

PHARMACOGENOMICS

VIRTUAL SUMMIT SERIES

Summit 3: **Moderator**



Mary V. Relling, PharmD

Member and Endowed Chair, Department of Pharmaceutical Sciences, St. Jude Children's Research Hospital, Memphis, TN

Dr. Relling earned her undergraduate BS degree from the University of Arizona College of Pharmacy and her doctoral degree from the University of Utah College of Pharmacy. She completed post-doctoral fellowships with Dr. William Evans at St. Jude and with Dr. Urs Meyer at University of Basel. She joined St. Jude as a faculty member in 1988, and in 2003 was named chair of the Department of Pharmaceutical Sciences. She is also a professor at the University of Tennessee in the Colleges of Medicine and Pharmacy.

Her primary interests are in treatment and pharmacogenetics of childhood leukemia and clinical implementation of pharmacogenetic testing. Dr. Relling is part of NIH's Pharmacogenomics Research Network and co-founder of CPIC, the Clinical Pharmacogenetics Implementation Consortium. She has published over 400 original scientific manuscripts. She was elected to the Institute of Medicine in 2009.

Summit 3: **Panelists**



Philip Empey, PharmD, PhD

Dr. Empey is the Associate Director of the Institute for Precision Medicine at the University of Pittsburgh and UPMC and an Associate Professor in the School of Pharmacy. He directs the Pharmacogenomics Center of Excellence and leads the PreCISE-Rx and Test2Learn teams to implement pharmacogenomics clinical, research, and educational initiatives. As a clinician-scientist, Dr. Empey conducts NIH-funded clinical and translational research aimed at understanding the mechanisms of the variability in drug response to improve medication-related outcomes in critically ill patients. His research interests include large scale population preemptive testing, pharmacogenomics clinical implementation, collection of medication-related phenotype information, genotype-phenotype discovery, and innovative approaches to genomics education



Todd Skaar, PhD (Indiana University)

Todd Skaar did his graduate work in nutrition at the University of Wisconsin, lactation physiology at the Penn State University, and a postdoc in breast cancer drug resistance at the Lombardi Cancer Center at Georgetown University. Since joining the Division of Clinical Pharmacology at the Indiana University School of Medicine, his research has focused on the discovery and implementation of genomic predictors of drug response. More specifically, his studies are focused on identifying and functionally testing genetic variants in the drug metabolism genes that are associated with clinical drug efficacy and toxicity. They also include studies to identify miRNAs that contribute to the drug-induced and developmental changes in hepatic drug metabolism. He co-leads multiple pharmacogenomics implementation studies focused on identifying and overcoming the barriers to using pharmacogenomics to guide drug therapies. He is also a co-leader of the Cancer Prevention & Control Program of the Indiana University Simon Comprehensive Cancer Center and the Director of the Indiana Institute for Personalized Medicine.



Nita A. Limdi, PharmD, PhD, MSPH, FAHA

Nita Limdi, PharmD, PhD, MSPH is Professor of Neurology and Epidemiology, Director Program in Translational Pharmacogenomics and Associate Director for UAB's Hugh Kaul Personalized Medicine Institute.

Dr. Limdi started her career as a pharmacist after graduating from Samford University with a PharmD (1994). Her observations on variability of drug response fueled her interests in understanding genetic underpinnings of drug response. She continued her training obtaining her MSPH (2005) and PhD in Epidemiology (2007).

As a clinical pharmacist and chronic disease epidemiologist with 20 years of experience, she brings her breath of expertise in clinical pharmacy, chronic disease epidemiology, and pharmacogenomics to lead research and implementation of genomics in clinical practice. Her efforts to recruit and engage African Americans (AA) and medically underserved patients has been vital to her contributions to understanding racial differences in drug response, identifying race-specific variants, reporting on the differential impact of gene variants and comorbidities by race.

Through her work, Dr. Limdi has collaborated extensively with national/international consortia including: the Pharmacogenomics Research Network, the Pharmacogenomics Knowledge Base, the Clinical Pharmacogenetics Implementation Committee, the Implementation of Genomics In pracTicE, the Alabama Genomic health Initiative, the Personalized Medicine Coalition, the Standardizing Laboratory Practices in Pharmacogenomics, and the Electronic Medical Records and Genomics.

