

PADiBa 2022

Confirmed Invited Speakers



Tessa Burch-Smith



Dr. Tessa Burch-Smith is an Associate Member and Principal Investigator at the Donald Danforth Plant Science Center in St. Louis, Missouri. Prior to this, she was an Assistant then Associate Professor in the Department of Biochemistry & Cellular and Molecular Biology at the University of Tennessee, Knoxville. She completed her graduate and post-doctoral work at Yale University and the University of California at Berkeley, respectively.

Her research focuses on intercellular communication in plants, particularly on structures called plasmodesmata that allow trafficking between cells. Her research uses a variety of molecular and cell biological approaches including advanced light and electron microscopy and plant viruses. Her lab also investigates chloroplast gene expression and how signals from chloroplasts can control expression of nuclear genes via retrograde signaling.

She is the author of numerous scientific articles and has received funding for her research from the National Science Foundation and the Defense Advanced Research Projects Agency. She is also a

Senior Editor and Associate Editor-in-Chief of *Molecular Plant-Microbe Interactions*. She currently serves as Chair of the Science Policy Committee of the American Society of Plant Biologists and is a member of the ASPB Board of Directors.

Hugues Renault

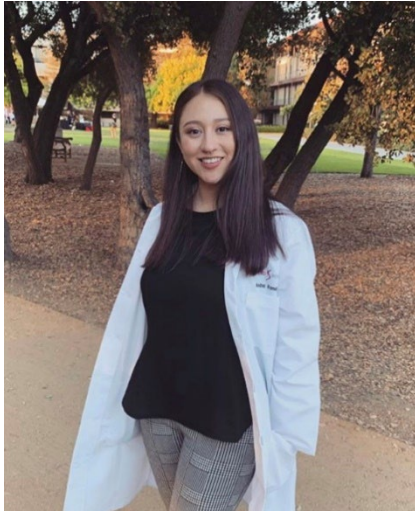


Hugues Renault obtained a PhD at the University of Rennes (France) during which he studied the functions of the GABA metabolism in plants. After a first postdoctoral experience at the University of Arizona (Tucson, USA) where he studied the plant MEDIATOR complex, Hugues Renault joined Danièle Werck's team at the Institute of Plant Molecular Biology in Strasbourg (France) to establish a research line centered on the evolution of cytochrome P450 enzymes. He then moved to the lab of Ralf Reski at the University of Freiburg (Germany) to expand his research to the origins of the plant phenylpropanoid pathway, using bryophyte models. In 2017, he got appointed tenured CNRS senior researcher at the Institute of Plant Molecular Biology in Strasbourg.

The current focus of Hugues Renault's research lies in the understanding the determinants of plant metabolic diversity, and the associated adaptive functions. More particularly, his research

investigates the origin and evolution of biopolymers that shape plant apoplastic diffusion barriers.

Andrea Ramirez



Andrea grew up in Southern California in the town of Inglewood. She moved north to earn her undergraduate degree at UC Santa Cruz (majored in Molecular, Cellular, and Developmental Biology) and further north to do her Ph.D. at Stanford.

Andrea is now building a root anatomical atlas of diverse species in the Brassicaceae family to understand how innovation in tissue functions helps plants survive under stressful conditions.

Miranda Sinnott-Armstrong



Dr. Miranda Sinnott-Armstrong is a National Science Foundation Postdoctoral Fellow in Biology, currently based at the University of Cambridge. She completed her PhD at Yale University in 2019, studying global scale patterns in fruit colors as well as the evolution of biophotonic structures in the plant clade Viburnum. Her current research focuses on characterizing novel structural colors in fruits and on understanding their evolution and ecology. She is particularly interested in understanding the morphological origins of novel structural colors, such as whether some structural colors are derived from a modification of cuticle synthesis. Her research uses a variety of techniques, especially electron microscopy, optical simulations, phylogenetics, and comparative methods. Miranda currently serves on the Early Career Professional Development Committee for the Botanical Society of America.

Ohkmae K. Park



Ohkmae K. Park graduated from Seoul National University and obtained PhD in biochemistry from University of Virginia. She worked as a postdoc on the EGFR-JAK-STAT pathway in animals at Jones Hopkin University School of Medicine. She joined Kumho Life & Environmental Science Laboratory as a Principal Investigator in 1997, where she began her study of proteomics and defense signaling in plants. In 2005, she was appointed as a professor in the Department of Life Sciences at the Korea University. Her research interests include cell wall defense and lignin barrier, autophagy and proteostasis, and ethylene-jasmonic acid signaling and crosstalk in plant immunity.

