
Rose F. Kennedy Intellectual and Developmental Disabilities Research Center (IDDRC) Seminar Series

Director: Steven U. Walkley, DVM., Ph.D.

Associate Director: John J. Foxe, Ph.D.

“A genetic suppressor screen in the mouse identifies new therapeutic targets for Rett Syndrome”

Monica Justice

Senior Scientist and Head, Program in Genetics and Genome Biology at The Hospital for Sick Children in Toronto, Ontario

**LeFrak Auditorium, Price Center
Thursday, February 27th, 2014 1:30-3:00 PM**



Bio: *Monica J Justice, PhD, is Senior Scientist and Head, Program in Genetics and Genome Biology at The Hospital for Sick Children in Toronto, Ontario. She recently moved to this position from Baylor College of Medicine, Houston, Texas, where she was a Professor in the Department of Molecular and Human Genetics and Director of the Mouse Embryonic Stem Cell Core and the BaSH Consortium for the Production and Broad-based Phenotyping of Knockout Mice. Dr. Justice received her Ph.D. from Kansas State University in mouse developmental genetics, and was a postdoctoral fellow in the Mammalian Genetics Laboratory at the National Cancer Institute. She is a Senior Editor of Disease Models and Mechanisms and Current Protocols in Mouse Biology. She is the recipient of several awards, including an American Cancer Society Junior Faculty Award, the Burroughs Wellcome Innovation Award in Functional Genomics, and the Michael E. DeBaakey Excellence in Research Award.*

Abstract: *Dr. Justice is a pioneer in the field of mouse mutagenesis. Her research exploits that genes and whole chromosome regions are conserved between the mouse and human. Overall, her research aims to merge mouse modeling with clinical genetics to understand the basis for human diseases, and to use mouse models to ameliorate disease states. Her internationally recognized program has produced hundreds of new mouse models of human disease, which have allowed for discoveries of gene functions in diverse areas such as cancer, reproduction, neurobiology, obesity, and blood, heart, and bone development. Her current work focuses on a genetic suppressor screen in a mouse model for Rett Syndrome (RTT) to identify pharmacologically targetable pathways for disease suppression. These studies show that cholesterol/lipid homeostasis is involved in the brain and systemic pathophysiology of RTT. Current efforts focus on continuing a Rett Syndrome Research Trust-funded screen to identify all targetable pathways involved in the pathophysiology of RTT.*