integrity
- Provision of randomization and blinding strategies
- Development of drug information, educational, compliance and toxicity characterization tools
- Assistance with emergency compassionate use requests
Consultative services to sponsors and other PRC services on a variety of topics (development of a pharmacy-based PRC program; gene therapy implementation within a health care environment; study drug packaging and labeling from pharmacy/health care environment perspective)

The PRC interfaces within research infrastructures of the UW Comprehensive Cancer Center, the UW Medical School’s Office of Clinical Trials, the Institutional Review Board, and the General Clinical Research Center.

The Pharmacy Department is on the forefront of information technology. In addition to a fully comprehensive electronic medical record, pharmacy staff have access to word-processing, spreadsheet and database applications, MicroMedex®, Up to Date®, Pub Med®, and a host of other applications and electronic resources. UW Pharmacy uses a robotic cartfilling system, which has been in place since June of 1993.

An on-site outpatient pharmacy fills an average of 400 prescriptions daily, including discharge prescriptions for inpatients. The Pharmacy Department operates additional pharmacies in the Oncology Clinic, the American Family Children’s Hospital, the Student Health Service on campus, and in nine other off-site clinics. Additional services provided by the Pharmacy Department include a telepharmacy service, consulting for nursing homes and other hospitals, and clinical services in many ambulatory specialty areas.

Residency Faculty - Administrative

Carrie Boeckelman (Clinical Instructor) is a Pharmacy Manager of Ambulatory Pharmacy Services. She received a B.S. in pharmacy from the University of Wisconsin-Madison. In her current role at UW Hospital, Carrie is responsible for providing leadership and direction to pharmacists and technicians in 7 ambulatory pharmacies including a home prescription delivery service. In addition, she oversees the pharmacy services for the University of Wisconsin Medical Foundation. Her interests include the advancement of medicine therapy management, maximizing pharmacy operations efficiencies and preventative care through the use of vaccines.

Patrick Cory (Clinical Instructor) is Manager of Managed Care Pharmacy Programs at UWHC and the Pharmacy Program Director for Unity Health Insurance, the managed care organization owned by UW Health. He holds a B.S. and Pharm.D. from the University of Wisconsin School of Pharmacy. He also completed a Pharmacy Practice Residency at the University of Wisconsin Hospital & Clinics. His responsibilities include management of all aspects the Unity pharmacy benefit, and integration of pharmacy benefit management with Unity corporate goals and vision as well as with the rest of the integrated UW Health system. Interests include the impact of benefit design on cost effectiveness and patient behavior, and utilizing the community pharmacist to optimize medication outcomes.

Lisa Gryttenholm (Senior Clinical Pharmacist and Clinical Instructor) received her B.S. Pharmacy and PharmD degrees from the University of Wisconsin-Madison. In addition to decentral staffing she spends 50% of her time as the Senior Clinical Pharmacist for Patient Care Services. Her responsibilities include: providing leadership and direction for pharmacists on practice issues and medication utilization, coordination of new and changing clinical patient care services, serving as a peer resource on clinical topics and mentorship of pharmacy students and residents. She is involved with the Acute Care of Elders (ACE) consult team and a variety of interdisciplinary committees within UWHC, is a board member on the UW-Madison School of Pharmacy Admissions Committee, and serves as the Madison Area Director for the PSW Long Term Care Section Board. Preceptor development, patient education, and geriatrics are her interest areas.
Susan Johnston (Clinical Instructor) is Manager of the Pharmaceutical Research Center. She earned her BS from the University of Wisconsin Madison in 1990 and her Doctor of Pharmacy degree from the University of North Carolina in 1995. She is responsible for all clinical drug research conducted through UW Health and for providing leadership, direction, and supervision for the safe, ethical, and quality provision of clinical drug research conducted through the institution's research infrastructure. Her areas of interest include ethics in research, regulatory law and pediatric oncology.

Brad Ludwig (Clinical Instructor) is Assistant Director of Pharmacy, Inpatient Pharmacy Operations. He earned his B.S. and M.S degrees from the University of Wisconsin and completed a one-year Pharmacy Practice Residency and a two-year Administrative Residency at the University of Wisconsin Hospital and Clinics. His practice and research interests include acute care information technology, automated systems, asset management, drug distribution, discharge planning and prescription services and pharmacy practice.

