

Speaker Bios

Zubair Ahmed, PhD is Professor Otorhinolaryngology-Head & Neck Surgery at the University of Maryland. Prof. Ahmed was a postdoctoral fellow with Tom Friedman in the Laboratory of Molecular Genetics at the NIDCD, as a member of team that first identified the R245X mutation in PCDH15 as a frequent cause of Usher 1F Syndrome. Prof. Ahmed's research program seeks to understand how the retinal and inner ear sensory epithelia develop and function to improve our understanding of these organs at the molecular level. His studies in both Usher syndrome and oculocutaneous albinism aim to decipher the pathophysiology of these disorders in animal models for the purpose of developing new strategies to prevent and treat these neurosensory disorders.

Livia Carvalho, PhD leads the Retinal Genomics and Therapy Research Group at the University of Western Australia/Lions Eye Institute in Perth, Australia. After completing a BSc in Biological Sciences from the University of Brasilia, she pursued further studies in the UK, completing a Masters in Neuroscience and a PhD in Genetics at the University College London Institute of Ophthalmology. Following additional postdoctoral studies in the areas of inherited degenerative eye diseases and ocular gene therapy at UCL and Harvard, she joined the Lions Eye Institute. Dr Carvalho's research program focuses on developing therapies for inherited vision loss, including Usher Syndrome, using AAV technologies, as well as investigating basic cellular and molecular mechanisms responsible for vision loss.

David P. Corey, PhD is the Bertarelli Professor of Translational Medical Science in the Department of Neurobiology at Harvard Medical School. Prof. Corey received a Ph.D. in neurobiology from Caltech, followed by a postdoctoral fellowship at Yale Medical School, and continued his career at Harvard Medical School and the Massachusetts General Hospital as a Howard Hughes investigator. Prof. Corey has defined mechanisms of hair-cell mechanotransduction that have led to fundamental advances in our understanding of auditory system function at the cellular and molecular level, using methods ranging from single-cell electrophysiology to single-molecule force spectroscopy to cryo-EM. He has developed methods for gene therapy in the inner ear, and more recently for inherited eye diseases. Prof. Corey is a member of the American Academy of Arts & Sciences.

Alex Hewitt, MD, PhD is a Professor of Ophthalmology at the Menzies Institute for Medical Research at the University of Tasmania in Australia. He received his MD from the University of Tasmania, his PhD from the Flinders University of South Australia and completed a residency in ophthalmology at the Royal Victorian Eye and Ear Hospital in Melbourne after which he was a Novartis Research Fellow at the Lions Eye Institute in Perth Australia. Prof. Hewitt's research interests lie in the genetics of a wide range of ocular disorders, including glaucoma and retinitis pigmentosa, as well as in the application of stem cell-based models of eye disease and the development of genetic therapies.

Samuel L. Pfaff, PhD, is a Professor at the Salk Institute for Biological Studies and the head of the Goldman Laboratory for Neural Circuit Dynamics in the Gene Expression Laboratory. He is the Benjamin H. Lewis chair in Neuroscience at the Salk Institute and holds appointments with the Biology, Biomedical Sciences, Neuroscience, and Bioengineering programs at the University of California, San Diego. He received his B.A. in Biology from Carleton College and his Ph.D. in Molecular Biology from the University of California, Berkeley. His post doctoral training was done at Vanderbilt University with William Taylor on gene regulation followed by Columbia University with Thomas Jessell on neural development. He is the recipient of the Javits Neuroscience Investigator Award,

McKnight Scholar Award, PEW Scholar Award, Alfred P. Sloan Research Fellow Award, and Fellow of the AAAS.

Katarina Stingl, MD is the Head of the Clinical Unit for Retinal Degenerations and Rare Eye Diseases and Head of the Research Lab for Retinal Functional Diagnostics at the University of Tübingen in Germany. Prof. Stingl received her MD and completed her clinical training at the University of Tübingen. She is the lead clinical investigator for **RUSH1F**, the multicenter Usher 1F natural history study. Prof. Stingl's clinical and scientific focus is in the area of retinal functional diagnostics and electrophysiology of vision, hereditary retinal degenerations, orphan eye diseases, and neuroprosthetics. She is a member of the European Reference Network for Rare Eye Diseases.

Vince Tropepe, PhD is Professor in the Department of Cell & Systems Biology, as well as in the Department of Ophthalmology at the University of Toronto and a member of the Ontario Institute for Regenerative Medicine. He also serves as Vice-Dean of Research in the Faculty of Arts & Science. Prof. Tropepe completed his Ph.D. in Developmental Biology at the University of Toronto studying neural stem cells in the developing and adult mouse brain and retina and, subsequently pursued a postdoctoral fellowship at the Whitehead Institute. His research interests are focused on the molecular and cellular mechanisms of neurogenesis and neurogenic plasticity during development and in the context of retinal disease and regeneration.

Monte Westerfield, PhD is Professor of Biology and a member of the Institute of Neuroscience, University of Oregon and Director of the Zebrafish International Resource Center and ZFIN, the zebrafish model organism database. Prof. Westerfield completed doctoral studies in Physiology and Pharmacology at Duke and was a Fulbright Scholar at the Max Planck Institute in Munich, Germany and Neurobiology at Harvard Medical School. He has served as Director of the Institute of Neuroscience at the University of Oregon and on advisory councils to the NIDCD. He has been the recipient of Sloan, Fogarty and Guggenheim Fellowships, the Talbot Award, and the Von Humboldt Prize, and is a Fellow of the AAAS. Prof. Westerfield studies the molecular genetics of Usher syndrome.