

Clinical Sciences and Research Division, Department of Pharmacy Practice TTUHSC School of Pharmacy

2010

The Clinical Sciences and Research Division is home to most of the Department's tenured and tenure track faculty. These faculties share a common commitment to research as a primary career component.

Our mission is to conduct basic, clinical, translational, and health systems research to improve the drug use process and ultimately patient care.

We are interdisciplinary faculty investigators dedicated foremost to original research and scholarship. We embrace collaborators within TTUHSC and TTU, other state institutions (e.g. University of Texas Southwestern), and academically oriented health care systems (e.g. the Veterans Affairs Administration, Children's Medical Center Dallas). We value diversity of division faculty disciplines and thus include pharmacists, physicians, microbiologists, and pharmacokineticists,

Focus areas include adult and pediatric pharmacology, analytical method development, microbial endocrinology, pharmacy practice research and health care outcomes.

Faculty

Dr. Carlos Alvarez is currently a NIH Clinical Research Scholar at University of Texas Southwestern Medical Center. He is working with members of Parkland Hospital's Center for Knowledge Translation and Clinical Innovation to develop a pharmacoseverity scoring system that predicts poor outcomes in hospitalized patients.

Dr. Ron Hall was selected as a National Institutes of Health (NIH) Clinical Scholar in 2006. He received his Masters of Science in Clinical Sciences with distinction from the University of Texas Southwestern in 2009. He serves as the program director for the Dose Optimization and Outcomes Research (DOOR) program. The primary research focus of the DOOR program is evaluating pharmacokinetics and pharmacodynamics of pharmaceutical agents in obesity to provide optimal medication dosing for these patients.

Dr. Richard Leff established the Pediatric Pharmacology Research & Development Center, one of four Centers for Research Excellence within the School of Pharmacy in collaboration with University of Texas Southwestern Medical Center. Work focuses on providing pharmaceutical expertise to conduct preclinical and clinical (eg, pharmacokinetic, pharmacodynamic and drug metabolism) studies in infants and children. The Center's mass spectrometry laboratory located at Children's Medical Center is the core analytical laboratory for both the "North and Central Texas Clinical and Translational Research Initiative" and the Department of Pharmacy Practice.

Dr. Mark Lyte founded the emerging field of microbial endocrinology and is internationally recognized at this interface of microbiology and neurophysiology especially as it relates to stress-related infectious disease (a major book on the field is to be published by Springer in 2010). His research, which includes international collaborations, is currently focused on the role of neurochemical-based drugs in hospital-acquired infections and the role of the gut microflora in health and disease as governed by microbial endocrinology-based interactions.

He is cross appointed as a member of the School of Medicine Department of Internal Medicine and has a co-appointment on the TTU academic campus in Food and Animal Science.

Dr. Claudia Meek directs the analytical laboratory for the Pediatric Pharmacology Research & Development Center. Her work focuses on developing mass spectrometric techniques for analyses of drugs and metabolites contained in complex biologic matrices. Novel methods focus on analyses using microvolume (10 - 100 microliters) sample volumes with picogram/milliliter sensitivity.

Dr. Cynthia Raehl pursues health literacy in aging research in addition to serving as Division Head and Department Chair. Health services research, with her late husband Dr. Chester A. (CAB) Bond, focused on the impact of inpatient clinical pharmacists on major health outcomes. She is co-PI on a National Sciences Foundation grant: "ADVANCE Partnerships for Adaptation, Implementation and Dissemination: Partnership of Women in Engineering, Research and Science - PoWERS," that is under the direction of Dr. Karlene A. Hoo (PI), Dr. Caryl E. Heintz-Wyatt (co-PI), Dr. Charlotte Dunham (co-PI), Dr. Cynthia Raehl (Co-PI), Dr. Stephanie Leeper (co-PI). \$499,590 to Texas Tech University. 2006-2009. SBE-0618406. "Innovations in Competency Education: Strengthening the Pipeline", Minority Health Research and Education Program, Texas Higher Education Coordinating Board. David Fike, PI; Paul Lockman, Co-PI; Cynthia Raehl, Investigator; Kenneth "Mac" McCall, Investigator. Funded \$338,002.

Future Directions

Division faculty are creating and cultivating exciting relationships with TTUHSC School of Medicine and Nursing faculty, TTU academic faculty, University of Texas Southwestern Medical Center, Children's Hospital of Dallas and the Veterans Administration Medical Center Dallas. The Division is leading the Department into a new era of basic, clinical, translational, and health systems research programs in concert with a greater research emphasis for the entire Health Sciences Center. TTUHSC leadership support for procuring laboratory space and start-up packages exemplifies a receptive environment for new as well as established investigators. The Division is leading the SOP involvement in the NIH funded CTSA Award, the North Central Clinical and Translational Science Initiative, lead by Dr. Milton Packer of UT Southwestern. Dr. Leff is the division head for clinical pharmacology; one of 10 divisions within the CTSA multi-institutional structure.

Division Web description update 12-15-09