



Brian Alper, MD, MSPH, FAAFP

Dr. Alper completed a Doctor of Medicine degree at Hahnemann University (now Drexel University School of Medicine), a fellowship at University of Missouri-Columbia, and continued for five years as a Clinical Research Assistant Professor serving roles in research, clinical practice and education at the University of Missouri-Columbia School of Medicine. Dr. Alper also created DynaMed, a clinical reference tool for physicians and other health care professionals for use at point-of-care. Today it supports hundreds of jobs, and DynaMed Plus provides a continuously updated synthesis of evidence and guidance to more than one million physicians globally and is used 20 times per minute on the web or mobile apps.



Michelle Clark, PhD

Dr. Clark received her B.A. in Mathematics from Chapman University and her Ph.D. in Biostatistics from UCLA. Dr. Clark's main research interest is the development of statistical methods for understanding the genetic basis of human disease and improving precision medicine implementation. As a graduate student at UCLA, Dr. Clark developed a novel method for detecting transgenerational genetic effects associated with disease-related quantitative traits. She has continued her research career at Rady Children's Institute for Genomic Medicine first as a Postdoctoral Fellow and now as a Statistical Scientist. Her current research aims to assess the impact of rapid whole genome sequencing (rWGS) on diagnostic rates and the clinical management of critically ill infants and children, identify cohorts of patients that will most benefit from rWGS, and evaluate the utility of phenotypic features extracted from medical records with natural language processing to reduce time to diagnosis.



Chris Dymek, EdD

Chris Dymek, EdD leads the work of the Division of Health Information Technology (IT) within the Agency for Healthcare Research and Quality's (AHRQ's) Center for Evidence and Practice Improvement. She is a computer scientist and health IT researcher who is dedicated to advancing the productive use of information technologies within healthcare.

Prior to joining AHRQ, Chris was a program manager in the HHS Office of the Assistant Secretary for Planning and Evaluation where she led the HHS effort, supported by the Patient-centered Outcomes Research Trust Fund, to build data capacity for patient-centered outcomes research. Chris has also held senior researcher positions within the Westat Center for Health IT and the National Opinion Research Center (NORC) at the University of Chicago. Preceding her work at Westat and NORC, she led an electronic medical record implementation for five Adventist Healthcare facilities. She also served as Chief Technology Officer and Product Development Executive at the Commission on the Accreditation of Rehabilitation Facilities.

In addition to her work in the health and human services sector, Chris has directed large scale IT implementations as well as re-engineering and organization effectiveness efforts for the electric utility industry.



Sanji Fernando

Sanji is the senior vice president at Optum, where he leads the Artificial Intelligence (AI) and Analytics Platforms team for Optum Enterprise Analytics (OEA). He is responsible for Optum IQ Studio, a platform supporting the design and development of leading-edge AI models and analytic tools for the enterprise.

Previously, Sanji was a vice president at OptumLabs and led the OptumLabs Center for Applied Data Science (CADS). The CADS team applied breakthroughs in AI and machine learning to solve complex health care challenges for UnitedHealth Group (UHG) by developing and deploying software product concepts. CADS pioneered using deep learning to streamline administrative processes in revenue cycle management and developed graph analytics tools to support provider network design, among other innovations. Sanji is a graduate of Trinity College with a bachelor's degree in computer science.



Luca Foschini, PhD

Dr. Foschini is the Co-founder and Chief Data Scientist at Evidation Health, responsible for data analytics and research and development. At Evidation, he has driven research collaborations resulting in numerous publications in the fields of machine learning, behavioral economics, and medical informatics. Previously, Luca held research positions in industry and academic institutions including Ask.com, Google, ETH Zurich, and UC Santa Barbara. He has co-authored several papers and patents on efficient algorithms for partitioning and detecting anomalies in massive networks. Luca holds MS and PhD degrees in Computer Science from UC Santa Barbara, and ME and BE degrees from the SanT'Anna School of Pisa, Italy.



Marzyeh Ghassemi, PhD

Dr. Ghassemi is an Assistant Professor at the University of Toronto in Computer Science and Medicine, and a Vector Institute faculty member holding a Canadian CIFAR AI Chair and Canada Research Chair. She currently serves as a NeurIPS 2019 Workshop Co-Chair and is a Board Member of the Machine Learning for Health Unconference.