Jessica Mahoney (Clinical Instructor) is Manager of Patient Care Services and Operations. She earned her Doctor of Pharmacy degree from The Ohio State University and M.S. degree from the University of Wisconsin-Madison. She completed the two-year Administrative Residency at the University of Wisconsin Hospital and Clinics in 2008. Her current responsibilities include oversight of the Pharmacy Oncology Service, Infusion Center Pharmacy Services and Sterile Product Preparation. She also oversees all UW School of Pharmacy Clerkship rotations. Her practice and research interests include pharmacy operations, drug distribution, oncology pharmacy practice.

Rebecca Mutch Marnocha (Clinical Associate Professor) is the Director of Clinical Research at the University of Wisconsin Hospital and Clinics (UWHC) and the University of Wisconsin School of Medicine and Public Health (SMPH). She is also the Associate Director of the UW Institute for Clinical and Translational Research (ICTR). In these roles, Dr. Marnocha is responsible for facilitating research activities within the UWHC clinical environment and for the provision of regulatory, quality and support services within the global clinical and translational research environments of ICTR and UW Health (UWHC, SMPH and UW Medical Foundation). Dr. Marnocha received her bachelor's degree in pharmacy from Ferris State University (Big Rapids, MI), Doctor of Pharmacy degree from the University of North Carolina (Chapel Hill, NC), and completed an oncology research fellowship at the University of Wisconsin School of Pharmacy (Madison, WI). Her areas of interest include research infrastructure management and oversight, clinical drug research and study design, and the regulation, safety and ethics of human research.

David Musa (Clinical Instructor) is Manager of Pharmacy Business Operations. He earned a B.S. degree in Pharmacy from Oregon State University and an M.B.A. degree in Healthcare Fiscal Management from the University of Wisconsin-Madison. He also completed a fellowship in hospital administration at the University of Wisconsin Hospital and Clinics. His responsibilities include financial and budget management, contracting, supervision of nuclear pharmacy and clinic medication distribution, coordination of services to Wisconsin Dialysis, Inc (WDI) and the UW Athletic Department. He also provides didactic and practical teaching on institutional drug distribution systems.

Connie Peterson (Clinical Instructor) is Manager of Revenue Cycle & Reimbursement. She received her B.S. in pharmacy from the University of Wyoming, her M.S. degree in Hospital Pharmacy Administration from UW-Madison, and her two-year Administrative Residency from UW Hospital and Clinics. Her research interests include improvements and expansion of pharmaceutical care for ambulatory patients, expansion of ambulatory pharmacy services, and improved systems for reimbursement of high cost take home and clinic administered medications and services. Management experience includes personnel
management, operations, financial management, planning and budgeting. Current responsibilities include financial management and reimbursement with emphasis on retail and clinic medication services at UWHC. In addition she oversees the UWHC Comprehensive Program for Bleeding Disorders, a 340 B program, the UWHC Medication Assistance Program, and high cost clinic medication prior authorization processes at UWHC.

Steve Rough is the Director of Pharmacy at the University of Wisconsin Hospital and Clinics, and Clinical Assistant Professor at the UW-Madison School of Pharmacy. Steve is also Director of the two year Health-System Pharmacy Administration Residency Training and Masters Program at UW Hospital. Steve received his Bachelor of Science in Pharmacy and his Master of Science in Health-System Pharmacy Administration from the School of Pharmacy at the University of Wisconsin, Madison. He also completed residency training in Pharmacy Practice and Health-System Pharmacy Administration at the University of Wisconsin Hospital and Clinics.

Steve has coordinated and implemented progressive pharmacy services in virtually all practice settings. He has contributed six textbook chapters and numerous other papers in the pharmacy literature related to pharmacy administration and leadership, medication safety, the application of automation and technology, operational benchmarking and a variety of other management-related topics. He has been an invited lecturer for local, state and national audiences on these topics as well. Steve has completed a four-year elected term as Treasurer of the Pharmacy Society of Wisconsin (PSW) and has served on PSW’s board of directors for six years. Steve currently serves as a member of the University Health System Consortium (UHC) Pharmacy Council Executive Committee. Steve also has served as Chair for the ASHP Section of Pharmacy Practice Managers, is a member of the ASHP House of Delegates and has served as Chair for the ASHP Council on Pharmacy Management. In 2006, Steve accepted the inaugural ASHP Foundation Pharmacy Residency Program Excellence Award on behalf of the UW Hospital and Clinics administrative residency and masters program. Steve is also co-creator of the ASHP Manager’s Boot Camp Workshop and ASHP State Affiliate Student Leadership Development Workshop. In July of 2009 Steve was awarded the UW Hospital and Clinics Presidential Leadership Award provided annually to a department director for exceptional sustained leadership across the organization and in the community. Steve's practice and research interests include pharmacy administrative practice, medication use safety, work redesign, pharmacy technology, financial management, and implementation of progressive pharmacy services.

