

The Southern California Drug Metabolism Discussion Group

Presents:



Rob Knight, Ph.D.

Founding Director, Center for Microbiome Innovation, Jacobs School of Engineering with the School of Medicine Professor, Department of Pediatrics Professor, Department of Computer Science University of California San Diego

"Human Microbiome and Metabolome Dynamics"

Advances in technology allow us to understand the human microbiota not as a static entity but as a complex, changing ecosystem that records substantial data about our lifestyles, our environmental exposures, and the people we live with. Here I discuss changes in the human microbiota associated with early life events such as delivery mode and antibiotics, the subsequent development of the microbiome throughout life, and even the development of the microbiome after death and its potential utility for forensics. Of particular value for toxicological studies is the ability to transfer the microbiome to germ-free mice, allowing individualized tests of function and subsequent therapies to be tested in personalized rodent models. Relating human to rodent microbiome timescales, especially for dietary studies, and relating multi-omics data in a timeseries context, remain outstanding challenges. Rapid progress is being made in these areas, and will allow far more powerful studies of the effects of drugs in mammalian hosts and our ability to stratify responders from non-responders for a wide range of therapies.

Tuesday, May 30, 2017

Registration & Appetizers Begin: 5:00 pm Dinner: 6:00 pm Presentation/Speaker: 7:00 pm

Location: National University 11355 N. Torrey Pines Road North Building La Jolla, CA 92037

\$20/person (Dinner & Beverages will be served)

The SCDMDG is a nonprofit established in 2003 as a forum for Southern California scientists working in drug metabolism in both academic and industrial settings to meet and discuss issues and share information for the public good.

	Seating is Limited— Please Register Early to Guarantee Your Attendance! To Register for SCDMDG – May 30, 2017: <u>Register Online</u> or at the door
	\$20/person in Advance or at the Door. Please make CHECKS payable to SCDMDG.
Name(s)	
Company	
Phone	E-mail
# Attending	Amount Enclosed \$

For More Information Text Call: (858) 458-9305 E-mail: SCDMDG@hbri.org Website: www.scdmdg.org Photo by David Ahntholz