Professor Ghassemi's PhD research at MIT focused on creating and applying machine learning algorithms towards improved prediction and stratification of relevant human risks with clinical collaborations at Beth Israel Deaconess Medical Center and Massachusetts General Hospital, encompassing unsupervised learning, supervised learning, and structured prediction. Her work has been applied to estimating the physiological state of patients during critical illnesses, modeling the need for a clinical intervention, and diagnosing phonotraumatic voice disorders from wearable sensor data. Prior to MIT, Marzyeh received an MSc. degree in biomedical engineering from Oxford University as a Marshall Scholar, and B.S. degrees in computer science and electrical engineering as a Goldwater Scholar at New Mexico State University.



Erich S. Huang, MD, PhD

Dr. Huang is the co-Director of Duke Forge, and Assistant Dean for Biomedical Informatics. Dr. Huang's research interests span applied machine learning, research provenance and data infrastructure. Projects include building data provenance tools funded by the NIH's Big Data to Knowledge program and regulatory science funded by the Burroughs Wellcome Foundation. Applied machine learning applications include "Deep Care Management," a highly interdisciplinary project with Duke Connected Care, Duke's Accountable Care Organization, that integrates claims and EHR data for predicting unplanned admissions and risk stratifying patients for case management; and CALYPSO, a collaboration with the Department of Surgery for utilizing machine learning to predict surgical complications.. Dr. Huang received his MD and PhD from Duke University.



Dina Katabi, PhD

Dr. Katabi is the Andrew & Erna Viterbi Professor of Electrical Engineering and Computer Science at MIT. She is also the director of the MIT's Center for Wireless Networks and Mobile Computing, a member of the National Academy of Engineering, and a recipient of the MacArthur Genius Award. Professor Katabi received her PhD and MS from MIT in 2003 and 1999, and her Bachelor of Science from Damascus University in 1995. Katabi's research focuses on innovative mobile and wireless technologies with application to digital health. Her research has been recognized with the ACM Prize in Computing, the ACM Grace Murray Hopper Award, the SIGCOMM test of Time Award, the Faculty Research Innovation Fellowship, a Sloan Fellowship, the NBX Career Development chair, and the NSF CAREER award. Her students received the ACM Best Doctoral Dissertation Award in Computer Science and Engineering twice. Further, her work was recognized by the IEEE William R. Bennett prize, three ACM SIGCOMM Best Paper awards, an NSDI Best Paper award, and a TR10 award. Several start-ups have been spun out of Katabi's lab such as PiCharging and Emerald.



Shinjini Kundu, MD, PhD

Dr. Kundu is a resident physician in radiology and computer scientist at The Johns Hopkins Hospital. She holds an MD degree from UPMC as well as a PhD in biomedical engineering from Carnegie-Mellon University. Earlier, she obtained a B.S. and M.S. in electrical engineering from Stanford University.

Her research focuses on developing novel artificial intelligence techniques to detect latent signs of disease from medical images that were previously imperceptible to the human eye. Her work in transport-based morphometry enabled knee osteoarthritis to be predicted in healthy individuals 3 years before the onset of symptoms, among many other exciting applications. In 2018, she was recognized as one of MIT Technology Review's 35 under 35 and as one of Forbes' 30 under 30. She was a participant at a United Nations summit, where she was a contributor to the Sustainable Development Goals for universal health.



S. Matthew Liao, PhD, AB

Dr. Liao is the Arthur Zitrin Chair of Bioethics, Director of the Center for Bioethics, Professor of Global Public Health, and Affiliated Professor in the Department of Philosophy at New York University. He is the author or editor of *The Ethics of Artificial Intelligence* (Oxford University Press, forthcoming); *The Right to Be Loved* (Oxford University Press); *Moral Brains: The Neuroscience of Morality* (Oxford University Press); *The Philosophical Foundations of Human Rights* (Oxford University Press); *Current Controversies in Bioethics* (Routledge), and over 60 articles in philosophy and bioethics. He has given TED and TEDx talks in New York and CERN, Switzerland, and he has been featured in the *New York Times*, *The Atlantic*, *The Guardian*, the BBC, *Harper's Magazine*, *Sydney Morning Herald*, *Scientific American* and other media outlets. Liao obtained his doctorate in philosophy from Oxford University and his AB from Princeton University.



