Early Career Advisory Board

In 2019, JCB created an Early Career Advisory Board as part of our ongoing efforts to ensure that the journal is representative and responsive to the needs of the entire cell biology community. Our Early Career Advisory Board members have the opportunity to participate in our editorial decision-making process and provide their input on journal policies and future projects. We are very happy to introduce our current Early Career Advisory Board members and to announce this exciting, long-term initiative to the community. Also read a recent Q&A with our Early Career Advisory Board members where they talk about how they found their academic position, the art of negotiating, and how they manage the demands of starting a new laboratory.

Greg Alushin
Greg Alushin studies structural mechanisms of the cytoskeleton in cellular force generation and force sensing. He received his PhD in biophysics from the University of California, Berkeley, in 2012, where he worked with Eva Nogales to visualize structural transitions in tubulin underlying microtubule dynamic instability and the interfaces that harness these dynamics to power chromosome motions during mitosis. After a brief postdoctoral training with Clare Waterman at the National Institutes of Health (NIH) studying the cell biology of the actin cytoskeleton and mechanical signal transduction, Greg received an NIH Director’s Early Independence Award in 2013 to establish his laboratory as a faculty fellow. In 2017, Greg moved to The Rockefeller University as an assistant professor, where he is working to directly visualize how mechanical forces regulate the structure and function of cytoskeletal filaments and their cellular partners. He has received several recognitions for his work, including the ASCB Norton B. Gilula award and the Presidential Early Career Award for Scientists and Engineers.

Prachee Avasthi
Prachee Avasthi is assistant professor of anatomy and cell biology at the University of Kansas Medical Center. She received her PhD in neuroscience in 2009 from the laboratory of Wolfgang Baehr at the University of Utah. She then completed her postdoctoral studies with Wallace Marshall at the University of California, San Francisco. Using a unicellular green alga as a model system, her NIH-funded laboratory uses chemical biology, biochemistry, genetics, and quantitative live cell imaging to uncover novel mechanisms regulating assembly of the ubiquitous cell-cellantenna, the cilium. Prachee is a strong advocate for improved publication practices and serves on the Board of Directors for ASAPBio and eLife. She also founded the online peer-mentoring community for junior faculty, New PI Slack, and is involved in various efforts to support early-career scientists.

Huaqing Cai
Huaqing Cai received her Bachelor’s degree from Peking University. As a graduate student at Yale University, she studied the cellular mechanisms that ensure correct vesicle targeting along the secretory pathway. Her postdoctoral work focused on understanding how cells decode spatiotemporal signals in the process of chemotaxis. She became a principal investigator at the Institute of Biophysics, Chinese Academy of Sciences, in 2016. Using biochemistry and the powerful genetic tools available in the model system Dicyostelium, her research team aims to understand how signaling and cytoskeletal networks coordinately control cell behavior plasticity, including cell migration and macroinocytosis, two processes that fulfill distinct function yet share common structural features and have profound implications for human health.

Lillian Fritz-Laylin
Lillian Fritz-Laylin is an evolutionary cell biologist who combines microscopy with comparative genomics and phylogenetics to understand the evolution and regulation of the eukaryotic cytoskeleton. Her laboratory studies two organisms with dynamic cytoskeletal properties and unique positions in the evolutionary tree: the amphibian-killing Bradlochytium dendrobatidis and Naegleria gruberi, which is a nonpathogenic cousin to the fatal “brain-eating amoeba.” Studying these diverse organisms has revealed conserved features of the eukaryotic cytoskeleton, as well as uncovered new and unexpected behaviors of less-studied pathogens. Dr. Fritz-Laylin received her PhD from the University of California, Berkeley, where she combined classical cell biology with comparative genomics in the laboratory of Dr. W. Zac Cande. She was a Helen Hay Whitney Postdoctoral Fellow in the laboratory of Dr. Dyche Mullins at the University of California, San Francisco, and is currently an assistant professor in the biology department at the University of Massachusetts, Amherst.

Susana Godinho
Susana Godinho is a senior lecturer at Barts Cancer Institute, Queen Mary University of London. Dr. Godinho received her undergraduate degree in biology from the University of Lisbon and did her PhD at the Institute Gulbenkian of Science (Portugal) and Cambridge University (UK). Following her postdoctoral training in the laboratory of Dr. David Pellman at the Dana-Farber Cancer Institute and Harvard Medical School, Dr. Godinho moved to London to start her own laboratory in 2013. The Godinho laboratory is interested in understanding how cells sense and respond to cytoskeleton abnormalities. The laboratory is particularly interested in studying the impact of centrosome amplification on cellular physiology and tumorigenesis.
Laura Lackner
Laura Lackner is interested in the fundamental biological question of how spatial and dynamic organization within cells is achieved. As a model for intracellular organization, she studies the mechanisms that position mitochondria. Laura received her Bachelor of Science in life science chemistry from John Carroll University and her PhD in molecular biology from Case Western Reserve University, where she worked with Piet de Boer on the mechanism of division site selection in Escherichia coli. She went on to do her postdoctoral work with Jodi Nunnari at the University of California, Davis. In the Nunnari laboratory, she studied the mechanisms of mitochondrial division and positioning. She started as an assistant professor at Northwestern University in 2013, where her laboratory is working to understand fundamental mechanisms used by cells to position mitochondria as well as form and regulate interorganellar contacts. She is a Scalog Fellow and a Keith R. Porter Fellow. Photo credit: Sadie Wignall.

