ELLISON INSTITUTE INSIGHTS FORUM
Hindsight * Foresight *** Insights**

May 19, 2022, 10:00 am – 12:00 pm PDT / 1:00 – 3:00 pm EDT

Precision Oncology: Separating Hope from Hype
(The Good the Bad the Unknown - and the Future)

FORUM SPEAKERS

Carolyn Compton, MD, PhD, FACP
Professor of Life Sciences
Arizona State University
Professor of Laboratory Medicine and Pathology
Mayo Clinic

Dr. Carolyn Compton is an academic pathologist specializing in gastrointestinal disease and is board certified in both anatomic and clinical pathology. She is a professor of Life Sciences at Arizona State University and a professor of laboratory medicine and pathology at the Mayo Clinic. She is also an adjunct professor of pathology at both the University of Arizona and Johns Hopkins University. She is the Chief Medical Officer of the National Biomarkers Development Alliance, a member of the Biodesign Institute at ASU, and the Chief Medical Officer of the Complex Adaptive Systems Institute. She is a former professor of pathology at Harvard Medical School, chief of Gastrointestinal Pathology at Massachusetts General Hospital and pathologist-in-chief of the Boston Shriners Children's Hospital. More recently she has served as the CEO and president of the Critical Path Institute (2012), the director of Biorepositories and Biospecimen Research and the Innovative Molecular Analysis Technologies program at the National Cancer Institute (2005-2011), and the Strathcona Professor and chair of the Department of Pathology at McGill University and pathologist-in-chief of the McGill University Health Center (2000-2005). She is a past chair of the Cancer Committee of the College of American Pathologists and the immediate past chair of the American Joint Committee on Cancer (AJCC). Currently, she is the chair of the Precision Medicine Core of the AJCC and chair of the Pre-analytics for Precision Medicine Project Team at the College of American Pathologists. She has authored more than 500 scientific manuscripts, review articles, books and chapters. Dr. Compton received her MD and PhD from Harvard Medical School.

Amy Heimberger, MD, FAANS
Jean Malnati Miller Professor of Brain Tumor Research
Director, Malnati Brain Tumor Institute
Professor of Neurological Surgery
Feinberg School of Medicine
Northwestern University

Amy B Heimberger, MD, FAANS, is the Jean Malnati Miller Professor of Neurological Surgery, Vice-Chair for Research in the Department of

Neurological Surgery at Northwestern University, Scientific Director of The Malnati Brain Tumor Institute, and the Interim Associate Director of Translational Research of the Robert H. Lurie Comprehensive Cancer Center. Her research program focuses on immune therapeutic strategies for patients with Central Nervous System (CNS) malignancies and she studies tumor-mediated mechanisms of immune suppression. She has been intricately involved in a wide variety of bench-to-bedside immune therapeutics, including those that were developed in her laboratory and arising from her own patents. She has expertise in the IND process and has been the PI of multiple clinical trials including the advocation for window-of-opportunity designs to evaluate the CNS tumor microenvironment.

Dr. Heimberger has been awarded the United States Presidential Early Career Award for Scientists and Engineers and she holds multiple National Institute of Health and foundation grants. She has served on a wide variety of NIH study sections and was the Chair of the Clinical Neuroimmunology and Brain Tumor Study Section. Dr. Heimberger's research interests are complemented by her surgical specialization in awake craniotomies and mapping. She has been named by the US News and World Report as a Top Doc and is a member of the prestigious American Society of Clinical Investigators. Dr. Heimberger was appointed by President Biden to serve on the National Cancer Advisory Board in 2021. Dr. Heimberger received her MD degree from Washington University and completed her residency in neurological surgery at Duke University.

Christine A. Iacobuzio-Donahue, MD, PhD
Pathologist
David M. Rubenstein Center Chair for Pancreatic Cancer Research
Director, Center for Pancreatic Cancer Research
Memorial Sloan Kettering Cancer Center

Christine Iacobuzio-Donahue is an Attending Physician in Pathology, Associate Director of Translational Research for the David M. Rubenstein Pancreatic Cancer Research Center, and Director of the Rapid Autopsy Program at Memorial Sloan Kettering Cancer Center in NYC. She is internationally known for her work on the genetics of pancreatic cancer including the clonal evolution and timing of pancreatic cancer from its inception through metastasis to distant sites. The majority of her time is devoted to leading an NIH funded laboratory focused upon the genetics and distinct evolutionary dynamics of clonal evolution in a spectrum of solid tumors using methods such as next generation sequencing, transgenic mouse models and experimental evolution. She is also the Director of the Rapid Medical Donation Program that empowers patients at the end of their life to contribute to ongoing the state-of-the-art clinical research at Memorial Sloan Kettering Cancer Center and Founder and Associate Director of the MSK Last Wish Program. Dr. Iacobuzio-Donahue received her MD and PhD from Boston School of medicine and completed her residency at Johns Hopkins University.