Maxine Mackintosh

Maxine is a PhD student at the Alan Turing Institute and University College London's Institute of Health Informatics. Her PhD involves using medical records to uncover early signs of dementia. She is interested in how we might make better use of routinely collected data to inform our understanding of health and diseases. Maxine is also the co-founder of One HealthTech – a community which champions and supports underrepresented groups, particularly women, to be the future leaders in health innovation. Her professional work has led her to the Royal Society, Roche, L'Oreal, Department for International Development, DeepMind and NHS England. She is part of a number of communities and committees including the World Economic Forum's Global Shapers, and the British Computer Society (Health Exec).



Kenneth Mandl, MD, MPH

Dr. Mandl is director of the Computational Health Informatics Program at Boston Children's Hospital and the Donald A.B. Lindberg Professor of Pediatrics and Professor of Biomedical Informatics at Harvard Medical School. In his work at the intersection of population and individual health, Mandl was a pioneer of the first personally controlled health record systems, and he co-developed SMART, an approach to enable a health app to access digital data and run anywhere in the health care system. He has received the Presidential Early Career Award for Scientists and Engineers for his work in biosurveillance, and the Donald A.B. Lindberg Award for Innovation in Informatics.



Berkman Sahiner, PhD

Dr. Sahiner is an electrical engineer by training and a senior scientist with the Office of Science and Engineering Laboratories at the Center for Devices and Radiological Health at the FDA. He has been involved in medical imaging for over 25 years, first as a faculty member at the University of Michigan Radiology Department for over 15 years, and since 2009, as a researcher with the Division of Imaging, Diagnostics and Software Reliability at the FDA. He has led many projects as the PI of multiple grants, including grants from the NIH, U.S. Army Medical Research and Materiel Command, Office of Women's Health at the FDA and the Critical Path at the FDA. He is an author/co-author of over 120 peer-reviewed journal publications and holds two patents. He is an editorial board member of the Medical Physics Journal and the chair of the American Association of Physicists in Medicine (AAPM) Machine Learning Sub-Committee. His interests include machine learning, computer-aided diagnosis, image perception, clinical study design, and performance assessment methodologies.



Sezin Palmer

Sezin is the first Mission Area Executive for National Health at the Johns Hopkins University Applied Physics Laboratory, which has been recognized by Fast Company in 2016 as one of the most innovative companies in Healthcare. The vision of the National Health Mission Area is to revolutionize health through science and engineering – a vision shared with their partners at the Johns Hopkins University School of Medicine. The National Health Mission Area takes a systems approach to understanding health determinants to better predict and prevent illness, injury and disease and applying this knowledge to develop novel capabilities to rapidly detect and respond to changes in health status. As the nation's largest University Affiliated Research Center, APL performs research and development on behalf of the Department of Defense, the Department of Health and Human Services, the intelligence community, the National Aeronautics and Space Administration, and other federal agencies. Ms. Palmer earned a Bachelor of Science degree in electrical engineering from the University of Maryland and a Master of Science degree in electrical engineering from Johns Hopkins University.



Nigam Shah, MBBS, PhD

Dr. Shah is an Associate Professor of Medicine (Biomedical Informatics) at Stanford University, and an Associate CIO for Data Science at the Stanford Hospital. Dr. Shah's research led to the creation of the USA's only bedside consult service that provides a clinician with an on-demand summary of similar patients in terms of the treatment choices made and observed outcomes (<http://greenbutton.stanford.edu>). Dr. Shah also leads Stanford Hospital's Program for Artificial Intelligence (AI) in Healthcare, which aims to bring AI technologies to the clinic, safely and ethically. Dr. Shah received the AMIA New Investigator Award for 2013, was elected into the American College of Medical Informatics (ACMI) in 2015 and inducted into the American Society for Clinical Investigation (ASCI) in 2016. He holds an MBBS from Baroda Medical College, India, a PhD from Penn State University and completed postdoctoral training at Stanford University.



Colin Walsh, MD, MA

Dr. Walsh is an Assistant Professor of Biomedical Informatics, Medicine, and Psychiatry at Vanderbilt University Medical Center. He is a practicing internist. He received a degree in Mechanical Engineering from Princeton University and his medical degree at the University of Chicago. He completed residency and chief residency in internal medicine at Columbia University Medical Center. He received a degree in Biomedical informatics in postdoctoral fellowship at Columbia University. He joined the faculty at Vanderbilt University in 2015. His research includes: 1) machine learning in behavioral health; 2) clinical decision support to enable prevention; 3) predictive modeling using Electronic Health Record (EHR) Data; and 4) evaluation of value-based care through data science.