ascb honors and awards

5 cell bio virtual 2021: advances in cell biology and beyond

17 education and professional development sessions

20 ascb honors and awards

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**ascb news**

want to get more involved with ascb?
join a committee! ........................................... 9
announcing the 2021 cell bio image
& video contest! ............................................. 9
mboc begins continuous publication .................. 10

**science and technology**

quantitative biology: embrace the numbers ........ 11
highlights from mboc ........................................ 13

**annual meeting**

cell bio virtual 2021 ........................................ 14
2021 ascb doorstep meeting .............................. 16
education and professional development
sessions seek to showcase “silver linings” .......... 17
fourteen scientists elected
to the 2021 cohort of ascb fellows.................. 20
pietro de camilli selected
for 2021 e.b. wilson medal ............................. 21
david a. micklos honored with 2021 bruce alberts
award for excellence in science education ....... 22
rebecca heald to deliver
2021 keith r. porter lecture ............................ 24

**columns**

emerging voices ........................................... 32
science and society ....................................... 34
highlights from lse .......................................... 37

**careers**

career navigator ........................................... 38
dear labby ................................................... 42

**members**

in memoriam: william r. brinkley ...................... 43
member gifts ................................................ 44
Cell Bio Virtual 2021: Great Science and More, Without the Hassle of Traveling

by W. Mark Leader, Editor

The world’s largest gathering of cell biologists, the annual ASCB|EMBO meeting, will again be virtual this year. Last year’s virtual meeting was well received, but this year’s Cell Bio Virtual 2021 will be even better, especially with regard to poster presentations. The barrier to attending the meeting is low: only a modest registration fee. No travel, no hotel, no hassle.

For an outline of the exciting science and other events at the meeting, see the President’s Column by guest authors Daniel Gerlich and Denise Montell, Co-Chairs of the 2021 Program Committee (p. 5). As they observe, the meeting is as much about researchers as about research. That is why ASCB offers extensive programming in education and professional development, as outlined on p. 17. And to honor those who are doing great work in research, education, and other areas, ASCB offers awards at all career levels. Meet eight of those award winners and the 2021 cohort of ASCB Fellows in the articles beginning on p. 20. (The rest of the award winners will be introduced in the December issue.) Many of the award winners will be speaking at the meeting. Come get inspired!

See the Career Navigator column on p. 38 for insights into how scientists at all career levels can make the most of attending Cell Bio Virtual 2021 or other meetings and what we can all do to make meetings more inclusive. And don’t miss Labby’s advice to a trailing spouse (p. 42) or the Emerging Voices story about helping students see the full breadth of career opportunities available to them (p. 32).
Hayflick Honored for Challenging Cell Mortality Dogma

The International Cell Senescence Association (ICSA) awarded Leonard Hayflick the first Honorary Membership in the ICSA for his “seminal discovery of cellular senescence.” Hayflick is a member emeritus of ASCB, having joined in 1960, and is a professor of Anatomy at the University of California, San Francisco.

In a virtual award ceremony held April 20, Hayflick told the participants that because the Merriam-Webster’s dictionary defines a “serendipitist” as “... one who finds valuable or agreeable things not sought for,” he qualifies because in his research on the viral etiology of cancer he first attributed the failure of cell replication in his serial cultures of normal human fetal fibroblasts to an error in his culture techniques. A 60-year-old dogma at the time was that culture cells were immortal.

After observing that only cells in cultures that underwent the most replications stopped dividing, he disproved the dogma by finding that only cancer cells are immortal and that normal cell mortality is caused by intra-nuclear events. He interpreted this to be senescence, or aging, at the cellular level. This redirected aging research from extracellular to intracellular causes. Years later telomere attrition and telomere expression, found by others, explained the molecular etiology of his phenomenological findings. Hayflick stated that aging is a universal phenomenon of all matter and that it is explained by the Second Law of Thermodynamics.

You can watch the ICSA ceremony and Hayflick’s talk at https://youtu.be/squGQOWdOIY.

Celia Regina Da Silva Garcia, an ASCB Fellow and professor at the University of São Paulo, was recently named as a Fellow of The World Academy of Sciences (TWAS). TWAS is a merit-based science academy, representing the best of science in developing countries. Only those scientists who have attained the highest international standards and have made significant contributions to the advancement of science can be nominated as Fellows. Membership is for life.