Her research portfolio encompasses observational studies and clinical trials with a focus on understanding the interplay of genes and environment on drug response and disease phenotypes.



David Gregornik, PharmD, BCOP

David Gregornik is the Pharmacogenomics Program Director at Children's Minnesota. Dr. Gregornik attended the University of Minnesota College of Pharmacy where he earned his Bachelor of Science in Pharmacy and his PharmD. He completed post-doctoral training at St. Jude Children's Research Hospital in Memphis, TN. Dr. Gregornik has held clinical and leadership roles in the St. Jude Pharmaceutical Department and Memorial-Sloan Kettering Cancer Center, in New York City where he served as Manager of Pediatric Clinical Pharmacy Programs. Dr. Gregornik joined Children's Minnesota in August 2016 where his team has established a Clinical Pharmacogenomics Specialty Clinic and inpatient consult service.

In addition to the clinical service, the Pharmacogenomics Program oversees the development and implementation of electronic clinical decision support for pharmacogenomics in the Children's EHR. Children's Minnesota started the first PGY2 Clinical Pharmacogenomics Pharmacy Residency in the state. The vision of the Pharmacogenomics Program at Children's Minnesota is to leverage the use of genetic testing as a patient safety tool to optimize medication selection and dosing, preventing adverse drug reactions while avoiding treatment failures in children and adolescents.



Victoria M. Pratt, PhD, FACMG

Dr. Pratt is a Medical and Clinical Molecular Geneticist board-certified by the American College of Medical Genetics. Prior to joining Indiana University, she was Chief Director, Molecular Genetics, for Quest Diagnostics Nichols Institute.

Dr. Pratt is the Past President of Association for Molecular Pathology. Dr. Pratt has also served as Chair of the Genetics, Clinical Practice, Nomination and the Program committees and is currently a member of the Economic Affairs committee for AMP. Dr. Pratt continues to serve on the Centers for Disease Control and Prevention (CDC) GeT-RM program for reference materials for Molecular Genetics, the National Academy of Medicine's Roundtable on Genomics and Precision Health, and the American Medical Association's (AMA) Molecular Pathology Current Procedural Terminology (CPT) Advisory committee.

Previously, Dr. Pratt served on the Centers for Medicare and Medicaid Services Clinical Diagnostic Laboratory Tests Advisory Panel.

Dr. Pratt has authored over 75 peer-reviewed manuscripts and book chapters. She is also an Associate Editor for the *Journal of Molecular Diagnostics*.

Dr. Pratt graduated with a PhD in Medical and Molecular Genetics from Indiana University School of Medicine, Indianapolis, IN in 1994. Her fellowship training was in PhD Medical and Clinical Molecular Genetics at Henry Ford Hospital, Detroit MI.



Gwen McMillin, PhD, DABCC (CC,TC)

Gwen McMillin received a PhD in pharmacology and toxicology as well as post-doctoral training in clinical chemistry from the University of Utah. After working in anticonvulsant drug development for several years, she joined ARUP Laboratories where she has directed development, validation, implementation, and interpretation of clinical testing in the areas of pharmacogenomics and clinical toxicology since 2003. She also serves as a Professor of Clinical Pathology at the University of Utah School of Medicine. Dr. McMillin has published more than 100 original research articles as well as dozens of review articles and book chapters in her areas of expertise. She also actively participates in professional organizations such as the College of American Pathologists (CAP), the American Association for Clinical Chemistry (AACC), and the Clinical Pharmacogenetics Implementation Consortium (CPIC).



Andrew Monte, MD, PhD

Dr. Monte, MD, PhD, is an Associate Professor of Emergency Medicine and Medical Toxicology at the University of Colorado and the Rocky Mountain Poison & Drug Safety Center. He is a clinical scientist that works and cares for patients in the emergency department and as a medical toxicology consultant. His research focuses on improving drug effectiveness and safety in acute care conditions through pharmacogenomics. His work is funded through the National Institute of General Medical Sciences and the Colorado Center for Personalized Medicine. He is the President-Elect of the Pharmacogenomic Research Network and the Co-Chair of the NHGRI Intersociety Committee for Provider Education in Genomics. He is an expert in pharmacogenetics of analgesics.