

报告时间：2013年12月14日（周六）上午8:45-10:15

报告地点：独墅湖校区炳麟图书馆报告厅



Steven S. Gross

Weill Medical College of Cornell University

Professor of Pharmacology

Director, Mass Spectrometry Facility

Director, Advanced Training in Pharmacology

Founding Scientist, ArgiNOx Therapeutics Inc

Title: Untargeted metabolite profiling: a powerful new tool in the armamentarium of biomedical researchers (8:45-9:30)

Abstract:

In human patients, we often know the immediate biochemical consequence of a given inborn error of metabolism and the primary molecular target of a given drug. However, the integration of biochemical pathways often leads to complex and unanticipated consequences of gene mutations and drug actions, owing to the unrecognized interconnectivity of biochemical pathways. Untargeted plasma metabolite profiling holds enormous potential to discover, at a comprehensive systems level, how gene defects and drugs can broadly perturb complex biochemical networks and thereby give rise to unpredicted actions. Using examples, this presentation will describe how untargeted plasma metabolite profiling can be used to screen for and expand our current understanding of rare inborn errors of metabolism in neonates, as well as discover unappreciated on-target and off-target molecular mechanisms of drug actions.



Dr. Richard H. Finnell

Professor in the Department of Nutritional Sciences and the Department of Chemistry at the University of Texas at Austin

the Director of Genomic Research at Dell Children's Medical Center

Adjunct Professor in the Shanghai Institute of Medical Genetics of Jiaotong University

Consultant to the School of Life Sciences, East China Normal University.

Title: From Man to Mouse and Back Again: Efforts to Develop Novel Interventions for Pediatric Neurological Disorders (9:30-10:15)

Abstract:

The consequences of abnormal folate transport with respect to neural tube defects are well known. However, there are other serious pediatric diseases that arise secondary to genetic mutations in folate transport genes and their downstream targets. We will explore new findings on the Cerebral Folate Deficiency Syndrome and consider how manipulation of one carbon metabolism might provide therapeutic advances in the treatment of this devastating disease.