Sara S. Shull (Clinical Instructor) received her B.A in Biology from Knox College, Galesburg, Ill, and Pharm.D from the University of Nebraska College of Pharmacy, and M.B.A from the University of Nebraska at Omaha. She is the Manager of the Drug Policy Program at UW Hospital and Clinics. Her practice and research interests include outcomes management and attributing value to pharmaceutical products, policy development and monitoring, and efficiency in delivery of clinical pharmacy services.

Bill Tanke (Clinical Instructor) received his B.S. degree from the University of Wisconsin. He is pharmacy manager of acute care and emergency services. Responsibilities include pharmacy services for cardiovascular surgery, cardiology, peripheral vascular surgery, trauma-life support center/burn center intensive care patients, the emergency department, and cardiac cath lab. In addition he is the medication safety officer officer for the hospital. His interests include transplant medicine, cardiology, trauma and resuscitation efforts. He is a member of the Resuscitation Review, Healthcare Event Evaluation Team, Respiratory Care, Emergency Management, Environment of Care Safety, and Nursing-Pharmacy committees. He chairs the Medication Safety Committee & co-chairs the Pharmacy Practice committees. Bill provides the longitudinal medication safety rotation for junior administrative residents. He also provides blue cart training for all new pharmacist staff.
**Jack Temple** (Clinical Instructor) is Manager of Pharmacy Operations and Improvement. He earned his Doctor of Pharmacy degree from the University of North Carolina in 2004 and his Masters of Science in Health System Pharmacy Administration from the University of Wisconsin in 2006. He also completed an ASHP accredited specialty residency in Pharmacy Practice Management from the University of Wisconsin Hospitals and Clinics. His current practice and research interests include pharmacy operations, technology, and the use of technology to expand clinical practice and improve patient safety.

**Michelle Thoma** is Pharmacy Manager, Patient Care Services, Compliance and Quality Improvement at the University of Wisconsin Hospital and Clinics, and Clinical Instructor with the UW School of Pharmacy. Michelle received her Bachelors and Doctor of Pharmacy degrees from the University of Wisconsin at Madison. She is responsible for managing patient care pharmacy services on the inpatient transplant, surgery and neurosciences care units, for leading ambulatory clinic pharmacist practice, and for coordinating department and organization wide regulatory compliance and quality improvement initiatives. She serves as a preceptor and advisor for many students, pharmacy practice and administrative residents. Michelle is an active member of the Pharmacy Society of Wisconsin, American Society of Health-System Pharmacists, the Wisconsin Department of Health Services Mental Health Drug Advisory Board and the University Health System Consortium’s Pharmacy Performance Improvement & Compliance Committee.

**Hannet Tibagwa** (Clinical Instructor) is Pharmacy Manager of Ambulatory Pharmacy Services. She received a M.S. degree at UW–Madison and completed a two–year Administrative Residency at UW Hospital and Clinics. She completed a Pharmacy Practice Residency at Fairview University Medical Center, and received her Pharm D. degree at Northeastern University, Boston. In her current role at UW Hospital, Hannet is responsible for providing leadership and direction to pharmacists and technicians in outpatient pharmacy, oncology pharmacy, Hilldale Pharmacy, anticoagulation clinics, the mail order program, and UWHC ambulatory contracts. Her interests include advancement of pharmacy practice, pharmacy technology, operational assessments, and financial management.

**Philip Trapskin** (Clinical Instructor) received his B.S. Pharmacy (1999) and Pharm.D. (2000) from the University of Wisconsin-Madison. Upon graduation he practiced at Marshland Pharmacies, Inc., an independent community pharmacy in Horicon, WI. He completed a PGY1 pharmacy residency (2004) and PGY2 pharmacy practice management residency (2005) at the University of Kentucky Chandler Medical Center in Lexington, Kentucky. Currently, his position is Manager, Patient Care Services and Program Director for the PGY1 Practice Residency at the University of Wisconsin Hospital and Clinics in Madison, WI. His interests include residency training, clinical practice and scholarship advancement, antimicrobial stewardship, and anticoagulation stewardship.

**Lee Vermeulen** (Clinical Professor) is Director of the Center for Clinical Knowledge Management. He received his B.S. degree in pharmacy from the State University of New York at Buffalo, and his M.S. degree in pharmacy administration from UW-Madison. He completed residency training in pharmacy practice and pharmacy administration at the University of Wisconsin Hospital and Clinics, and has served a fellowship in medical technology assessment at the University Hospital Consortium. His research focuses on drug policy development and clinical decision making, with an emphasis on clinical economics, outcome evaluations, development of practice guidelines and the measurement of the impact of practice guidelines on patient care.