John Quackenbush, PhD
Henry Pickering Walcott Professor and Chair of Computational Biology and Bioinformatics
Chair, Department of Biostatistics
Harvard T.H. Chan School of Public Health
Professor
Dana-Farber Cancer Institute
Harvard University

John Quackenbush is Professor of Computational Biology and Bioinformatics and Chair of the Department of Biostatistics at the Harvard TH Chan School of Public Health and Professor in the Channing Division of Network Medicine at Brigham and Women's Hospital and in the Department of Data Science at the Dana-Farber Cancer Institute. John's PhD was in Theoretical Physics, but in 1992 he received a fellowship to work on the Human Genome Project. This led him through the Salk Institute, Stanford University, and The Institute for Genomic Research (TIGR), before moving to Harvard in 2005. John's research uses massive data to probe how many small effects combine to influence our health and risk of disease. He has published more than 320 scientific papers that have collectively been cited over 85,000 times and among his honors is recognition in 2013 as a White House Open Science Champion of Change. In 2012, he founded Genospace, a precision medicine software company providing data platforms to hospitals, diagnostic testing labs, and other groups. In 2017, Genospace was purchased by the Hospital Corporation of America. He serves on numerous advisory boards, including those of Merck KGaA, Caris Life Sciences, and RenalytixAI. Dr. Quackenbush received his undergraduate degree from Caltech and PhD from UCLA.

MODERATORS

David Agus, MD
Professor of Medicine and Engineering at USC, and the CEO of the Lawrence J. Ellison Institute for Transformative Medicine

Dr. Agus is one of the world's leading physicians, a cofounder of several pioneering personalized medicine companies, and specializes in treating patients with advanced cancer. Over the past twenty-five years he's received acclaim for his innovations in medicine and contributions to new technologies and therapeutics that change how all of us maintain optimal health and treat cancer. His clinical responsibilities include the development of clinical trials for new drugs and treatments for cancer supported by the National Cancer Institute and other private foundations (he has no financial ties to drug companies). He serves in leadership roles at the World Economic Forum, among other prestigious organizations. He is a NY Times and International Best-Selling Author, a CBS News contributor, and a 2017 recipient of the Ellis Island Medal of Honor. Dr. Agus received his MD from the University of Pennsylvania Perelman School of Medicine and completed his residency at Johns Hopkins University.

Anna Barker, PhD, FAACR
Chief Strategy Officer of the Lawrence J. Ellison Institute for Transformative Medicine
Distinguished Visiting Fellow, Complex Adaptive Systems Arizona State University

Dr. Barker develops information-based strategies through internal research and engagement of networks of leading experts in medicine, science, and engineering to solve complex problems in cancer and other diseases. Previously, she served as the principal deputy director of the National Cancer Institute (NCI) where she led the development of Foundational platforms (Clinical Proteomics and National Cancer Nanotechnology Centers) and national programs (e.g., TCGA, Physical-Sciences Oncology Centers) to support the emerging concept of precision medicine. Hallmarks of these strategic innovative programs were networks of global institutions, team science and publicly available data. Post NCI, Dr. Barker served as Director of Transformative Healthcare Networks, co-director of Complex Adaptive Systems - Biomedicine (CAS) and professor of practice, School of Life Sciences at Arizona State University (ASU), where she maintains a courtesy academic appointment. At ASU, she employed CAS approaches through "knowledge networks" to enable progress in areas ranging from clinical trial designs to biomarker discovery and applying concepts from the physical sciences to fundamentally understand and control complex diseases such as cancer. Dr. Barker spent several years at Battelle Memorial Institute, a nonprofit transdisciplinary research organization, where she progressed from a research scientist to serve in several senior executive roles. She has received numerous awards for her contributions to cancer research, cancer patients and patient advocates, professional organizations, and the ongoing national effort to prevent and cure cancer. She is also a member of the National Advisory Board for the National Cancer Institute. Dr. Barker received her MA and PhD from the Ohio State University.