



California Initiative to Advance Precision Medicine

CIAPM Request for Proposals 2016

Selection Committee

Overview by Expertise

Selection Committee Member	Institution	Expertise
Nancy Cox - Chair	Vanderbilt University	Genomics / Statistics
Elaine Mardis	Washington University	Genomics / Cancer
Marylyn Ritchie	Geisinger Health System	Genomics / Bioinformatics
Isaac Kohane	Harvard University	Statistics / Computation
Eric Hekler	Arizona State University	Digital Health
Stanley Shaw	Harvard University	Digital Health
Shawneequa Callier	George Washington University	Health Disparities / Ethics
Akinlolu Ojo	University of Arizona	Health Disparities / Global Health
Rachel Ceballos	Fred Hutchinson Cancer Research Center	Health Disparities / Behavioral Health
Jeffrey Kahn	Johns Hopkins University	Ethics
Ya Chen Tina Shih	MD Anderson Cancer Center	Health Economics
Timothy Coetzee	National Multiple Sclerosis Society	Patient Engagement
Margaret Anderson	Faster Cures	Patient Engagement

Listed in alphabetical order

Margaret Anderson

Executive Director

Faster Cures, Milken Institute

Margaret Anderson is the executive director of FasterCures, a Milken Institute center that works to speed up the process of getting new medicines from discovery to patients. She is a founding board member and past-president of the Alliance for a Stronger FDA, a member of the NIH National Center for Advancing Translational Sciences Advisory Council and Cures Acceleration Network Review Board, the National Health Council Board of Directors, United for Medical Research Steering Committee, and the Institute of Medicine's Forum on Drug Discovery, Development and Translation. Previously, Anderson was the deputy director and team leader of the Center on AIDS & Community Health at the Academy for Educational Development; program director at the Society for Women's Health Research; health science analyst at the American Public Health Association; and analyst and project director at the Congressional Office of Technology Assessment in the Biological Applications Program. Anderson holds a bachelor's degree from the University of Maryland and a master's degree in science, technology, and public policy from George Washington University.

Shawneequa L. Callier, JD, MA

*Assistant Professor
Department of Clinical Research and Leadership
School of Medicine and Health Sciences
The George Washington University*

Ms. Shawneequa Callier has over a decade of experience analyzing the ethical, legal and social issues raised by genetic research. Her current scholarship focuses on topics related to precision medicine, race and genetics, pharmacogenomics, and the use of personalized genomic testing as an educational tool. Ms. Callier is a Special Volunteer at the National Human Genome Research Institutes' Center for Research on Genomics and Global Health. In addition, she is a full time assistant professor of Bioethics and Health Care Law and Regulation in the School of Medicine and Health Sciences at George Washington University (GW), and a Part-Time Professorial Lecturer of Genetics and the Law at the GW School of Law.

Prior to joining the GW faculty, Ms. Callier completed a post-doctoral fellowship at the Center for Genetic Research Ethics and Law, an interdisciplinary center for excellence funded by the National Human Genome Research Institute and located in the Bioethics Department of Case Western Reserve University's School of Medicine. From 2006 to 2009, Ms. Callier practiced health care law in Washington, D.C. Earlier in her career, she also interned at the World Health Organization and the Nuffield Council on Bioethics where she examined international healthcare ethics policies and human genetics laws and guidelines.

Rachel Ceballos, PhD

*Assistant Member, Public Health Sciences Division
Fred Hutchinson Cancer Research Center
Affiliate Assistant Professor, School of Public Health
University of Washington in Seattle*

Dr. Ceballos is currently an Assistant Member in the Division of Public Health Sciences at the Fred Hutchinson Cancer Research Center and Affiliate Assistant Professor in the School of Public Health at the University of Washington in Seattle, WA. Her research focuses on the development of culturally appropriate interventions to improve emotional well-being and health education opportunities for Latino and African-American cancer survivors. This includes examination of underserved Latinos' interests, beliefs, and preferences for biomedical research participation. Her research methods emphasize community based participatory research practice, which engages in reciprocal learning and community collaboration at all levels of the research process. She is the recipient of a career development award funded by the National Cancer Institute. Dr. Ceballos received her doctoral degree from the Department of Biobehavioral Health at Penn State University. She is trained as an interdisciplinary scientist with both laboratory and community-level research experience. Dr. Ceballos is a Steering Committee Member for the National Latino Cancer Summit, an Advisory Board member for the Susan G. Komen Puget Sound LGBTQ Initiative, and is a Board Member for Cancer Lifeline (a Seattle-based community cancer support center).