**Residency Faculty - Clinical**

**Sheila Aton** (Senior Clinical Pharmacist) received her B.S. and Pharm.D. degrees from St. Louis College of Pharmacy. She completed a pharmacy practice residency at the University of Wisconsin Hospital and
Clinics. Responsibilities include patient care services for neurology and neurosurgical as well as movement disorder clinic. Her interests include Parkinson’s disease patients, spinal cord injury patients, and multiple sclerosis patients; she is very involved with the inpatient and outpatient management of these populations.

**Carin Bouchard** (Clinical Pharmacist, Clinical Instructor) received her Pharm.D. degree at the University of Wisconsin-Madison, completed a pharmacy practice residency at the Froedtert Hospital in Milwaukee and is a board-certified Pharmacotherapy Specialist. Her responsibilities include providing pharmacy services for neurology and neurosurgery patients at UWHC. Additional practice interests include stroke, neurocritical care and infectious disease.

**Caitlin Curtis** (Clinical Pharmacist, Clinical Instructor) completed a Pharm.D. degree at the University of Louisiana at Monroe, a pharmacy practice residency at UWHC in Madison, and a Nutrition Support/Critical Care residency at Emory University in Atlanta, Georgia. She is a board-certified Nutrition Support Pharmacist and is a member of the Surgical Nutrition Support Team at UWHC, as well as a member of a clinical nutrition research team in the Department of Surgery. Caitlin served as the Nutrition Support Network Facilitator for the American Society of Health-System Pharmacists from 2006-2007, and is an active member of the American Society of Parenteral and Enteral Nutrition as well as the Pharmacy Society of Wisconsin.

**Catherine Decker** (Clinical Instructor) is a Senior Pulmonary Care Clinical Pharmacist. She received her B.S. in Pharmacy from the University of Iowa and her Doctor of Pharmacy Practice Degree followed by completion of a Pediatric Pulmonary Pharmacist Fellowship from the University of Wisconsin-Madison. She is a certified asthma educator. Catherine is responsible for providing pharmaceutical care services for Adult pulmonary clinic patients, as well as staffing in the UW Health ambulatory pharmacies. Catherine collaborates with Michelle Thoma in developing standards of practice for UWHC ambulatory clinic pharmacist practice. In addition to her provision of care, Catherine serves on the Wisconsin Medicaid Advisory Committee and volunteers as an educator for the American Lung Association of Wisconsin. Her research activities and interests include cystic fibrosis, pulmonary arterial hypertension, asthma, and advancing the role of the pharmacist in outpatient clinics.

**Heather Donovan** (Clinical Pharmacist) received her Pharm.D. degree from Drake University in 2001. She is Board Certified in Oncology Pharmacy. She is responsible for pediatric patients from neonates to teen including intensive care, oncology, bone marrow transplant and general care patients. She also works with the inpatient adult oncology team. Primary interests within the pediatric population include oncology, hematology, pain management and nutrition support.

**Jeff Fish** (Senior Clinical Pharmacist) received his B.S. degree from the University of Wisconsin, and his Pharm.D. degree from the University of Minnesota. He completed a cardiology research fellowship with the University of Minnesota, and is BCPS certified. His responsibilities include providing pharmacy services for medical, surgical and burn intensive care patients. His interests include pain, sedation and infective disease issues in this patient population.

**Sean Gehrke** (Community Pharmacy Practice Residency Director, Senior Clinical Pharmacist, Clinical Instructor, and Pharmacy Manager) received his Pharm.D. degree from the University of Wisconsin-Madison and completed a one-year community pharmacy residency at the University of Arizona College of Pharmacy and Fry’s Food and Drug Stores in Tucson, AZ. In addition to directing the residency program, other responsibilities include managing the UW Health Pharmacy at Hilldale, ambulatory clinic involvement, and working with students at the University of Wisconsin School of Pharmacy. Sean’s research and practice interests include implementation and advancement of pharmaceutical-care services in the community
pharmacy setting, pharmacy practice management initiatives, collaboration with health care providers, and teaching.

David Hager (Clinical Pharmacist) received his PharmD degree from the University of Wisconsin School Of Pharmacy. He completed a pharmacy practice residency at the University of Wisconsin Hospital and Clinics. His responsibilities include advancing pharmacy practice within the Transplant Clinic, being the primary preceptor for PGY-1 residents interested in the abdominal transplant rotation, and providing care for liver, kidney, and pancreas transplant recipients. He also is a member of the surgical nutrition support team and is a Certified Nutrition Support Clinician. His main interests are in immunology, immunosuppression and therapeutic drug monitoring.