Howard Hughes Medical Institute (HHMI) has elected a new cohort of 33 Investigators from across the United States, who will each receive roughly $9 million over a seven-year term—renewable pending a successful scientific review. HHMI selected the new Investigators from more than 800 eligible applicants. ASCB members named as new HHMI Investigators include Cagla Eroglu of Duke University and John McCutcheon of Arizona State University.
ASCB President Ruth Lehmann invited Cell Bio Virtual 2021 Program Committee co-chairs Daniel Gerlich and Denise Montell to write this issue’s President’s Column.

**Excellence through Diversity**

Cells are spectacularly diverse: from miniscule microbes to massive oocytes to motor neurons with meters-long axons. And from the unlimited potential of zygotes to the 100-year-old cardiomyocyte still beating in a centenarian’s heart, cells never cease to amaze. Underneath this diversity though, lie deeply conserved processes, and the more we learn about the inner workings of cells, the clearer the fundamental similarities in core mechanisms become.

Cell biologists are as diverse yet fundamentally similar as their research subjects. The overarching goal of Cell Bio 2021 is to showcase and bring together the full spectrum of cell biology research and researchers. Given the incredible range of topics and approaches, it is impossible to cover everything in a concise overview. So here is just a taste of what will be on offer at Cell Bio Virtual 2021:

**Highlights**

**Biomolecular condensates.** Hiding in plain sight, liquid–liquid phase separation, which generates membraneless organelles, has emerged as a ubiquitous mechanism for spatial segregation within cells. Mixtures of biomolecules that self-organize into micron-scale structures to compartmentalize biochemical reactions, localize signaling events, and serve biomechanical functions have taken cell biology by storm. Amy Gladfelter, Simon Alberti, and many others will share their latest findings about the molecular mechanisms underlying biomolecular condensates and their roles in spatial and temporal organization of the cytoplasm.

**Cell and tissue mechanics.** With unrivaled physical beauty and structural importance, the cytoskeleton is an enduring favorite of cell biologists. Enrique De La Cruz will share recent work investigating how cells regulate the length, assembly, and severing of actin filaments. His is among many presentations on this core subject.

**Imaging across scales.** What you see depends on how you look, and innovations in microscopy have long been driving cell biology discoveries. Recent technical advances are allowing interrogation of ever smaller and ever larger biological structures, from the single molecule to the tissue scale, and permitting automated imaging for genome-wide perturbations. Xiaowei Zhuang, a pioneer of super-resolution fluorescence microscopy, will deliver a Keynote Lecture showcasing integration of intelligent probe design with cutting-edge microscopy and sophisticated computational approaches to provide insights into
genome architecture and gene expression programs. Expanding into multiscale and automated imaging, Jan Ellenberg will show how imaging approaches provide insights into cell division and nuclear organization. David Van Valen leverages advanced imaging, genomics, and deep learning software developed by his laboratory to acquire integrated measurements probing microbial host–virus interactions.

**Intra- and intercellular communication.** Membrane-bound organelles like mitochondria, peroxisomes, endoplasmic reticulum, and lysosomes are key features of eukaryotic cells. Although organelles are mostly studied independently, inter-organelle communication is emerging as critical to cellular homeostasis and stress responses. Maya Schuldiner will discuss the molecular composition and functional consequences of direct contacts between organelles. While organelles are busy interacting inside the cell, on the outside cells encounter extracellular matrices and other cells. At tissue boundaries, inter-organ communication is only just beginning to be explored. The blood–brain barrier is a particularly fascinating—and enormous—site for critical communication between the vascular system and the brain. Chenguai Gu will present the latest findings from her lab on the molecular and cellular mechanisms that regulate the blood–brain barrier normally and in disease.

**The nucleus.** The largest organelle, the nucleus, is cellular headquarters and home to the genome and epigenetic regulation. Tracy Johnson will present her insights into the interplay between the RNA splicing machinery and chromatin in the regulation of eukaryotic gene expression. Jennifer Phillips-Cremins combines cutting-edge 3D epigenomics with stem cell and organoid systems to study mammalian brain development and function.

**Organogenesis.** As cell biology extends its tentacles into the very small and the ever larger, organoids represent another exciting frontier. Development of multicellular organs and organisms relies on self-organization into layers, tubes, and even more complex structures, a veritable and varied cellular origami. While much has been—and continues to be—learned from organisms such as worms, flies, fish, and mice, the ability to grow miniature organ-like structures has launched research in many exciting directions, including a new era in the study of human cells and tissues in health and disease. Madeline Lancaster and Prisca Liberali will speak about how brain and gut organoids can be used to gain insights into organogenesis, and Sara Wickstrom will describe how multiple stem cells fuel the growth, differentiation, and renewal of our largest organ, the skin.

