

Toward Sequencing and Mapping of RNA Modifications

First Committee Meeting

MONDAY, DECEMBER 19, 2022 (all times in ET)

CLOSED SESSION

11:00–11:15

Welcome and Introductions

National Academies Project Staff, Members of the Committee

11:15–11:30

Overview of NASEM and the Consensus Study Process

Trisha Tucholski, Associate Program Officer, Board on Life Sciences

11:30–12:00

Initial Review of Statement of Task

Brenda L. Bass and Taekjip Ha, Co-Chairs of the Committee

OPEN SESSION

12:00–12:30

Briefing and Q&A with the Study Progenitor

Vivian G. Cheung, Howard Hughes Medical Institute

12:30–1:30

Briefing and Q&A with the Study Sponsors

August Schiesser, Warren Alpert Foundation

Fred J. Schiffman, Warren Alpert Foundation

Frederick L. Tyson, National Institute of Environmental Health Sciences

Carolyn Hutter, National Human Genome Research Institute

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CLOSED SESSION

1:30-1:45

Break

1:45-3:00

Discussion of Key Considerations for Study and Workshop

Brenda L. Bass and Taekjip Ha, Co-Chairs of the Committee

3:00

Wrap-up and Closing Thoughts

Brenda L. Bass and Taekjip Ha, Co-Chairs of the Committee

MEETING ADJOURNS

[\[COMMITTEE ROSTER AND BIOS FOUND HERE\]](#)

SPEAKER BIOS

Vivian G. Cheung, University of Michigan

Dr. Vivian G. Cheung is an RNA biologist and pediatric neurologist. She is the Frederick G.L. Huetwell Professor of Pediatrics at the University of Michigan. Dr. Cheung has a long-standing interest in gene regulation and neurogenetic disorders. Her group developed a genetic approach to identify regulators of human gene expression that is widely used to map regulatory variants including those that affect disease susceptibility. Dr. Cheung's laboratory demonstrated widespread differences between RNA and the underlying DNA sequences and studies how chemical modification of RNA leads to those differences and how dysregulation of these processes contributes to neurological diseases. Dr. Cheung is a recipient of the Curt Stern Award from the American Society of Human Genetics. She is a member of the National Academy of Medicine. She served as the President of the American Society for Clinical Investigation. Dr. Cheung is a determined advocate for a diverse biomedical workforce. Her students and trainees have won prestigious awards including the Rhodes scholarship and the Harold Amos Medical Faculty Development Award.

August Schiesser, Warren Alpert Foundation

August (Gus) Schiesser was President and CEO of Warren Equities Inc., (WEI) at the time of its sale to Global Partners LLC in 2015. The proceeds of the sale are used to fund the philanthropic activities of the Warren Alpert Foundation. Gus has been in the energy sector for 40 years and a former employee of WEI, and its subsidiaries for 28 years. He is presently the Executive Director, President, and Treasurer of the Warren Alpert Foundation. He has been a member of the board since 2004 and is a member of the Investment Committee. Gus presently resides in East Greenwich Rhode Island.

Fred J. Schiffman, Warren Alpert Foundation

Fred J. Schiffman, M.D., a hematologist/oncologist at Brown and Lifespan, is also the Sigal Family Professor of Humanistic Medicine at Brown, Vice Chairman of the Department of Medicine of the Warren Alpert School of Medicine at Brown University, Associate Director of the Categorical Residency Program at Brown, and Associate Physician in Chief at The Miriam Hospital. His areas of expertise include malignant and non-malignant hematological problems and disorders of the spleen. Dr. Schiffman has published in a broad range of hematologic areas and on a variety of subjects regarding the education of students and house staff. The recently awarded Sigal Family Professorship in Humanistic Medicine has allowed him to lead and participate in several programs in the arts dealing with the interface between the humanities and medicine. He has recently co-edited the tenth edition of the textbook "Cecil Essentials of Medicine."

Frederick L. Tyson, National Institute of Environmental Health Sciences

Frederick L. Tyson, Ph.D. is a Scientific Program Director at the NIEHS in the Division of Extramural Research and Training, Cellular, Organ and Systems Pathobiology Branch. Tyson's research portfolio covers a diverse array of topics and has included programs in basic and translational research focusing on: mouse genomics, K-12 environmental health science education, biological mechanisms of health disparities, breast cancer, environmental justice, and community-based participatory research. His current research portfolio includes projects on marine toxicology and human health risks, transcriptional regulation, chromatin biology, environmental epigenetics and human epigenomics. Tyson serves as the Program Director for the NIH Roadmap Epigenomics Mapping Consortium, which is supported by the NIH Common Fund, is a member of the Executive Committee for IHEC (International Human Epigenomics Consortium) and serves as a review editor for the online journal *Frontiers in Epigenomics*. He received his Ph.D. in cell biology and developmental genetics from the Zoology Department, the Graduate School of Rutgers University. Tyson received postdoctoral training in the Laboratory of Developmental Genetics at the Memorial Sloan-Kettering Institute for Cancer Research in New York City. Prior to working in the Division of Extramural Research and Training, he served as a Special Assistant to the Director of Intramural Research (DIR), NIEHS, as well as a Senior Staff Fellow in DIR. He has also been employed as a Medical Oncology Fellow at Duke University Medical Center in Durham, NC, and as a Senior Scientist at the Sacramento Cancer Research Institute in Grand Junction, CO.

Carolyn Hutter, National Human Genome Research Institute

Dr. Carolyn Hutter has been the director for the Division of Genome Sciences in the National Human Genome Research Institute (NHGRI) Extramural Research Position since 2018, after having served in the position of acting division director in 2017. In this role, Dr. Hutter leads efforts to support and accelerate foundational resources, technology development, experimental approaches and analytical tools in genome sciences. Dr. Hutter joined the NIH in 2012, serving as a program director in the National Cancer Institute (NCI) Epidemiology and Genomics Research Program. She transferred to NHGRI in 2013 as a program director, serving as the NHGRI team lead for The Cancer Genome Atlas (TCGA). Prior to NIH, she was a senior staff scientist at the Fred Hutchinson Cancer Research Center and lecturer at the University of Washington, where her research focused on large-scale consortia work for genome-wide association studies and on gene-environment interactions for cancer and other complex diseases. Dr. Hutter received her Sc.B. in applied mathematics - biology from Brown University, her M.S. in genetics from Cornell University, her M.S. in biostatistics from the University of Washington and her Ph.D. in epidemiology from the University of Washington.