

SPEAKER LIST

Matt Vander Heiden, M.D., Ph.D.

Director, Koch Institute for Integrative Cancer Research at MIT

Matthew Vander Heiden is the Director of the Koch Institute for Integrative Cancer Research and a Professor in the Department of Biology at the Massachusetts Institute of Technology. He is also an Institute Member of the Broad Institute of Harvard and MIT, and an Instructor of Medicine at the Dana-Farber Cancer Institute and Harvard Medical School. Dr. Vander Heiden received his MD and PhD degree from the University of Chicago. He also completed clinical training in Internal Medicine and Medical Oncology at the Brigham and Women's Hospital / Dana-Farber Cancer Institute prior to completing a post-doctoral fellowship at Harvard Medical School. His laboratory studies how metabolism is regulated to meet the needs of cells in different physiological situations with a focus on understanding the role of metabolism in cancer.

Christian Metallo, Ph.D.

Professor, The Salk Institute

Christian Metallo is a professor at the Salk Institute for Biological Studies and an adjunct professor of Bioengineering at UC San Diego. His lab studies how diet, genetics, and other factors alter metabolism to drive cancer, diabetes, and neuropathy. They use stable isotope tracers and mass spectroscopy to quantify metabolic fluxes in cells, animal models, and patients. He received his BS from the University of Pennsylvania and his MS and PhD from the University of Wisconsin-Madison in chemical engineering. Metallo was an ACS postdoctoral fellow at MIT before starting his lab at UC San Diego in 2011.

Jon Coloff, Ph.D.

Assistant Professor of Physiology & Biophysics, University of Illinois at Chicago

Jon completed his PhD in Jeff Rathmell's lab at Duke University and his postdoctoral training in Joan Brugge's lab at Harvard Medical School. Jon recently started his own lab at the University of Illinois College of Medicine in Chicago, where his group is studying metabolic phenotypes in breast cancer. In particular, members of the Coloff Lab have been seeking to integrate genomic, metabolic, and nutrient availability studies to identify metabolic vulnerabilities in specific subtypes of breast tumors. This has led to current work characterizing dietary serine and glycine starvation as a therapeutic approach for luminal breast cancer.

Heather Christofk, Ph.D.

Professor of Biological Chemistry, UCLA David Geffen School of Medicine

Dr. Heather Christofk is Associate Director of Basic & Translational Research at the UCLA Jonsson Comprehensive Cancer Center and a Professor of Biological Chemistry at the UCLA David Geffen School of Medicine. She earned her B.S. at UCLA and Ph.D. at Harvard. Her research focuses on how metabolism impacts cancer, virus infection, and differentiation, with the goal of using this knowledge to develop novel treatment strategies. She is a Searle Scholar and recipient of the Damon Runyon-Rachleff Innovation Award and the NIH Director's New Innovator Award. She serves on the Editorial/Advisory Boards of several journals including *Cell*, *Cell Metabolism*, and *Cancer Discovery*.

Jason Locasale, Ph.D.

Associate Professor of Pharmacology and Cancer Biology, Duke University School of Medicine

Dr. Locasale has pioneered the use of metabolomics approaches to study cancer biology and metabolism. He has made seminal contributions to our understanding of metabolism and nutrition including the role of serine

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synthesis in cancers, defining the quantitative, mechanistic principles of the Warburg Effect and altered glucose metabolism in cancer, the role of metabolism in mediating chromatin status and epigenetics, and the emerging

field of dietary amino acid metabolism and cancer. His research combines quantitative approaches in metabolomics and mathematical modeling with biochemistry, cell biology and genetics. His current research interests are in three areas: 1) quantitative biology of metabolism, 2) the role of diet and metabolic therapeutics in health and cancer, and 3) the mechanistic basis between the interaction of metabolism and epigenetics. Each of these synergistic areas utilizes the metabolomics technologies and computational approaches that he develops, applies, and disseminates. Dr. Locasale is a recipient of the NIH Pathway to Independence Award, the Benjamin Trump Award for Excellence in Cancer Research, and the American Cancer Society Research Scholar Award. As an internationally recognized thought leader in metabolism, Dr. Locasale currently serves on the editorial board of PLoS Biology and has served numerous advisory roles for industry, philanthropic organization, and government including the National Institutes of Health office of the Director, and the National Cancer Institute. His laboratory is funded primarily by NIH. He has authored over 185 publications, numerous textbooks chapters and patents, and was named in 2019 and 2020 as one of the world's most highly cited researchers of the past ten years.

