EXPLORING NEW TECHNOLOGIES IN BIOMEDICAL RESEARCH

Speaker Biographies

Ani B. Satz, JD, PhD.
Professor Satz, Professor of Law, leads the Health Law, Policy & Ethics Project at Emory University School of Law. She is also a professor of health, policy & management at the Rollins School of Public Health, a senior faculty fellow at the Center for Ethics, and an affiliated professor at the Goizueta Business School. As a regulatory health lawyer and philosopher, a central theme in her work is the legal response to vulnerability and governmental obligations to promote well-being for both human and non-human animals. Professor Satz’s recent scholarship examines the role of regulation in shaping health care outcomes, guarding the medical privacy of injured workers, and protecting animals used in exhibition, experimentation and commerce. Her work has appeared in books, peer-reviewed journals, and law reviews. She holds a JD from the University of Michigan School of Law and a PhD in philosophy from Monash University Melbourne, Australia where she also served as a Fulbright Scholar.

Catherine Willett PhD.
As Director of Regulatory Toxicology, Risk Assessment and Alternatives at Humane Society International and the Humane Society of the United States, Dr. Willett coordinates the Human Toxicology Project Consortium, a multi-stakeholder group focusing on pathway-based toxicology. She represents the animal protection community at the Organisation of Economic Co-operation and Development (OECD) and is an active member of the OECD Adverse Outcome Pathway (AOP) training group and the Society for the Advancement of AOPs. Dr. Willett focuses on the science, policy and regulatory aspects of developing practical solutions for human and environmental chemical safety assessments using biological pathway-based approaches to assess chemical safety. She has numerous publications on non-animal approaches and advises international companies and governments on their regulatory use. Dr. Willett serves on the U.S. National Toxicology Program Scientific Advisory Committee on Alternative Toxicological Methods, the Scientific Advisory Board of the Institute of In Vitro Sciences and Shell’s Animal Testing Review Panel.

Kambez H. Benam, D.Phil.
Kambez Benam is Assistant Professor at the University of Colorado Denver, School of Medicine with a secondary appointment at the Department of Bioengineering. He is the founder of Lung Microengineering Lab, which brings together researchers from the engineering, biology, biopharmaceutical industry, clinical and business communities to develop new technologies that recreate complex human organ pathophysiology in vitro, and apply them to discover novel therapeutics and personalized biomarkers. His research focuses on applying disruptive technologies that enable his team to elucidate cellular and molecular mechanisms that govern tissue pathology or offer protection during lung injury and host-environment interaction. Dr. Benam received his D.Phil. in Immunology from the University of Oxford. He trained as a Technology Development Fellow at the Wyss Institute for Biologically Inspired Engineering at Harvard University. Dr. Benam has been the recipient of multiple awards including Baxter and Lush Young Investigator Awards and his work has received extensive press coverage (Fox News, BBC, STAT News, Harvard Gazette, Washington Times, etc.). He publishes in leading scientific journals (Nature Methods, Cell Systems, JCI Insight, etc.) and is a co-inventor on seven pending patent applications and multiple reports of invention.

Qiang Zhang, MD, PhD.
Dr. Qiang Zhang is an Associate Professor at the Department of Environmental Health, Rollins School of Public Health, Emory University. His research interest is focused on using computer simulations of biological systems to understand and predict the human health effects of environmental perturbations. In close collaboration with experimental biologists and toxicologists, he develops mechanically-based computational systems biology models of toxicity pathways to understand the low-dose effects of environmental exposures. Author of over sixty peer-reviewed journal publications and book chapters, Dr. Zhang is the recipient of multiple awards, including SOT Biological Modeling Specialty Section Best Paper Awards and the Outstanding New Investigator Award by International Dose-Response Society. Dr. Zhang holds an M.D. degree from Harbin Medical University and Ph.D. degree in Physiology from the University of Connecticut. He received his computational biology/toxicology training as a postdoctoral fellow at CIIT Centers for Health Research. Dr. Zhang was the Director of the Center for Dose Response Modeling at the Hamner Institutes for Health Sciences (formerly CIIT).
Michael Salmon, PhD.
Dr. Salmon is the Vice President of Platform Translation and Development at Emulate, Inc. Based on their Organs-on-Chips technology, the company is developing a new living system that combines cell biology within micro-engineered environments to enable researchers to more accurately understand how diseases, medicines, chemicals and foods affect human health. His career spans both academia and the pharmaceutical industry, with more than 17 years’ experience in pharma, including positions at GlaxoSmithKline, Gilead Sciences, and Merck. He has held leadership positions and managed drug discovery teams in numerous roles spanning a variety of aspects across the drug discovery process, including developing multiple clinical candidate molecules. He was the discovery lead for umeclidinium bromide, a component in the inhaled combination product Anoro Ellipta. Dr. Salmon earned his Ph.D. in pharmacology at the National Heart and Lung Institute, Imperial College, London. He has co-authored more than 50 peer-reviewed publications and book chapters.

André Kleensang, PhD.
Dr. Kleensang is a Research Associate at the Johns Hopkins Center for Alternatives to Animal Testing (CAAT) and a faculty member of the Department of Environmental Health Sciences, Johns Hopkins Bloomberg School of Public Health. He focuses on combining data-rich omics approaches and developing, implementing and validating novel tools to identify toxicity pathways. He applies his background in Evidence-based Medicine to support the activities of the Evidence-based Toxicology program. He received his degree in biochemistry in 2001 from the University of Hamburg (Germany). In 2003, he led biometrical and bioinformatics support for several genome wide genetic epidemiological studies at the Institute of Medical Biometry and Statistics, Medical University of Luebeck, Germany. In 2007 he moved to the European Centre for the Validation of Alternative Methods (ECVAM) at the European Commission Joint Research Centre (JRC) where he served as a biometrics and bioinformatics specialist developing and validating in vitro methods. He then applied these approaches at the Systems Toxicology Unit, ECVAM. In 2010, he was appointed as a member of the JRC Institute for Health and Consumer Protection Scientific Committee.

Patricia J. Zettler, JD.
Professor Zettler, Associate Professor of Law, Georgia State University College of Law has expertise in the regulation of medical products, medicine, and biomedical research, with an emphasis on the U.S. Food and Drug Administration (FDA). She is also a faculty member of the Center for Law, Health & Society. She has published in various legal and medical journals, such as the Indiana Law Journal, Ohio State Law Journal, San Diego Law Review, Yale Journal of Health Policy Law and Ethics, Journal of Law and the Biosciences, JAMA Internal Medicine, American Journal of Bioethics Neuroscience, and Academic Medicine. She also advises various groups and organizations on FDA law and policy and serves on the editorial advisory board for the Food and Drug Law Journal since 2015. She has served as an associate chief counsel in the FDA’s Office of Chief Counsel advising the FDA and the Department of Health and Human Services on various issues including drug safety, human subjects protection, expanded access to investigational drugs, over-the-counter drugs, dietary supplements, prescription drug advertising and promotion, incentives for developing antibiotics and advisory committees. She graduated with distinction from Stanford Law School in 2009.