Dan R Hendrickson (clinical instructor) received a BS in Pharmacy in 1982 from North Dakota State University. He has been a clinical pharmacist at University Hospital and Clinics (UWHC) since 1984. He has practiced in many different specialty areas including general medicine, pulmonary medicine, gastrointestinal medicine, and abdominal transplant. Currently, Dan spends equal time in critical care, cardiovascular medicine, heart failure, cardiothoracic surgery and vascular surgery. He staffs in the heart failure/transplant clinic and as a decentral pharmacist. His current interests include heart failure, transplant and medication compliance.

Kimberly E. Holdener (Senior Clinical Pharmacist) received her PharmD degree from the Purdue University College of Pharmacy. She completed a pharmacy practice residency at Barnes-Jewish Hospital in St. Louis, Missouri and a specialty residency in nephrology and kidney transplant at Hennepin County Medical Center in Minneapolis, Minnesota. Her responsibilities include providing care for liver, kidney and pancreas transplant patients in the acute care and ambulatory settings and chronic kidney disease patients in the ambulatory setting. Her interests include transplant pharmacy practice, drug dosing and anemia therapy in patients with kidney disease, and the care of dialysis patients. She is also interested in expanding the role of pharmacists in the care of CKD patients.

Angela Hottmann (Clinical Pharmacist) received her Pharm.D. degree from University of Wisconsin. She completed a pharmacy practice residency at Riverside Methodist Hospital in Columbus, Ohio. She works on the inpatient surgery team where she provides pharmacy services for general surgery, bariatric surgery, gynecology/oncology, urology, plastic surgery, ENT, and trauma patients. Her interests include medication management in bariatric patients, pain management, diabetes and patient education.

Rick Kittell (Clinical Pharmacist) earned his B.S. and PharmD degrees from the University of Wisconsin Madison. He works primarily with pediatric and adult patients with chronic diseases ranging from Cystic Fibrosis, diabetes and renal disease. He has both inpatient and clinic duties. He also serves as the Pharmacy Education Director for the Pediatric Pulmonary Center Training Grant. His area of expertise is in Cystic Fibrosis.

Scott Knishka (Sr. Clinical Nuclear Pharmacist and Clinical Instructor) received his BS in Pharmacy with a specialization in Nuclear Pharmacy from Purdue University. He has been Board Certified in Nuclear Pharmacy since 1995 and currently serves on the Board of Pharmaceutical Specialties Nuclear Pharmacy specialty council. He spent 15 years staffing and managing commercial Nuclear Pharmacies before coming to University of Wisconsin Hospital in 2006. In his current role at UWHC, Scott oversees the operations of the Nuclear Pharmacy and teaches Radiopharmaceuticals 612 at the University of Wisconsin School of Pharmacy. He currently serves on the University of Wisconsin Radiation Safety Committee, the VA Hospital Radiation Safety Committee, UW Radioactive Drug Research Committee, UW Radiopharmaceutical Production Taskforce, and the Radionuclide Therapy Coordinating Committee. He is also guest lecturer for the University of Wisconsin Radiology Resident Lecture Series.
**Brian LaRowe** (Senior Clinical Pharmacist) received his B.S. and M.S. degree’s from North Dakota State University School of Pharmacy and completed a pharmacy practice residency at St. Francis Hospital in Breckenridge, MN. He is responsible for pediatric patients including intensive care and hematology, oncology, and bone marrow transplant as well as general care patients from birth through teen years. Primary interests within the pediatric population include emergency medicine, critical care, and therapy management for patients with varying degrees of renal function impairment.

**Nikki Lokker** (Clinical Pharmacist) received her B.S. (’01) and Pharm.D. (’06) degrees from the University of Wisconsin-Madison. She completed a PGY-1 residency with an emphasis in pediatrics at Vanderbilt University Medical Center in Nashville, Tennessee. Her primary practice involves working with pediatric patients from birth to 18 years at AFCH and she also works on the adult oncology, hematology and bone marrow transplant unit. Nikki's practice interests include hematology/oncology in pediatric and adult patients and pharmacy student education, both at the School of Pharmacy and during rotational experiences in AFCH.

**Mary Mably** (Senior Clinical Pharmacist, Pharmacy Oncology Coordinator, Clinical Instructor) received her B.S. in Pharmacy from St. Louis College of Pharmacy. She has been Board Certified in Oncology Pharmacy since 2002. She is chairperson of the Pharmacy Oncology Service Line Committee and is a member of the Hematopoietic Stem Cell Transplant Performance Improvement Committee. She works on the inpatient oncology team where she provides pharmacy services to oncology, hematology, BMT, and palliative care patients.

