

# Plenary Speakers

## Elliot Meyerowitz



Elliot Meyerowitz is the George Beadle Professor of Biology, and a Howard Hughes Medical Institute Investigator, at the California Institute of Technology. His laboratory, along with others, pioneered the molecular biology of the plant reference organism *Arabidopsis thaliana* in the 1980s. In the years since they have elucidated aspects of flower development (leading to the widely recognized ABC Model of flower development), hormone perception (they were the first to clone a gene for a plant hormone receptor, that for ethylene), phyllotaxis, and meristem maintenance and function. The recent work of the Meyerowitz laboratory focuses on studies of chemical and mechanical signaling between the cells of the shoot apical meristem.

## Siobhan Braybrook



Siobhan obtained her undergraduate honours degree in Plant Biology from the University of Guelph in June 2003. In December 2008, Siobhan obtained her doctorate in Plant Biology at the University of California at Davis. In January 2013, Siobhan started as a Career Development Fellow at the Sainsbury Laboratory at Cambridge University. She has since started The Plant Mechanics Group here, which studies plant growth mechanics.

## Cara Haney



Dr. Cara Haney is an assistant professor in the departments of Microbiology and Immunology and Michael Smith Labs at the University of British Columbia. Dr. Haney's research focuses on interactions between beneficial plant-associated microbes (the "microbiome") and plant growth and disease resistance. She received her B.S. in Plant Science from Cornell University and her Ph.D. in Cell and Molecular Biology from Stanford. She worked at Harvard as a postdoc developing a model system to study plant-microbiome interactions prior to

joining the UBC faculty in 2016. Dr. Haney is a Canada Research Chair in plant-microbiome interactions.

## Sophia Stone



Sophia Stone is a Professor in the Biology Department at Dalhousie University in Halifax, NS Canada. She received her PhD at York University (2003) and completed a HFSP postdoctoral fellowship at the University of California – Davis (2006). She is the recipient of a number of research awards, most recently the Killam Prize from the Faculty of Science at Dalhousie University. She has a long standing research interest in the role and regulation of the ubiquitin proteasome system (UPS) in plant

development, reproduction and response to environmental stresses. Her current research focuses on the role of the UPS in regulating hormone biosynthesis and signalling, specifically ethylene and abscisic acid (ABA). She is also interested in identity substrate proteins that are targeted for degradation by the UPS in response to biotic and abiotic stress, such as iron deficiency, and determining how the enzymes of the UPS are themselves regulated to facilitate growth under suboptimal conditions.

## Sabeeha Merchant



Sabeeha Merchant is Director of the Institute for Genomics and Proteomics and Distinguished Professor of Chemistry and Biochemistry at UCLA. She earned degrees in Molecular Biology and Biochemistry from the University of Wisconsin, Madison, and undertook post-doctoral studies at Harvard University prior to her professorial appointment. Merchant's discoveries have influenced scholarly thought in diverse disciplines, from biogeochemistry and biological oceanography to photosynthesis, plant biochemistry and human

nutrition. Merchant formulated the concepts of elemental sparing and recycling, which operate to sustain life in situations of deficiency by prioritized distribution of the limiting resource. Her concept of “reduce and re-use” has now been demonstrated across the kingdom of life. Merchant is recognized separately in plant biology for discoveries relating to chloroplast biogenesis and contributions to the genomics of algae. Merchant has served on advisory boards in government, academia and industry and is presently Editor of the Annual Reviews of Plant Biology and Editor-in-Chief of The Plant Cell. Her accomplishments are recognized by a Guggenheim fellowship, major awards from the American Society of Plant Biologists, the National Academy of Sciences and the Alexander von Humboldt Foundation, and election to the National Academy of Sciences, the American Academy of Arts and Sciences and the Leopoldina.

## Mathew Bracken



Matt Bracken is an Associate Professor of Ecology and Evolutionary Biology at the University of California, Irvine, where he teaches courses in ecology, evolution, and marine biology. His research program employs an interdisciplinary approach to evaluating the linkages between marine communities and ecosystems, with a particular focus on the roles of primary producers in marine systems. Matt has been slowly working his way southward, having grown up in Alaska, done his undergraduate studies in biology at the University of Puget Sound in Washington, completed his Ph.D. at Oregon State University, and worked as a postdoctoral researcher at the

UC Davis Bodega Marine Laboratory. He left the U.S. west coast for 6 years as a faculty member at Northeastern University in Boston before moving back west to UC Irvine in 2014. The R2 value for the relationship between time and latitude over his life history is 0.92.

## Yves Desjardins



Yves Desjardins is full Professor and Director of International Relations (INAF) at University of Laval. His laboratory is using functional genomics tools, metabolomics and proteomics to study the adaptive phenomena taking place in in vitro plantlets during the transition from heterotrophy to autotrophy and acclimatization. His recent research focuses on the characterization and extraction of polyphenols and particularly proanthocyanidins found in blueberries and cranberries and their effects on cardiovascular diseases, metabolic syndrome, diabetes and other

chronic diseases. Yves Desjardins was president of the Canadian Horticultural Sciences Society from 2003 to 2005; he has led many networks of excellence at the national level and he is active in many international networks in France, Mexico, Belgium, Brazil and Italy.

## Harry Klee



Harry Klee received a PhD in Biochemistry from the University of Massachusetts. Following postdoctoral work at the University of Washington where he worked on the mechanisms of *Agrobacterium tumefaciens* T-DNA transfer, he was a senior scientist at Monsanto. While there, he participated in developing herbicide resistant crops as well as fundamental research in ethylene biology. In 1995 he took an endowed chair in Horticultural Sciences at the University of Florida. There his research has

focused principally on tomato fruit ripening and quality. For the last decade, his lab has used an interdisciplinary approach to understand the chemistry of tomato flavor. The lab has identified the fruit chemicals that drive consumer liking, the metabolic pathways for synthesis of the most important flavor chemicals and the underlying genetic control of flavor chemical composition. Harry is an elected Fellow of the AAAS, a member of the US National Academy of Sciences and current President-elect of the American Society of Plant Biologists.

## Andrew Groover



Andrew Groover is a Research Geneticist with the US Forest Service, and Adjunct Professor in the Department of Plant Biology at the University of California Davis. Dr Groover's lab uses imaging, molecular genetic and genomic approaches to understand the developmental biology of forest trees, with an emphasis on wood formation. Integrating different complex data types and extracting biological meaning from them is a

significant challenge, and thus Dr Groover's lab has increasingly relied on computational approaches to understand the development and evolution of wood formation.