Tim Coetzee, PhD

*Chief Advocacy, Services, and Research Officer
National Multiple Sclerosis Society*

Timothy Coetzee, Ph.D., is the Chief Advocacy, Services and Research officer at the National Multiple Sclerosis Society (NMSS) in New York. Dr. Coetzee has been engaged in multiple sclerosis research and advocacy work throughout his career. He leads the Society's federal and state activism programs, manages its investment in basic, clinical and commercial research, and oversees the delivery of nationwide educational programs and services for people living with MS. He has also helped launch and served as president of Fast Forward, an initiative of the NMSS to speed the commercial development of new treatments for multiple sclerosis. He earned his Ph.D. at Albany Medical College in New York, pursued postdoctoral training at the University of North Carolina at Chapel Hill. Prior to joining the Society, he was a faculty member of the Departments of Microbiology and Neuroscience at the University of Connecticut Health Center.

Nancy J. Cox, PhD

*Director, Vanderbilt Genetics Institute
Director, Division of Genetic Medicine
Mary Phillips Edmonds Gray Professor of Genetics
Vanderbilt University*

Nancy J. Cox, PhD is a quantitative human geneticist with a long-standing research program focused on identifying and characterizing the genetic component to common human diseases. Dr. Cox earned a BS in Biology from the University of Notre Dame in 1978, a PhD in Human Genetics at Yale in 1982 and did post-doctoral research at Washington University and the University of Pennsylvania before joining the University of Chicago in 1987. She spent 28 years at the University of Chicago rising to Professor and Chief of the Division of Genetic Medicine before moving to Vanderbilt University in 2015 to become the Mary Phillips Edmonds Gray Professor of Genetics and inaugural Director of the Vanderbilt Genetics Institute, and Director of the Division of Genetic Medicine. Dr. Cox is the President-elect of the American Society of Human Genetics (2016-18), a Fellow of the AAAS, was part of a team winning the Landon Award in 2008 from the American Association for Cancer Research, and achieved the Leadership Award in 2010 from the International Genetic Epidemiology Society. Dr. Cox's current research is now focused largely on integrating data on genome variation and genome function with electronic health records to push the next round of translation of genome discovery into healthcare. Currently funded research projects on which Dr. Cox is PI or co-PI include using these data integration approaches to analyze whole genome sequence data generated by the Centers for Common Disease Genomics, and developing the new Center of Excellence in Health Disparities for Personalized Medicine and Population Health at Vanderbilt.

Eric Hekler, PhD

*Assistant Professor, School of Nutrition and Health Promotion
Director, Designing Health Lab
Arizona State University*

Dr. Eric Hekler, PhD, is an Assistant Professor in the School of Nutrition and Health Promotion at Arizona State University and directs the [Designing Health Lab](#) @ASU. His research focuses on facilitating individualized and "precise" behavior change for fostering

long-term health and well-being via digital health/mHealth technologies. For example, his NSF-funded work is focused on developing mathematical models for guiding an intervention that determines an individualized “ambitious but doable” daily step goal to strive for each day. The long-term goal is to develop a comprehensive intervention that provides the right type of support for physical activity only when it is needed. Dr. Hekler’s Robert Wood Johnson Foundation grant is focused on developing a methodology for the more rapid collective development of technology-delivered behavior change strategies, a process he has labeled **Agile Science**. His Google-funded work is focused on teaching individuals fundamentals of behavior change and self-experimentation and giving them tools (e.g., home sensors and feedback) to allow them to self-experiment with behavior change techniques to optimize their health. Prior to ASU, Dr. Hekler completed his postdoctoral training at Stanford University and received his Ph.D. in Clinical Health Psychology from Rutgers University.

