Standing Committee on Evidence Synthesis and Communications in Diet and Chronic Disease Relationships

WORKSHOP ON HOW NUTRITION AND HEALTH CHANGE OVER THE LIFE COURSE

November 16, 2022

SPEAKER BIOS

Allison Aiello, PhD, is the James S. Jackson Healthy Longevity Professor of Epidemiology in the Robert N. Butler Columbia Aging Center and Professor of Epidemiology at the Mailman School of Public Health. Dr. Aiello's research focuses on identifying the processes by which health inequities emerge across the life course, to uncover points of intervention for improving health equity. She has led numerous studies examining how social inequalities and adverse exposures modify biology at the cellular level to impact health and aging processes. Her research program has focused on some of today's most pressing and complex conditions, including biological aging, Alzheimer's Disease, mental health, and susceptibility to infectious diseases. Dr. Aiello's group has identified infection and aging of the immune system, or immunosenescence, as particularly salient biological pathways by which exposure to psychosocial stressors impact many facets of physiological health and disease risk. In addition, Dr. Aiello and her collaborators have led pioneering studies of the impact of life course social exposures, stressors, and mental health on epigenetic aging. Dr. Aiello currently serves as the Deputy Director of the National Longitudinal Study of Adolescent to Adult Health (Add Health) Wave VI, which is funded by the National Institute on Aging and several other institutes/offices at the National Institutes of Health. The Add Health Study Wave VI is a highly comprehensive and large nationally representative life course study of the health of Americans, starting in adolescence and now in Wave VI, when participants are in early midlife.

Johan Auwerx, MD, PhD, is currently Professor at the Ecole Polytechnique Fédérale de Lausanne, Switzerland. He is using systems biology and genetics approaches to understand the communication between the mitochondria and the nucleus. His work is relevant for the areas of transcription, mitochondria, metabolism, and aging. His research spurred the development of new drugs, such as PPAR agonists, urolithin A, PARP inhibitors and other NAD^+ boosters for the treatment of metabolic, cardio-vascular, renal, and neuro-muscular diseases. Johan Auwerx was elected as a member of EMBO in 2003 and has received many international scientific prizes. He is the founder of a handful of biotech companies. Dr. Auwerx received both his MD and PhD in Molecular Endocrinology from the Katholieke Universiteit in Leuven, Belgium. He was a post-doctoral research fellow in the Departments of Medicine and Genetics of the University of Washington in Seattle.

Sara Benjamin-Neelon, PhD, MPH, JD, RD, is a Professor in the Department of Health, Behavior and Society at the Johns Hopkins Bloomberg School of Public Health. She has a joint appointment in the Department of International Health, Human Nutrition Program. She is also a faculty fellow in the Centre for Diet and Activity Research at the University of Cambridge. She is a registered dietitian and licensed attorney. Her research interests include early life chronic disease prevention, food insecurity, and nutrition throughout childhood with a focus on health equity. She served on the National Academies of Sciences Committee on Scoping Existing Guidelines for Feeding Recommendations for Infants and Young Children Under Age 2 (2019-

2020) and the Committee on Early Care and Education Innovation Collaborative of the Institute of Medicine's Roundtable on Obesity Solutions (2014-2016). She also served as a Technical Expert Collaborative Member for the Nutrition Evidence Library (NEL) for the Dietary Guidance Development Project for Infants and Toddlers from Birth to 24 Months, Taste Development & Feeding Practices and Methods (2015-2017). She received her PhD and MPH from the Department of Nutrition at the University of North Carolina at Chapel Hill and her JD from Mitchell Hamline School of Law. She completed her postdoctoral fellowship in the Department of Population Medicine at Harvard Medical School.

Susan Carnell received her BA in Experimental Psychology from the University of Oxford and her PhD in Health Psychology at University College London, and completed post-doctoral training at University College London and Columbia University. She is currently Associate Professor in the Division of Child & Adolescent Psychiatry, Department of Psychiatry & Behavioral Sciences, Johns Hopkins University School of Medicine, where she heads the Appetite Lab. A central question motivating her research is, "Why do some people develop obesity while others don't?" Her research program investigates the model that individuals differ in appetite-related biobehavioral traits (e.g., food cue responsiveness, satiety sensitivity) that manifest early in life, show genetic influence, and interact with environmental factors to predict food intake and weight trajectories. To probe this model she employs a range of methods including behavioral tests, psychometric questionnaires, genotyping, hormonal assays, and neuroimaging techniques (fMRI, MRI, PET). Ongoing research projects include investigations of appetite and body weight in infants, children, adolescents, and adults, including studies of bariatric surgery and eating disorders.