**Patrick Martin** (Clinical Pharmacist) received his Pharm.D. degree at the University of Wisconsin-Madison. He completed a 2-year administrative residency also at the University of Wisconsin-Madison and received his Masters of Science in Health System Pharmacy Administration. His current practice and research interests include pharmacy operations, perioperative services, and the integration of industrial engineering principles, such as Human Factors Engineering, into pharmacy operations.

**Vicki Nussbaum** (Senior Clinical Pharmacist, Clinical Instructor) Received B.S. Pharmacy and Pharm D from the University of Wisconsin-Madison. She a board certified oncology pharmacist. Areas of interest include pediatrics and oncology.

**Julie Pawola** (Senior Clinical Pharmacist) received her PharmD degree from the University of Illinois College of Pharmacy and completed a pharmacy practice residency at the University of Iowa Hospitals and Clinics. Her responsibilities include providing care for solid organ transplant recipients in the acute care setting and working in the outpatient transplant clinic. Her interests include medication education for transplant patients, drug dosing in patients with hepatic and renal insufficiency and expanded the role of pharmacists in the transplant clinic.

**Marie Pietruszka** (Senior Clinical Pharmacist, Clinical Instructor) received her BS and PharmD degrees from the University of Wisconsin Madison. Practice areas include inpatient adult general medicine, ambulatory clinic in the adult comprehensive HIV care program and consult services as a member the Surgical Nutrition Support team. Her interests include infectious disease/HIV, nephrology/dialysis, adult Cystic Fibrosis, nutrition support and pharmacokinetics/pharmcodynamics. She instructs third year PharmD students in dialysis/nephrology.

**Erin Robinson** (Clinical Instructor) is the managing pharmacist at the UW Anticoagulation Clinics. Erin earned her PharmD from the University of Iowa and completed a Pharmacy Practice Residency at the UW Hospital and Clinics. Her responsibilities include oversight and maintenance of proficiency testing,
quality controls and staff competencies at the anticoagulation clinic, as well as coordinating staff training and serving as main preceptor for resident rotations in the anticoagulation clinic. Her areas of interest include anticoagulation, teaching, and women’s health.

**Anne Rose** (Clinical Instructor) is Coordinator of the Anticoagulation Management Stewardship Program. She received her Doctor of Pharmacy degree from Butler University and completed a Pharmacy Practice Residency at the North Chicago Veterans Affairs Medical Center. In her current role, Anne is responsible for anticoagulation management in both the inpatient and ambulatory settings. Her current practice and research interests include maximizing safety, quality, and outcomes for patients and providers of anticoagulation management and advancement of the pharmacist's role in anticoagulation management. In addition, she continues to serve as a clinical pharmacist on the cardiology units.

**Dan Schiedermayer** (Clinical Pharmacist, Clinical Instructor) received his Pharm.D. degree from the University of Wisconsin-Madison and completed a pharmacy practice residency at Aurora Health Care in Milwaukee, Wisconsin. Responsibilities include patient care for general medicine patients, service on the Acute Care for the Elderly (ACE) consult service, and precepting pharmacy students and residents. His interests include geriatrics, liver and kidney disease, and patient education.

**Lucas Schulz** (Clinical Pharmacist, Clinical Instructor) received his Pharm.D. degree at the University of Wisconsin-Madison, and completed a PGY-1 residency at the University of Wisconsin Hospital and Clinics. Following the initial residency year, he completed a PGY-2 Critical Care specialty residency with Jeff Fish, PharmD at the University of Wisconsin Hospital and Clinics. He practices in all critical care areas including medical/surgical, cardiovascular, and neurosurgical intensive care units. He is also a lead pharmacist in the Antimicrobial Stewardship and infectious disease programs. His clinical practice research focuses on ID and critical care.

**Aaron Steffenhagen** (Senior Clinical Pharmacist, Clinical Instructor) received his Pharm.D. degree at the University of Wisconsin-Madison, and completed a pharmacy practice residency at the University of Pittsburgh Medical Center. He is a board-certified Pharmacotherapy Specialist and is the lead pharmacist in the Emergency department at UWHC. Additional practice interests related to emergency medicine include stroke, epilepsy, medication safety and anticoagulation.