Kathryn Wellen, Ph.D.

Associate Professor, Department of Cancer Biology, University of Pennsylvania Perelman School of Medicine

Kathryn Wellen received her PhD from Harvard University, studying the role of inflammation in metabolic diseases. She performed her postdoctoral work, focusing on metabolic signaling mechanisms at the University of Pennsylvania. In 2011, Dr. Wellen joined the Department of Cancer Biology at the University of Pennsylvania Perelman School of Medicine. She was promoted to Associate Professor with tenure in 2017. Her honors include selection as a Forbeck Scholar and a Pew Scholar in the Biomedical Sciences. Her lab is broadly interested in links between cellular metabolism, signaling, and gene regulation in metabolic diseases and cancer.

Stacey Finley, Ph.D.

Associate Professor of Biomedical Engineering, University of Southern California

Dr. Stacey Finley is the Gordon S. Marshall Early Career Chair and Associate Professor of Biomedical Engineering at the University of Southern California. Dr. Finley is the Director of the Center for Computational Modeling of Cancer at USC. She has established an innovative research program in systems biology that uses multiscale computational models to answer unresolved questions about the way cells behave and identify new ways to control cell behavior. Dr. Finley applies systems biology to study tumor angiogenesis, metabolism, and immunotherapy. Her research is supported by grants from NSF, NIH, and the American Cancer Society.

Marcia Haigis, Ph.D.

Professor, Department of Cell Biology, Harvard Medical School

Marcia C. Haigis is a professor in the Department of Cell Biology at Harvard Medical School. Dr. Haigis is an active member of the Paul F. Glenn Center for the Biology of Aging, a member of the Ludwig Center at Harvard Medical School, and was recently selected for the National Academy of Medicine Emerging Leaders in Health and Medicine Program. Her research has identified new mechanisms by which mitochondria respond to cellular stress and contribute to cancer. Her work has mapped fat metabolism and ammonia recycling pathways in cancer, and also elucidated how high fat diet-induced obesity affects anti-tumor immunity.

Vishwa Deep Dixit, D.V.M., Ph.D.

Professor of Comparative Medicine and of Immunobiology, Yale School of Medicine

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Son of teachers, Deep, grew up in Hisar (Northwest India) and pursuit of biomedical research took him to Mariensee (Germany), Atlanta, Baltimore, Baton Rouge and New Haven. Dixit lab studies Immunometabolism. His team help establish NLRP3 inflammasome in causing 'inflammaging' and immunosenescence that leads to

age-related chronic diseases including metabolic dysfunction in the aged. The long-term goal of his lab is to harness immunometabolic checkpoints to enhance healthspan. He currently holds Waldemar Von Zedtwitz endowed chair and is a Professor in the Departments of Comparative Medicine and Immunobiology at the Yale School of Medicine.

Omer Yilmaz, M.D., Ph.D.

Associate Professor of Biology, Koch Institute for Integrative Cancer Research at MIT

Omer Yilmaz is the Eisen and Chang Career Development Associate Professor of Biology at the Koch Institute/MIT and a gastrointestinal pathologist at the Massachusetts General Hospital/Harvard Medical School. He is a graduate of the University of Michigan Medical School, where he performed his thesis work with Sean Morrison. He has also spent three years as a Postdoctoral Fellow in David M. Sabatini's lab at the Whitehead Institute. In 2014 he established his lab, which focuses on understanding how intestinal stem cells and their microenvironment adapt to diverse diets in the context of tissue regeneration, aging, and cancer initiation/progression.

Marcus Da Silva Goncalves, M.D., Ph.D.

Assistant Professor of Biochemistry and Medicine, Weill Cornell Medical College

Dr. Marcus Da Silva Goncalves is a physician-scientist studying the effects of dietary factors and endocrine hormones on the development and progression of cancer and obesity, two of the leading causes of morbidity and mortality worldwide. He holds a MS in biomedical engineering, a PhD in cell biology and physiology, and is a practicing endocrinologist with expertise in metabolic diseases like hyperlipidemia, fatty liver disease, and diabetes. A portion of his clinical practice is further sub-specialized to the care of patients with metabolic dysfunction due to paraneoplastic syndromes or cancer-related treatment.

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