**Signaling and metabolism.** The study of cellular metabolism in health and disease has undergone a renaissance in recent years. It has long been appreciated that the cancer cell metabolism differs from that of normal cells. Donita Brady will share her thoughts on the roles of metal ions in nutrient sensing and regulation of protein kinases. Bao-Liang Song will present the latest on cholesterol homeostasis, trafficking, and signaling.

**Regulation of cell death and survival.** In times of stress, cells either adapt or die. We will hear late-breaking research from Noburo Mizushima into
autophagy mechanisms and from Vishva Dixit into cell death and inflammation.

**Special Interest Subgroups.** These member-organized sessions provide a forum for deep discussions about themes that bubble up from the community. Look here for tomorrow’s next big thing. Ranging from currently niche topics that could well come to dominate the meeting in a few years (e.g., Quantum Biology) to those that burn with urgency today (e.g., Membrane Biology of Virus Entry and Assembly), the Special Interest Subgroups are a bonus of a large meeting. These sessions provide a refreshing stream of emerging trends and ideas from many fields, inspiring our broad community.

**Doorstep Meeting on Neurodegeneration and Repair.** A popular addition to the ASCB|EMBO meeting in recent years, the doorstep meeting takes place the day before the official start of the meeting. This year’s event will feature both junior and senior speakers including Pietro De Camilli, Frank Bradke, Ai Yamamoto, and Andrea Stavoe, along with a greater number of talks to be chosen from submitted abstracts. You won’t want to miss the interactive sessions on Therapeutic Approaches, with panelists from foundations and pharma, networking sessions, and important discussions on how to improve the culture of science through inclusion and diversity.

**Minisymposia.** A perennial highlight of the meeting, tune in to the Minisymposia for the most current science selected from submitted abstracts.

**Poster sessions.** One of the big challenges of virtual conferences has been poster sessions. So we are excited to present a new and improved format. Presenters will have the ability to upload a three- to five-minute audio presentation for on-demand listening. Posters will be grouped together by topic to help attendees find their favorites. An asynchronous chat will be available for each poster throughout the meeting. There will also be a 30-minute time slot each day where poster presenters can choose to be available. The scheduled time slots are at different times each day to better accommodate the different time zones of those participating in the meeting. Poster presenters can choose to be available for as many of these time slots as they wish and indicate in the virtual platform when they will be there. Up to nine other attendees can join the poster presenter in the room to discuss the poster. The poster presenter will be able to share their screen with their poster or videos.

**Education and professional development sessions.** The meeting is as much about researchers as it is about their research, and we are committed to enhancing the professional development of all attendees through learning and networking opportunities. Check out sessions on career options, transitioning careers, skills building, teaching, international relations, science policy, publishing, communications, diversity in the workforce, and more. Most sessions will be available live for group interactions, and hot topics from Cell Bio 2021 will be available in our on-demand library.

**Minorities Affairs Committee FRED Symposium.** The Faculty Research and Education Development (FRED) Mentoring Program, supported by ASCB’s Minorities Affairs Committee, is designed to promote grant funding success for senior postdocs and junior faculty from backgrounds underrepresented in STEM
or faculty members at minority-serving institutions. Hear great science from FRED program participants, learn more about the successes of the FRED program and what it offers, and connect with FRED program mentee and mentor alums to expand your network and establish potential collaborations for future projects.

**Women in Cell Biology 50th Anniversary.** This year, we celebrate the founding of ASCB’s Women in Cell Biology (WICB) Committee and the contributions, challenges, and triumphs within the social and academic landscape that women in STEM have met over the last 50 years. Discover awesome science presented in a special “Wonder Women in Cell Biology” session; explore real conversations and situations encountered by members in the mentoring theater, “WICB50: Challenges and triumphs of women in cell biology over 50 years;” and join WICB-led networking sessions that will reflect on how the role of the WICB Committee and women in cell biology has evolved with a forward look at making positive change for the future.