Luis Lopez Molina



I am a group leader at the University of Geneva (UNIGE, Switzerland) since 2004. I studied theoretical physics at the UNIGE for my Master degree and then the molecular biology of mammalian circadian rhythms for my PhD degree, under the supervision of Prof. Ueli Schibler (UNIGE). I am currently interested in identifying the major processes withstanding the control of germination in *Arabidopsis thaliana* seeds. I initiated my research on this topic during my postdoctoral research in the laboratory of Prof. Nam-Hai Chua (Rockefeller University, New York, USA) where I studied ABA signaling and its role to control germination. Since then, my group has characterized the signaling pathways governing

the control of seed germination in response to abiotic and biotic cues and studied the role of epigenetic modifications for the regulation of seed dormancy. A major focus of our work is to study the function of the endosperm since it plays an essential to control germination. More recently, we have been interested in the role of seed apoplastic barriers to regulate seed dormancy.

Yoselin Benitez-Alfonso



Dr. Yoselin Benitez-Alfonso is Associated Professor in Plant Sciences at the University of Leeds (UK). She was born in Cuba and graduated in the Faculty of Chemistry in University of Cordoba, Spain. Yoselin did her PhD in plant biochemistry and molecular biology followed by postdoctoral research at Cold Spring Harbor Laboratory in New York (USA) and at the John Innes Centre (Norwich, UK). In 2017, she was appointed Lecturer at the University of Leeds, where she secured multiple funding including a recent UKRI Future Leaders Fellowship. Yoselin research group focuses on studying cell walls properties surrounding plant intercellular channels (named plasmodesmata) with the goal to unlock knowledge for the

development of new strategies for crop improvement and biomaterial development. Yoselin is an advocate for equality and inclusion and outreach. She engages with social media via twitter @benitez_lab and @YoselinBenAlf. For more info visit benitezalfonso.wordpress.com.

Bénédicte Bakan



Dr. Bénédicte Bakan, PI scientist at INRAE (Biopolymers Interactions & Assembly lab., Nantes, France), develops multidisciplinary research on the structure and biosynthesis of the cutin biopolymer in relation to its functional and technological properties. The different biochemical and biophysical strategies developed for the characterization of the polymer enabled to decipher the function of CUS1 (cutin synthase), in collaboration with INRAE Bordeaux, and to improve the understanding of the composite structure of the cutin-polysaccharide continuum.

Mikio Nakazono



Mikio Nakazono is a professor of Graduate School of Bioagricultural Sciences at Nagoya University in Japan. He earned a PhD degree from University of Tokyo in 1995. After completion of his PhD, he worked at University of Tokyo as an Assistant Professor (1995 to 2003) and an Associate Professor (2003 to 2010) and then he moved to Nagoya University as Professor in 2010. He has studied molecular mechanisms of plant response and adaptation to abiotic stresses (especially flooding stress) for more than 20 years. In particular, he is interested in the mechanisms for the radial oxygen loss barrier formation and the aerenchyma formation, both of which are induced in some plant roots under flooded soil conditions.

Teagen Quilichini



Dr. Teagen Quilichini is a Research Officer at the National Research Council (NRC) in Saskatoon Canada and fascinated by how plants adapt to the stresses of sessile, terrestrial life. Her doctorate at the University of British Columbia in Vancouver Canada examined the toughened wall encasing spores and pollen that is critical for land plant reproduction. By merging leading-edge imaging with molecular genetics, her work contributed insights into the composition and transport of evasive 'sporopollenin', believed to be the strongest biopolymer on earth. After completing her doctorate, Dr. Quilichini transitioned into an industry-based postdoctoral position with Anandia Laboratories Inc., and revealed specialization among the multicellular trichome factories that produce the complex essential oils of *Cannabis sativa*. In her current position as a Research Officer at the NRC, Dr. Quilichini has focused on characterizing the genetic regulation of embryogenesis and seed development in agriculture-relevant species, including wheat, Brassicas (canola), legumes and their ancestral relatives. Dr. Quilichini is an active advocate for women in STEM and enjoys speaking with early career scientists about alternate research career paths.