Jeffrey Kahn, PhD, MPH

*Andreas C. Dracopoulos Director of the Johns Hopkins Berman Institute of Bioethics
Robert Henry Levi and Ryda Hecht Levi Professor of Bioethics and Public Policy
Professor, Department of Health Policy and Management
Johns Hopkins University Bloomberg School of Public Health*

Dr. Jeffrey Kahn is the Andreas C. Dracopoulos Director of the Johns Hopkins Berman Institute of Bioethics. He is also Robert Henry Levi and Ryda Hecht Levi Professor of Bioethics and Public Policy, and Professor in the Department of Health Policy and Management in the Johns Hopkins University Bloomberg School of Public Health. His research interests include the ethics of research, ethics and public health, and ethics and emerging biomedical technologies. He speaks widely both in the U.S. and abroad, and has published four books and over 125 articles in the bioethics and medical literature. He is an elected Fellow of the Hastings Center, and has chaired or served on committees and panels for the National Institutes of Health, the Centers for Disease Control, and the Institute of Medicine/National Academy of Medicine, where he is currently chair of the Board on Health Sciences Policy. His education includes a BA in microbiology (UCLA, 1983), MPH (Johns Hopkins, 1988), and PhD in philosophy (Georgetown, 1989).

Isaac Kohane, MD, PhD

*Marion V. Nelson Professor of Biomedical Informatics
Chair, Department of Biomedical Informatics
Harvard Medical School*

Isaac Kohane, MD, PhD is the inaugural Chair of the Department of Biomedical Informatics and the Marion V. Nelson Professor of Biomedical Informatics at Harvard Medical School. He develops and applies computational techniques to address disease at multiple scales: from whole healthcare systems as “living laboratories” to the functional genomics of neurodevelopment with a focus on autism. Over the last 30 years, Kohane’s research agenda has been driven by the vision of what biomedical researchers could do to find new cures, provide new diagnoses and deliver the best care available if data could be converted more rapidly to knowledge and knowledge to practice. In so doing, Kohane has designed and led multiple internationally adopted efforts to “instrument” the healthcare enterprise for discovery and to enable innovative decision-making tools to be applied to the point of care. At the same time, the new insights afforded by ‘omic-scale molecular analyses have inspired

him and his collaborators to work on re-characterizing and reclassifying diseases such as autism, rheumatoid arthritis and cancers. Kohane's i2b2 project is currently deployed internationally to over 120 major academic health centers to drive discovery research in disease and pharmacovigilance (including providing evidence on drugs which ultimately contributed to "black box"ing by the FDA). Dr. Kohane has published several hundred papers in the medical literature and authored a widely-used book on Microarrays for an Integrative Genomics. He is a member of the Institute of Medicine and the American Society for Clinical Investigation.

Elaine R. Mardis, PhD

*Robert E. and Louise F. Dunn Distinguished Professor of Medicine
Professor of Genetics and Molecular Microbiology
Co-director, McDonnell Genome Institute
Washington University School of Medicine*