The COVID pandemic has upended nearly every aspect of our lives for more than a year now. While we had hoped to see you in person, the online format does offer some advantages, such as access for many who would not be able to attend in person and the opportunity for more inclusive Q&A. So, we invite you to join us. There is so much we have to learn from each other, and we are really looking forward to a great Cell Bio 2021!

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**About the Authors**

Daniel Gerlich is a Senior Group Leader at the Institute of Molecular Biotechnology of the Austrian Academy of Sciences in Vienna. Denise Montell is the Duggan Professor of Molecular, Cellular, and Developmental Biology at the University of California, Santa Barbara.

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**Have your CV reviewed online by experienced scientists**

[ascb.org/career-development/cv-review](ascb.org/career-development/cv-review)

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*ascb newsletter october 2021*
Want to Get More Involved with ASCB? Join a Committee!

Now’s your chance to apply to join one of ASCB’s many committees or self-nominate to be considered for a seat on Council! ASCB has numerous standing committees to meet members’ interests. Get to know others with those same interests, boost your CV, and help your Society move forward.

This volunteer opportunity is open from August 1 to October 15, 2021. All you need to do is submit a CV and a statement of interest. You will be asked to describe your work in and commitment to diversity, equity, and inclusion (in a maximum of 200 words).

Most committees take on somewhere between three and five new people each year as Associate members for one year, before considering those Associates for full three-year terms.

Find out more about the following committees and apply at ascb.org/committees.

- Ambassadors
- Committee for Postdocs and Students
- Council
- Education
- Finance & Audit
- International Affairs
- LGBTQ+
- Membership
- Minorities Affairs
- Nominating
- Program
- Public Information
- Public Policy
- Women in Cell Biology

Announcing the 2021 Cell Bio Image & Video Contest!

ASCB is holding another contest to find amazing images and videos that show the beauty of cell biology. Winning entries will be featured during Cell Bio Virtual 2021-An Online ASCB|EMBO Meeting in December. We are looking for striking images that feature any aspect of cell biological research, including light and electron micrographs, movies, images of gels or other assays, data visualization, and computer simulations. Submissions can be either still images or short (up to 15 second) videos. Submit by Oct. 30 at https://www.ascb.org/science-policy-public-outreach/science-outreach/cellbio2021-image-contest.
MBoC Begins Continuous Publication

By W. Mark Leader

Beginning with the October 1, 2021, issue *Molecular Biology of the Cell* (MBoC) will be published continuously, meaning that articles will be posted online in their final form as they complete the production process rather than waiting for an issue to be released. There will be 14 issues per year (including two special issues), but each issue will fill gradually as it approaches its release date.

“Continuous publication will enable us to accelerate publication of the final versions of articles,” said Matt Welch, Editor-in-Chief of MBoC. “Rapid publication is important in scientific communication, which is why the MBoC Editorial Board also strives for rapid peer review and editorial evaluation. MBoC will continue to publish accepted ‘in press’ manuscripts soon after acceptance.”

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Quantitative Biology: Embrace the Numbers

By Mary Spiro

ASCB’s basic science research journal, *Molecular Biology of the Cell* (MBoC), has issued a call for abstracts for the Eighth Special Issue on Quantitative Cell Biology. The deadline for abstracts is November 1. The popularity of these particular special editions proves that there is an increasing interest in collecting quantitative data that either backs up or is used to predict experimental observations. These collaborations between experimental biologists, computer scientists, and mathematicians are vitally important, explained Alex Mogilner of New Quantitative Biology in action to model nuclear positioning in multinucleated muscle cells. Images on the left from Manhart et al. (PLoS Comp. Biol. 14, e1006208) show models filtered by their ability to produce an evenly spread single file of nuclei in the thin cell, and double file in the wide cell. The image on the right is a 3D rendering of Drosophila larval muscles. At the bottom, we have a system of mechanical equations for simulating multiple nuclei positioning by pairwise distance-dependent forces.

\[
\frac{dX_i}{dt} = \sum_{j=1}^{N} f(||X_i - X_j||) \frac{X_i - X_j}{||X_i - X_j||} + \sum_{k \in \{L,R\}} g_k(||X_i - w_k^i||) \frac{X_i - w_k^i}{||X_i - w_k^i||} \\
+ \sum_{k \in \{U,D\}} g_p(||X_i - w_k^i||) \frac{X_i - w_k^i}{||X_i - w_k^i||},
\]
York University, who along with HHMI senior group leader Jennifer Lippincott-Schwartz and Diane Lidke of the University of New Mexico School of Medicine is co-editor of this and past iterations of the Special Issue.