Matthew W. Gillman, MD, SM, joined the National Institutes of Health in 2016 as the inaugural director of the Environmental influences on Child Health Outcomes (ECHO) Program. Dr. Gillman came to NIH from Harvard Medical School, where he was a professor of population medicine and director of the Obesity Prevention Program, and Harvard School of Public Health, where he was a professor of nutrition. With background in the fields of internal medicine, pediatrics, and epidemiology, he has led cohort studies and randomized controlled trials and published widely in prevention of chronic disease across the life course. Dr. Gillman won mentoring awards at Harvard Medical School and Harvard School of Public Health, and has served in several national and international leadership positions, including on the United States Preventive Services Task Force and for the International Society for Developmental Origins of Health and Disease, from which he won the David Barker Medal in 2017. His clinical experience includes primary care for children and adults, and preventive cardiology among children.

David R. Jacobs, Jr., PhD (Mathematical Statistics, 1971, The Johns Hopkins University) has been on the faculty of the School of Public Health, University of Minnesota since 1974. He holds a Mayo Professorship in Public Health. He is a fellow of the American Heart Association and the American College of Nutrition. He was Deputy Editor of the British Journal of Nutrition (2006-2011), Associate Editor of Journal of Nutrition (2015-2017) and is on the editorial boards of JAHA, Clinical Chemistry, and other journals. He has over 1200 articles on various topics concerning the epidemiology of chronic diseases and their risk factors, including the epidemiology of specific molecules, and particularly those relating to cardiovascular diseases and diabetes. He has a great interest in diet, particularly focusing on health effects of foods and diet patterns. He has published the idea of food synergy, that the nutrient constituents of foods and diet patterns act in concert with each, thereby having different health effects than does any single constituent in isolation. Questions like this are of great interest to him: "Why doesn't our society just give everyone primarily good food, automatically?"

Emily Oken, M.D., M.P.H., is Alice Hamilton Professor and Vice-Chair in the Department of Population Medicine at Harvard Medical School (HMS) and the Harvard Pilgrim Health Care Institute, and Professor in the Department of Nutrition at the Harvard TH Chan School of Public Health. Dr. Oken received her medical degree from Harvard Medical School in 1996 and completed her internship and residency in internal medicine and pediatrics at the Harvard Combined Program. She completed her fellowship in general internal medicine at Harvard Medical School and obtained her Master's degree in public health from the Harvard School of Public Health. Dr. Oken directs the Division of Chronic Disease Research Across the Lifecourse within the department of Population Medicine. Her research focuses on the influence of nutrition and other modifiable factors during pregnancy and early childhood on long-term maternal and child health, especially cardiometabolic health and cognitive development. She was a planning committee member for the National Academy of Medicine's 2020 Workshop on Nutrition in Pregnancy. Dr. Oken served on the Technical Expert Collaborative 1 for the Dietary Guidance Development Project for Birth to 24 Months and Pregnancy and coauthored the work that came out of the committee. She currently serves on the Committee on Evaluating the Process to Develop the Dietary Guidelines for Americans, 2020-2025

Tom Perls MD, MPH, in 1995, began directing and continues to direct, the longest running and largest study of centenarians, their siblings and offspring in the world, the New England Centenarian Study. This study of 2500 participants includes over 600 semi-supercentenarians (ages 105-109 years) and 200 supercentenarians (ages 110-119 years). He leads four NIH funded studies researching exceptional longevity. Areas of investigation include multiple omics signatures associated with exceptional longevity, racial and ethnic differences in predisposition for exceptional longevity, resilience and resistance to Alzheimer's disease in centenarian cognitive superagers, cancer, and familial clustering for EL. Tom is a Robert Evans Dawson Evans Distinguished Professor of Medicine at Boston University School of Medicine. He received his Geriatrics training at both Mount Royal Hospital in Melbourne, Australia and at Harvard Medical School and he obtained his Masters in Public Health at Harvard. He is a senior physician in Geriatrics and cares for patients at Boston Medical Center and is a Fellow of the American College of Physicians, The American Geriatrics Society and the Gerontological Society of America.