Michael Lazarou
Michael was awarded his PhD from La Trobe University studying the assembly of mitochondrial protein complexes and their defects in energy generation disorders. He conducted his postdoctoral studies in Richard Youle’s laboratory at the NIH, focusing on the Parkinson’s disease proteins PINK1 and Parkin and their role in maintaining mitochondrial health through mitophagy. That work led to Michael receiving the 2013 ASMBB Boomerang Award, and in 2015 he started his independent research group at the Monash Biomedicine Discovery Institute (Monash University, Australia). Michael is an Australian Research Council Future Fellow and his laboratory’s research focuses on the function of PINK1 and Parkin, mitochondrial quality control, and the intricate cell biology behind autophagy.

Tomoko Nishiyama
Tomoko Nishiyama received a Bachelor of Science and a PhD at the Tokyo Institute of Technology, Japan, where she worked on the study of the meiotic cell cycle in frog eggs. She performed postdoctoral research in chromosomal biology with Jan-Michael Peters at the Institute of Molecular Pathology in Vienna, Austria, from 2008 to 2012. She started leading her laboratory in 2012 at Nagoya University, Japan, and investigates how the eukaryotic genome is equally distributed in every dividing cell in a cell cycle–dependent manner, especially by focusing on the molecular mechanisms underlying sister chromatid cohesion at the resolution of single molecules to cells.

Mahak Sharma
Mahak Sharma is an associate professor and Wellcome Trust/DBT Intermediate Fellow in the Department of Biological Sciences at the Indian Institute of Science Education and Research, Mohali, India. She got her graduate training at the University of Nebraska Medical Center (2004–2009) with Dr. Steve Caplan and Dr. Naava Naslavsky and completed her postdoctoral training with Dr. Michael B. Brenner at Brigham and Women’s Hospital, Harvard Medical School (2009–2011). In October of 2011, she moved back to her home country of India to set up her independent laboratory. Her research interests are focused on studying the molecular mechanisms regulating membrane trafficking toward lysosomes and how pathogens manipulate the endolysosomal pathway for their growth and survival.

Yan Song
Yan Song is a principal investigator at the School of Life Sciences and Peking-Tsinghua Joint Center for Life Sciences at Peking University (PKU). She received her PhD in molecular genetics from Duke University and completed her postdoctoral training with Bingwei Lu at Stanford University. In 2012, she joined the faculty of PKU to start her independent research group. Combining powerful fly genetics and state-of-the-art imaging with cell biology and biochemical approaches, her research group uses fruit flies, mice, and human cell lines to decipher the secrets of stem cell fate specification and commitment in development and disease. Her group currently focuses on understanding how timely cell fate commitment is achieved and how temporal and spatial cues are integrated to dictate cell fate/identity in stem cell lineages.

Juanma Vaquerizas
Juanma (Spanish short form for “Juan Manuel”) studied molecular biology and biochemistry at the Universidad Autónoma de Madrid, Spain. He received his PhD from the Spanish National Cancer Centre and Universidad Autónoma de Madrid (2008), where he worked on the characterization of the human transcription factor repertoire. Juanma trained as a postdoctoral fellow with Dr. Nick Luscombe at the European Molecular Biology Laboratory - European Bioinformatics Institute in Cambridge, UK, where he focused on the study of the dosage compensation mechanism in Drosophila melanogaster. Since 2012, Juanma is a Max Planck Research Group Leader at the Max Planck Institute (MPI), Muenster, Germany. His group is interested in understanding the role of 3D chromatin conformation during development and disease. Photo credit: Jeannine Mueller-Keuer/MPI Muenster.

Julia von Blume
Julia von Blume performed her PhD in the laboratory of Thomas Seufferlein at the University of Ulm, where she investigated signaling-dependent nuclear transport of protein kinase D. In 2007, she moved to the laboratory of Vivek Malhotra at the University of California, San Diego, and Centre Regulació Genomica in Spain. During her work as a postdoctoral fellow, she discovered a novel sorting mechanism for secretory proteins. The major components that regulate this novel sorting process include F-actin, cofillin, the Golgi Ca2+-ATPase SPCA1, Ca2+, and C4bS. She then moved as an independent group leader to the MPI of Biochemistry in Munich, Germany, to further dissect the sorting mechanism using in vitro reconstitution and cell biology. In 2018, she was recruited to the department of cell biology at Yale School of Medicine. The overarching goal of her research group is to dissect mechanisms that facilitate sorting of secreted proteins that include signaling molecules such as hormones, cytokines, or chemokines, as well as extracellular matrix proteins such as collagen. Their misorting causes a variety of diseases such as cancer, diabetes, and autoimmune diseases. Therefore, an elucidation of the molecular mechanisms by which the Golgi apparatus sorts secreted proteins is key to understand how the underlying mechanisms are integrated with cell physiology. Her research program focuses on sorting reactions in the trans-Golgi Network with particular emphasis on the role of protein and lipid complexes that recognize and pack secreted proteins into specific transport carriers. This process is crucial to facilitate secretion and function of these factors in different cell types and organisms. Photo credit: Wolfgang Fink.