AACR PATIENT ADVOCATE FORUM

ACTIVATING ARTIFICIAL INTELLIGENCE (AI) IN CANCER SCIENCE AND MEDICINE

Speakers

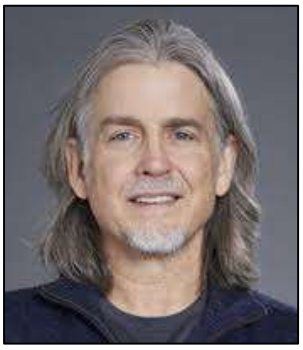
-in order of appearance

ASAL SAYAS

Senior Advisor for Cancer Infectious Disease
White House Office of Science and Technology Policy
Washington, DC

Asal Sayas is a Senior Advisor on the Health Outcomes Team in the White House Office of Science and Technology Policy and a Senior Advisor on President Biden's Cancer Moonshot where she works on advancing two clear goals that the President and First Lady set: To prevent more than 4 million cancer deaths by 2047 and to improve the experience of people who are impacted by cancer.

Asal began her career in policy working as a congressional aide in both the U.S. House of Representatives and the U.S. Senate. After leaving Capitol Hill, Asal joined amfAR, The Foundation for AIDS Research to work on domestic and global HIV policy. Asal believes that good policy is achieved when we allow people at the center of the experience lead.



JOHN QUACKENBUSH, PHD

Henry Pickering Walcott Professor of Computational Biology and Bioinformatics
Chair, Department of Biostatistics
Harvard T.H. Chan School of Public Health
Boston, MA

John Quackenbush is Professor of Computational Biology and Bioinformatics and Chair of the Department of Biostatistics at the Harvard T.H. Chan School of Public Health, Professor in the Channing Division of Network Medicine, and Professor 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, The Institute for Genomic Research (TIGR), and to Harvard in 2005. John uses massive data to probe how many small effects combine to influence human health and disease. He has more than 300 scientific papers and over 73,000 citations. Among his honors is recognition in 2013 as a White House Open Science Champion of Change.

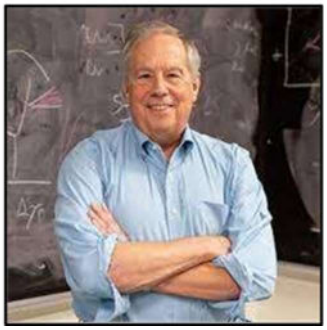
DAVID SPETZLER, MS, PHD, MBA

President, Caris Life Sciences
Phoenix, AZ

Dr. Spetzler currently leads Caris Life Sciences' Clinical Operations, Research and Development, Information Technology, Bioinformatics and Biopharma Services. As an innovator in molecular science and precision medicine, Dr. Spetzler has a relentless focus on improving patient care. He has led the development of each of the company's clinical offerings, including launches of clinical Whole Transcriptome Sequencing in 2019 and Whole Exome Sequencing in 2020. More recently he led the launch of Caris' first AI-based clinical products, Caris GPSai™ and FOLFIRSTai™. He also led the recent development and launch of Caris Assure™, a new whole exome and whole transcriptome liquid biopsy assay that sequences DNA & RNA from both plasma and buffy coat to provide sensitive testing to patients without requiring a tissue specimen.

Dr. Spetzler oversaw the development of the company's exclusive and unique technology, ADAPT, which is able to measure thousands of protein aberrations and is being used to develop early cancer detection assays, discover novel drug targets and characterize protein differences in each patient's tumor. He also leads the ongoing development of the company's proprietary AI platform (DEAN) to create and validate dozens of machine learning signatures, called Next Generation Profiling™ (NGP), thus providing the most in-depth and exclusive analysis and interpretation using the most comprehensive suite of clinical offerings available to cancer patients today.

At Arizona State University Dr. Spetzler earned an MS from the School of Mathematical and Statistical Science in Computational Bioscience, a PhD in Molecular & Cellular Biology and an MBA. Dr. Spetzler is an adjunct faculty member of the molecular cellular biology program at Arizona State University, and a scientific and commercial reviewer for SBIR/STTR grants for NSF.



ROBERT GATENBY, MD

Co-Director, Center for Excellence for Evolutionary Therapy
Chair, Department of Radiology
H. Lee Moffitt Cancer Center
Tampa, FL

Robert A. Gatenby is Chair of the Department of Radiology at the H. Lee Moffitt Cancer Center and Co-Director of the Cancer Biology and Evolution Program. He spearheaded the formation of a new program at Moffitt titled Integrative Mathematical Oncology (IMO) which brings the knowledge of applied mathematicians to collaborate with tumor biologists and clinical oncologists. The goal is to use the mathematics developed for other nonlinear dynamical systems to examine the physiology of tumors incorporating factors such as phenotypic evolution, intracellular communication pathways, and interactions with microenvironmental factors including therapies.

Robert joined Moffitt in 2008 from the University of Arizona where he was Professor, Department Radiology and Professor, Department of Applied Mathematics since 2000. He received a B.S.E. in

Bioengineering and Mechanical Sciences from Princeton University and an MD from the University of Pennsylvania in 1977. He completed his residency in radiology at the University of Pennsylvania where he served as chief resident.

Moderator

ANNA D. BARKER, PHD, FAACR

Founder and Chair, AACR Scientist↔Survivor Program®
Chief Strategy Officer, Ellison Institute of Technology
Distinguished Visiting Fellow, Complex Adaptive Systems, Arizona State University

Dr. Barker is the founder and chair of the AACR Scientist↔Survivor Program® and chief strategy officer of the Lawrence J. Ellison Institute for Transformative Medicine and distinguished visiting fellow at Arizona State University. She 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, Dr. Barker 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 also 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. Dr. Barker received her doctoral degree from the Ohio State University.