“The data that is coming out of experiments is getting more and more quantitative every year and the amount of data is greater and greater,” Mogilner said. “The ultimate goal is the same as it has always been—to understand the life of the cell. Decades ago this understanding was based on qualitative experiments and a lot of intuitive thinking and guessing. Nowadays we are trying to harness the quantitative nature. It’s becoming impossible to just process this data using our brains—we have to use computers, and computational and mathematical tools, to process the data.”

Of course, the use of mathematics in biology is not new. Mogilner noted several examples of how mathematics has been applied to better understand biological processes, such as the Lotka-Volterra equations, also known as the predator–prey equations, developed in the early twentieth century and used to describe how two species interact.

“Then Alan Turing in 1952 proposed a model that gave a very good explanation of morphogenesis or pattern formation in biology using math. In the same year, coincidentally, there was the Hodgkin-Huxley model for nerve impulse propagation,” Mogilner said. But those examples were few and far between.

“What is special now (it seems) is that every second paper uses some kind of mathematical computational tool,” he said. “We are very lucky now to be in the middle of this quantitative revolution.”

Mogilner remarked that computational biology even adds more depth to the figures included with papers. In the past you would have your “Figure 7,” which would usually be a cartoon visually summarizing the data presented in the previous six figures. “Now those figures are supported by computer simulations,” he said.

The feedback loop generated by analysis of preliminary data, which generates models, which then begets experiments, which provide more data that further refines the model and so on, Mogilner said, “creates the most spectacular studies.” He added that he is excited by the work he is seeing that uses artificial intelligence and machine learning to create models and to predict experimental outcomes.

“With this modern blend of data analysis and mathematical modeling maybe we will have the ability to predict the things that we can’t understand, yet,” Mogilner said. “Embrace the numbers [and] submit the good stuff to us [MBoC].”

You can listen to the entire interview with Alex Mogilner on the October ASCB Pathways Podcast: https://anchor.fm/ascb-pathwayspodcast.
Be sure to check out the Fifth Annual Special Issue on Forces on and within Cells
www.molbiolcell.org/toc/mboc/32/18

Here are some important recent papers that the MBoC Editorial Board has selected for highlighting:

**Stochastic contraction of myosin minifilaments drives evolution of microridge protrusion patterns in epithelial cells**

Aaron P. van Loon, Ivan S. Erofeev, Andrew B. Goryachev, and Alvaro Sagasti (August 1, 2021)

Microridges are elongated protrusions that form regular mazelike patterns on the surface of epithelial cells. Cortical myosin minifilament activity in zebrafish skin cells orchestrates microridge rearrangements that alter their patterning and help them evolve toward a regular, nematic arrangement.

**Three-dimensional superresolution fluorescence microscopy maps the variable molecular architecture of the nuclear pore complex**

Vilma Jimenez Sabinina, M. Julius Hossain, Jean-Karim Hériche, Philipp Hoess, Bianca Nijmeijer, Shyamal Mosalaganti, Moritz Kuehlbeck, Andrea Callegari, Anna Szymborska, Martin Beck, Jonas Ries, and Jan Ellenberg (August 15, 2021)

We combined 3D superresolution microscopy with computational classification and averaging to explore the structure of the NPC in single human cells. We present the first integrated 3D map with molecular specificity and nanoscale resolution, which indicates that the nuclear ring and the nuclear basket of the NPC can adopt different conformations.

**Praja1 ubiquitin ligase facilitates degradation of polyglutamine proteins and suppresses polyglutamine-mediated toxicity**

Baijayanti Ghosh, Susnata Karmakar, Mohit Prasad, and Atin K. Mandal (August 15, 2021)

Accumulation of intracellular toxic misfolded proteins acts as an important pathological hallmark in polyglutamine (polyQ) diseases. In this study, we investigate how Praja1 ubiquitin ligase, which is abundantly expressed in the brain, clears these polyQ proteins and subsequently helps in suppressing the cytotoxicity associated with them.

**A troponin T variant linked with pediatric dilated cardiomyopathy reduces the coupling of thin filament activation to myosin and calcium binding**

Samantha K. Barrick, Lina Greenberg, and Michael J. Greenberg (August 19, 2021)

A variant in troponin T associated with dilated cardiomyopathy, R134G, decouples thin filament activation from calcium and myosin binding. These defects lead to molecular and cellular hypocontractility and sarcomeric disorganization in cardiomyocytes, demonstrating that altered molecular forces drive the disease pathogenesis.
The reinvented ASCB|EMBO meeting is once again taking to the virtual stage, with leading-edge cell biology research and lots of networking opportunities.