**MaryAnn Steiner** (Senior Clinical Pharmacist) received her B.S. and Pharm.D. degree’s from the University of Wisconsin. She completed a pharmacy practice residency at Mayo Clinic in Rochester, Minnesota. She provides policy analysis and formulary support for the Unity Pharmacy Program. Additional responsibilities include pharmaceutical outcomes and policy related research in the Drug Policy Program. Her interests include patient education, student/resident teaching, preventive medicine and policy research.

**Jill Strayer** (Clinical Pharmacist) received her Pharm.D. degree’s from the University of Iowa in 2002. She completed a pharmacy practice residency at the University of Wisconsin Hospital and Clinics in 2003 and became Board Certified in Pharmacotherapy. Responsibilities include patient care for pediatric patients in the American Family Children's Hospital including intensive care and oncology, as well as providing care for general medicine patients. She has a special interest in infectious disease and HIV therapy and lectures students on pharmacotherapy at the UW School of Pharmacy, in addition to providing care for patients in the comprehensive HIV Care program.

**Claude Taylor** (Clinical Pharmacist, Clinical Instructor) received his BS pharmacy degree from the University of Wisconsin-Madison and his PharmD from the University of Texas at Austin.
He completed a specialty adult medicine residency at Brackenridge Hospital in Austin and a nephrology fellowship at UW-Madison. His current responsibilities include providing pharmacy services for surgery and medicine patients as well as occasional staffing in the central pharmacy. His interests include renal disease, infectious disease, pharmacokinetics and teaching.

**Lisa Vanevenhoven** (Clinical Pharmacist, Clinical Instructor) received her Pharm.D. from the University of Wisconsin-Madison. She currently works on the inpatient neurology team where she provides pharmacy services to neurology, psychiatry, surgery, and rehab patients. Her primary interest is psychiatry, where she a primary preceptor to both pharmacy students and residents.

**Katie Waala** (Clinical Pharmacist, Clinical Instructor) Received her Pharm.D. from the University of Wisconsin in 2008. She completed a pharmacy practice residency at the University of Washington Medicine in Seattle, Washington in 2009. Katie also obtained board certification in pharmacotherapy in 2009. She provides pharmacy services for cardiothoracic and cardiac medicine intensive and general care patients. Additional practice interests include critical care and infectious disease.

**Clinical Pharmacy Faculty**

**Robert Breslow** (Clinical Associate Professor) received his BS from the University of Wisconsin. Robert has over twenty years of clinical experience in hospital practice and is a Board Certified Pharmacotherapy Specialist, 1992. Past experience as a consultant in long-term care as a consultant for a PACE Model program for older adults. Mr. Breslow’s research interests include pharmaceutical care of older adults.

**Mary Hayney** (Assistant Professor of Pharmacy – CHS) received her B.S. and Pharm.D. from the University of Minnesota. She completed a pharmacy practice residency at the Mayo Clinic and Foundation and a fellowship with the Mayo Vaccine Research Group, Clinical Pharmacology Unit. Her clinical practice is with the lung transplant group. Research interests include vaccine responses in solid organ transplant patients.

**Paul Hutson** (Associate Professor) received a BS in Biochemistry from the University of California-Los Angeles, MS in Chemistry, and BS in Pharmacy from the University of Washington, and a Pharm.D. from the University of Tennessee. Dr. Hutson completed an oncology/pharmacokinetics fellowship at St. Jude Children’s Research Hospital in Memphis. He now practices pharmacy in the oncology/hematology division at UW Hospital and Clinics and is an Associate member of the UW Comprehensive Cancer Center. Professor Hutson’s present research is in the areas of palliative care, and separately in population pharmacokinetic modeling. Current active or pending palliative care protocols include the treatment or prevention of chemotherapy-induced palmar-plantar erythrodysesthesia and peripheral neuropathy.

**Jill Kolesar** (Associate Professor) is the Director of the Analytical Instrumentation Laboratory for Pharmacokinetics, Pharmacodynamics and Pharmacogenetics (3P) at the University of Wisconsin Comprehensive Cancer Center. She completed a specialty pharmacy residency in oncology/hematology and a two-year fellowship in molecular oncology pharmacotherapy at the University of Texas Health Science Center in San Antonio. Dr. Kolesar’s research includes the use of biomarkers and pharmacokinetics to predict response and monitor efficacy of drug and gene therapy, population genotyping for cancer susceptibility and the regulation of gene expression of the two electron reductases. She holds two patents for developing novel technologies for evaluating gene expression and point mutations. Dr. Kolesar is currently a member of the National Cancer Institute’s Adult Central IRB, chairing the adverse events subcommittee and is a member of the Board of Regents of the American College of Clinical Pharmacy. In addition, Dr. Kolesar chairs the Lung Cancer Biology Subcommittee for the Eastern Cooperative Oncology Group as well as serving on the core committees for the Thoracic and Developmental Therapeutics Committees of ECOG.
Karen Birkelbaw Kopacek (Clinical Assistant Professor) is a member of the Pharmacy Practice Division and lectures on coronary heart disease, acute coronary syndromes, cardiovascular and pulmonary physical assessment, and pharmaceutical care. She is the Director of the Pharmacotherapy Labs, coordinates the Pharmacotherapy Lab for second-year Doctor of Pharmacy students, and is a clinical pharmacist in the cardiac and cardiovascular surgery intensive care units. Kopacek earned her Bachelor of Science degree in Pharmacy from the University of Iowa College of Pharmacy in 1988 and has practiced as a clinical pharmacist in cardiac and cardiovascular intensive care units at several Wisconsin hospitals. Her areas of interest include cardiovascular medicine, asthma, and patient education.