Elaine Mardis graduated Phi Beta Kappa from the University of Oklahoma with a B.S. degree in zoology. She then completed her Ph.D. in Chemistry and Biochemistry in 1989, also at Oklahoma. Following graduation, Dr. Mardis was a senior research scientist for four years at BioRad Laboratories in Hercules, CA. In 1993, Dr. Mardis joined the faculty at Washington University School of Medicine. Recruited for her expertise in DNA sequencing and automation technology, she served as Director of Technology Development at the (then) Washington University Genome Sequencing Center, helping create methods and automation pipelines for sequencing the Human Genome. She has served as Co-director of the McDonnell Genome Institute since 2002. In 2014, Dr. Mardis was named the Robert E. and Louise F. Dunn Distinguished Professor of Medicine. Dr. Mardis has research interests in the application of next-generation sequencing to characterize cancer genomes and transcriptomes, and using these data to support therapeutic decision-making. She co-led the teams that first used next-generation sequencing to characterize the whole genome of an AML patient (Nature 2008), first sequenced and compared a primary tumor to its metastasis and xenograft, and first reported whole genome sequencing of samples from a breast cancer clinical trial. Beyond cancer genomics discoveries, Dr. Mardis is leading efforts to facilitate the translation of basic science discoveries about human genetic diseases into the clinical setting, especially focused on the use of next-generation sequencing. Her translational research efforts aim to devise NGS-based diagnostics, decision-support tools and databases, and the use of genomics to design personalized cancer vaccines. Dr. Mardis was elected to the AACR Board of Directors in 2015. She serves as an associate editor of Molecular Cancer Research, Disease Models and Mechanisms and Annals of Oncology, and acts as a reviewer for Nature, the New England Journal, Cell and Science. She is the Editor-in-Chief of Molecular Case Studies. She serves on the scientific advisory boards of Qiagen Ingenuity, DNA Nexus, and ZS Genetics, and is a member of the Supervisory Board of Qiagen N.V. Dr. Mardis received the 2010 Scripps Translational Research award for her work on cancer genomics, and was named a Distinguished Alumni of the University of Oklahoma College of Arts and Sciences in 2011. Discover Magazine featured her work in cancer genomics as one of their top 100 science stories of 2013. In 2014 and 2015, she was one of the most highly cited researchers in the world, according to Thompson-Reuters. She will receive the Morton K. Schwartz award from the American Association of Clinical Chemistry for Significant Contributions in Cancer Research Diagnostics in 2016.

Akinlolu O. Ojo, MD, MPH, PhD, MBA

*Associate Vice President for Clinical Research and Global Health Initiatives
Professor of Medicine & Health Promotion Sciences
University of Arizona Health Sciences*

In January 2016, Dr. Akinlolu (“Lolu”) Ojo was appointed as the Associate Vice President for Clinical Research and Global Health Initiatives at the University of Arizona Health Sciences in the Office of the Senior Vice President for Health Sciences. Dr. Ojo came from the University of Michigan, Ann Arbor where he served as Professor of Medicine and the Inaugural Florence E. Bingham Research Professor in Nephrology. Dr. Ojo is an internationally recognized physician scientist with expertise in chronic kidney disease, kidney and kidney-pancreas transplantation and Global Health Research. At the University of Michigan, Dr Ojo was the PI of research studies totaling >\$70 million and he played leadership roles on major NIH-funded clinical trials and cohort studies including the African American Study of Hypertension and Kidney Disease (AASK), the Folic Acid Vascular Outcome Reduction in Transplantation (FAVORIT), the Chronic Renal Insufficiency Cohort Study (CRIC), the Adult-to-Adult Living Donor Liver Transplantation Study (A2ALL) and the Nephrotic Syndrome Study Network (NEPTUNE). Dr. Ojo directed the Department of Medicine Global Health Research Program and the joint University of Michigan-International Society of Nephrology (UM-ISN) fellowship program to train nephrologists for low resource settings. Dr. Ojo is currently the PI of the Human Heredity and Health in Africa (H3Africa) Kidney Disease Research Network – a research and training program that is conducting genetic studies on kidney disease in 8,000 participants through 10 academic medical centers in five countries in sub-Saharan Africa. The H3Africa Kidney Disease Research Network is also engaged in the development of clinical and translational research infrastructure and research workforce capacity in Africa as part of a larger \$76 million NIH-Wellcome Trust funded initiative to advance genomics research and develop clinical and translational research capacity in sub-Saharan Africa. Dr. Ojo has served as the Chair of the Steering Committee of the H3Africa Consortium which is comprised of 24 research projects and >350 investigators from 37 African countries. Dr. Ojo received his medical education from the University of Lagos, Nigeria and residency training in internal medicine at the University of Kentucky, Lexington. He earned a Master of Public Health (MPH) degree in Global Health from the University of Alabama in Birmingham and completed nephrology fellowship, PhD in Epidemiology and the Master of Business Administration (MBA) at the University of Michigan. Dr. Ojo has over 170 peer-reviewed publications and serves on editorial boards and on NIH study sections. Dr. Ojo maintains active clinical research collaboration with investigators in Latin America, the Caribbean, West Europe and East Asia. Dr. Ojo has mentored >20 research scientists and physician scientists and has been elected into several honorific societies including the American Clinical and Climatological Association (ACCA), American Society of Clinical Investigation (ASCI), and the Association of American Physicians (AAP).

