2025 ACCP Distinguished Investigator Award

J. Steven Leeder, PharmD, PhD

Executive Vice President & Chief Scientific Officer, Research, Children's Mercy Kansas City

Executive Director, Children's Mercy Research Inst

Dr. J. Steven Leeder is the Executive Vice President and Chief Scientific Officer at Children's Mercy Kansas City, and Executive Director of the Children's Mercy Research Inst. He also serves as Associate Chair-Research, Dept of Pediatrics at Children's Mercy. He holds the Marion Merrell Dow Endowed Chair in Pediatric Precision Therapeutic and holds academic appointments as Professor of Pediatrics and Pharmacology at the Univ of Missouri-Kansas City; Courtesy Professor, Dept of Pharmaceutical Chemistry, Univ of Kansas, Lawrence, KS and Clinical Professor of Pediatrics, Univ of Kansas Medical Center, Kansas City, KS.

Dr. Leeder's career has focused on improving the safety and efficacy of drugs in children, and major contributions generally have fallen into five main areas: *CYP2D6* pharmacogenetics, ontogeny of drug biotransformation *in vitro*, pediatric drug biotransformation and disposition *in vivo*, pediatric domain expertise for clinical pharmacogenetic guidance documents and providing mentorship for the career development of junior faculty and trainees. His longstanding interest in applying pharmacogenetic principles to individualize drug therapy in children, particularly CYP2D6, has benefited from a particularly productive partnership with Andrea Gaedigk, PhD over the past 30 years. Her expertise related to *CYP2D6* gene structure and genotyping strategies and his interest in *in vivo* phenotype assessment have resulted into several important contributions to the field. Perhaps the most significant has been development of the CYP2D6 "Activity Score", to provide a semiquantitative phenotype assignment from genotype data, which has been widely accepted. The continual application of new technologies and approaches to improve the accuracy of *CYP2D6* genotyping, including next generation sequencing, coupled with longitudinal study designs has allowed their group to determine CYP2D6 phenotype is concordant with genotype by two weeks of age in full term infants and genetic variation remains the primary source of inter-individual variability in CYP2D6 activity from infancy through adolescence and beyond. His interests have extended into many different pediatric subspecialties by serving as a mentor to pediatricians during fellowship training and early in their academic careers, clinical pharmacists with advanced training and PhD-trained trainees.

Dr. Leeder earned his BScPhm from the Univ of Toronto, Toronto, Ontario; his PharmD from the Univ of Minnesota, Minneapolis, MN and his PhD from the Univ of Toronto.