Jack P. Shonkoff, M.D., is the Julius B. Richmond FAMRI Professor of Child Health and Development at the Harvard T.H. Chan School of Public Health and Harvard Graduate School of Education; Professor of Pediatrics at Harvard Medical School and Boston Children's Hospital; and Founding Director of the university-wide Center on the Developing Child at Harvard University. He chairs the National Scientific Council on the Developing Child, a group of distinguished scholars whose mission is to bring credible science to bear on public policy affecting young children, and the JPB Research Network on Toxic Stress, which is developing new measures of stress effects and resilience in young children. Dr. Shonkoff has received multiple honors, including elected membership to the Institute of Medicine (now the National Academy of Medicine); the C. Anderson Aldrich Award in Child Development from the American Academy of Pediatrics; and the Award for Distinguished Contributions to Public Policy for Children from the Society for Research in Child Development. He has authored more than 180 publications and co-edited a landmark report from the National Academy of Sciences in 2000 titled, From Neurons to Neighborhoods: The Science of Early Childhood Development.

Thomas W. Valente, Ph.D., is a Professor in the Department of Population and Public Health Sciences, Keck School of Medicine, at the University of Southern California. He is the author of Social Networks and Health: Models, Methods, and Applications (2010, Oxford University Press); Evaluating Health Promotion Programs (2002, Oxford University Press); Network

Models of the Diffusion of Innovations (1995, Hampton Press); and over 235 articles and chapters on social networks, behavior change, and program evaluation. Valente uses social network analysis, health communication, and mathematical models to implement and evaluate health promotion programs designed to prevent tobacco and substance abuse, unintended fertility, and STD/HIV infections. He is currently working on specifications for analyzing network models of diffusion and contagion with the R package NetdiffuseR. Valente is also well-known for his work developing network models of program implementation and network interventions. Valente has received the Simmel Award from INSNA and the Rogers award from APHA. Valente has also received the USC Melon award for graduate student mentoring and the Johns Hopkins University student mentoring award. Valente earned his BS in Mathematics from the University of Mary Washington, his MS in Mass Communication from San Diego State University, and his PhD from the Annenberg School for Communication at USC. From 1991 to 2000 he was at the Bloomberg School of Public Health; in 2008, he was a visiting senior scientist at NIH (NHGRI) for 6 months; and in 2010-2011 he was a visiting Professor at the École des Haute Études en Santé Publique (Paris/Rennes). Valente is co-editor (with Martin Everett) of Social Networks, and on the editorial board of the Journal of Health Communication: International Perspectives.

John B. Wong, M.D. is Vice Chair of Academic Affairs, a primary care physician, and primary faculty in the Institute for Clinical Research and Health Policy Studies at Tufts Medical Center and Distinguished Professor of Medicine at the Tufts University School of Medicine. A Master of the American College of Physicians, a past president of the Society for Medical Decision Making, an Associate Statistical Editor at the Annals of Internal Medicine, and a member of the US Preventive Services Task Force, he has been a consultant to the National Academy of Science, Engineering and Medicine (NASEM), World Health Organization, National Institutes of Health, Centers for Disease Control and Prevention, Agency for Healthcare Research and Quality, Patient-Centered Outcomes Research Institute, American Association for the Study of Liver Diseases, European League Against Rheumatism, Physician Consortium for Performance Improvement, American College of Cardiology, American Heart Association and others. With over 275 publications, his research focuses on the application of decision analysis to help patients, clinicians, and policymakers choose among alternative tests, treatments or policies, thereby promoting rational evidence-based efficient and effective patient-centered care that reflects individualized risk assessment and patient preferences. For the NASEM, he has co-authored chapters in the Reference Manual on Scientific Evidence 3rd Ed (and will for the 4th Ed), a committee member for diagnostic errors in medicine (published as Improving Diagnosis in Health Care) and for Evaluating the Process to Develop the Dietary Guidelines for Americans, 2020–2025, speaker for Sex-specific Reporting of Scientific Research and for Observational Studies in a Learning Health System, and reviewer for Hepatitis and Liver Cancer. He received his BS with honors from Haverford College and MD from the University of Chicago and completed residency, medical informatics fellowship in Clinical Decision Making, and chief residency in Internal Medicine at Tufts Medical Center.