Clinical Pharmacy Faculty

Warren Rose (Assistant Professor) earned his Pharm.D. from Butler University then completed a PGY-1 residency in pharmacy practice with Rush University Medical Center in Chicago, Illinois. Following residency training, he then completed a post-doctoral fellowship in infectious disease pharmacotherapy at the Anti-Infective Research Laboratory at Wayne State University. Dr. Rose’s research interests involve the impact of bacterial cell-to-cell communication in S.aureus on antimicrobial resistance, virulence and toxin production, and bacterial biofilms. His laboratory incorporates multiple in vitro modeling systems to evaluate these characteristics against both clinically available and investigation antimicrobials. These studies are used to evaluate optimal antibiotic activity, antibiotic penetration into simulated infections, and the development of antibiotic resistance. These systems can be used as tools for further study of optimal dosing regimens. In addition to the study of these strains in the laboratory, he is also involved in epidemiological studies of MRSA infections at the University of Wisconsin Hospital and Clinics.

Madison, Wisconsin

Madison is a thriving city of 250,000 situated in south central Wisconsin. It combines the friendly atmosphere of a university town with the appeal of a larger city, including sporting events, art festivals, farmers’ markets, and cultural activities. Madison is only a short distance from lakes, parks, state and national forests, and larger cities such as Chicago and Milwaukee. Publications such as USA Today, Money Magazine, Outside, and U.S. News and World Report have rated Madison as one of the finest cities in the country in which to live and work.

The University of Wisconsin-Madison, with 45,000 students, is one of the largest and most diverse universities in the country. The campus is situated on the shores of Lake Mendota, within walking distance of the State Capitol building. There are 26 libraries throughout the campus. The Wisconsin Badgers, of the Big Ten Conference, offer major-college football, basketball, volleyball, hockey, crew, and many other sports.

There are 13 beaches and over 150 parks throughout the city. Some of the more popular city attractions include the Henry Vilas Zoo, Olbrich Botanical Gardens, and the UW-Madison Arboretum, with 1200 acres of natural forests, prairies and orchards. There are four major lakes, with over 18,000 acres of lake surface for sailing, swimming, fishing, and water skiing. Many major streets have bike lanes to accommodate citizens and students who ride bicycles. On Saturdays in spring through fall, the Farmers’ Market takes place on the sidewalks surrounding the capitol. With hundreds of vendors, it is one of the largest such markets in the country.

There are several museums and playhouses throughout the Madison area, including the Chazen Art Museum, Madison Children's Museum, Madison Museum of Contemporary Art, and the crown jewel of the Madison
arts scene, the Overture Center for the Arts. The Memorial Union, on the UW-Madison campus, provides many opportunities to eat, relax, and enjoy the activities and views afforded by Lake Mendota. The Alliant Energy Center plays host to fairs, sporting events, and concerts year round. Monona Terrace Convention Center, a Frank Lloyd Wright design overlooking Lake Monona, is a 250,000 square foot meeting facility. The annual Art Fair on the Square draws over 100,000 visitors each year.

Madison is within driving distance of many attractions. The famous Wisconsin Dells recreation area is a short one hour drive north. To the northeast is Green Bay, home of the Green Bay Packers football team, and Door County, with its gorgeous state parks, shops, and bed-and-breakfast inns. One hour to the east on I-94 is Milwaukee, home of Miller Brewing Company and the Brewers baseball club and Bucks basketball. Chicago is only 2½ hours southeast on I-90, and Minneapolis-St. Paul is 4 hours west on I-94. More information about Madison can be found on the following websites:

- madison.com
- madisonmag.com
- visitmadison.com
- greatermadisonchamber.com
- wisc.edu
- insiders.com