Marylyn D. Ritchie, PhD

*Director, Biomedical and Translational Informatics
Chief Research Informatics Officer
Geisinger Health System*

Dr. Marylyn Ritchie, PhD is a Professor in the Department of Biomedical and Translational Informatics at Geisinger Health System. Dr. Ritchie is a statistical and computational geneticist with a focus on understanding genetic architecture of complex human disease.

She has expertise in developing novel bioinformatics tools for complex analysis of big data in genetics, genomics, and clinical databases, in particular in the area of Pharmacogenomics. Dr. Ritchie has received several awards and honors including selection as a Genome Technology, Rising Young Investigator in 2006, an Alfred P. Sloan Research Fellow in 2010, a KAVLI Frontiers of Science fellow by the National Academy of Science for each of the past four consecutive years (2011-2014), and she was named one of the most highly cited researchers in her field by Thomas Reuters in 2014. Dr. Ritchie has extensive experience in all aspects of genetic epidemiology and translational bioinformatics as it relates to human genomics. She also has extensive expertise in dealing with big data and complex analysis including GWAS, next-generation sequencing, CNVs, data integration of meta-dimensional omics data, Phenome-wide Association Studies (PheWAS), and development of data visualization approaches.

Stanley Shaw, MD, PhD

*Assistant Professor of Medicine, Harvard Medical School
Associate Member of the Broad Institute of Harvard and MIT
Co-Director, Center for Assessment Technology and Continuous Health*

Stanley Shaw, MD PhD is the co-founder and co-director of the Center for Assessment Technology and Continuous Health (CATCH) at Massachusetts General Hospital (MGH), Associate Dean for Executive Education at Harvard Medical School, an Associate Member of the Broad Institute of Harvard and MIT, and a founding Principal Investigator in the MGH Center for Systems Biology.

His research seeks to better assess human wellness and disease through new phenotypes (measurable traits), including patient-derived cells, Electronic Medical Records (EMR), the gut microbiome in human disease, and digital health. Dr. Shaw recently led the development of GlucoSuccess, an iOS ResearchKit app for type 2 diabetes patients, in partnership with Apple.

Dr. Shaw received his AB in Chemistry & Physics from Harvard College, and his MD and PhD (Biophysics) from Harvard. He is a practicing cardiologist in the Corrigan Minehan Heart Center at Massachusetts General Hospital.

Ya-Chen Tina Shih, PhD

*Professor of Health Economics
Chief, Section of Cancer Economics and Policy
Department of Health Services Research
University of Texas MD Anderson Cancer Center*

Ya-Chen Tina Shih, Ph.D., is Professor of Health Economics and Chief of the Section of Cancer Economics and Policy at the Department of Health Services Research, University of Texas MD Anderson Cancer Center. Dr. Shih received her Ph.D. in Economics from Stanford University, with a concentration on labor/health economics and econometrics. She has served as Principal Investigators on research grants related to various economic aspects of cancer funded by the National Cancer Institute, National Human Genome Research Institute, Agency for Healthcare and Quality, American Cancer Society, and Lance Armstrong Foundation. Dr. Shih has close to 20 years of experience with economic evaluation, health

services, and comparative effectiveness research, using both modeling approach and econometric techniques applied to observational as well as trial data. Her research concentrates on the application of quantitative methods to examine the economic aspect of cancer care. Major themes in her work include studying the diffusion of new medical technologies among various patient and provider subgroups and/or geographic areas; examining the impact of new technologies on the outcomes and costs of cancer care; estimating disease burden of cancer and cancer-related complications; and exploring the effect, especially the unintended consequences, of technology diffusion, health policies and regulations on cancer patients. Other research interests are assessing the cost-effectiveness of medical as well as behavioral interventions. Dr. Shih has over 120 publications, serves as a co-editor for Value in Health, and is on the editorial board of PharmacoEconomics. She is a member of the National Cancer Policy Forum at the National Academies of Sciences, Engineering, and Medicine (formerly Institute of Medicine) and also serves on the American Cancer Society Guidelines Development Workgroup.