Cell Bio Virtual 2021 is the place to be inspired by and collaborate with stellar researchers in the field, grow professionally with education and professional development sessions, and stay on top of the latest technology from around the globe.

ASCB prioritizes inclusivity and diversity in science as reflected in the meeting’s hot topics and engaging programming. To enhance our inclusive environment, we look to you, our members—as presenters, organizers, and attendees from every career level, research area, and institution—as leaders to create and plan content that best suits the meeting you want to attend. This is a meeting designed by you.

**KEYNOTE LECTURE**

**Xiaowei Zhuang**
Harvard University and HHMI

**SYMPOSIA**

**IMAGING ACROSS SCALES**
Tracks: Cellular Dynamics, Signaling and Metabolism

- **Jan Ellenberg**
  EMBL Heidelberg, Germany

- **David Van Valen**
  California Institute of Technology

**THE NUCLEUS**
Track: Cellular Genome

- **Jennifer Phillips-Cremins**
  University of Pennsylvania

- **Tracy Johnson**
  University of California, Los Angeles

**MODELING ORGANOGENESIS**
Track: Communal Cell

- **Madeline Lancaster**
  MRC-LMB, UK

- **Prisca Liberali**
  FMI Basel, Switzerland

**SIGNALING AND METABOLISM**
Track: Signaling and Metabolism

- **Donita Brady**
  University of Pennsylvania

- **Bao-Liang Song**
  Wuhan University, China

**BIOMOLECULAR CONDENSATES**
Tracks: Cellular Dynamics, Physical Cell

- **Amy Gladfelter**
  University of North Carolina at Chapel Hill

- **Simon Alberti**
  TU Dresden, Germany

**CELL AND TISSUE MECHANICS**
Track: Physical Cell

- **Sara A. Wickstrom**
  University of Helsinki, Finland

- **Enrique De La Cruz**
  Yale University

**INTRA- AND INTERCELLULAR COMMUNICATION**
Tracks: Specialized Cell and Evolution, Cellular Dynamics

- **Chenghua Gu**
  Harvard Medical School

- **Maya Schuldiner**
  Weizmann Institute of Science, Israel

**DISEASE AND AGING**
Tracks: Cells in Distress and Disease, Signaling and Metabolism

- **Vishva M. Dixit**
  Genentech, Inc.

- **Noboru Mizushima**
  The University of Tokyo, Japan
Want to be a part of designing the 2021 program?

Check out this opportunity:

NETWORKING SESSION LEADER
Application Deadline: November 15

These informal virtual networking rooms allow attendees to connect and engage with each other on hot topics within the scientific community. Attendees can sign up and create a room where they can invite others to join them, catch up with colleagues, meet new people, or just host a room that is open to all attendees. Table leaders are responsible for facilitating the discussions.

KEY DATES AND DEADLINES

November 15
Networking Session Application Deadline

November 23
Registration Cancellation Deadline

SPECIAL INTEREST SUBGROUP SESSION DETAILS NOW AVAILABLE ONLINE!

SCIENTIFIC AND EDUCATION MEETING TRACKS

These special interest tracks aim to enhance your meeting experience by identifying sessions, poster presentations, and other relevant content focused on your areas of interest. These tracks are designed to help you find your niche and navigate the meeting within the increasingly diverse research specialties of cell biology. Choose from eight tracks—seven scientific and one education and professional development.

ascb.org/cellbio2021 | #cellbio2021
The Cell Biology of Neurodegeneration and Repair

Tuesday, November 30, 2021 | 10:00 am to 5:00 pm EST

Supported by The Kavli Foundation

The Doorstep Meeting is the ideal platform for junior and senior investigators to connect and jumpstart new ideas for therapeutic intervention.

This year’s highly interactive virtual meeting will focus on the cell biology of neuronal homeostasis, neurodegeneration, and neuroregeneration, with exciting research talks from senior and junior leaders in the field, including George Langford, Pietro De Camilli, Frank Bradke, Ai Yamamoto, and Andrea Stavoe. The meeting will also feature a Panel Session on Therapeutic Development, with experts from research foundations and pharma/biotech, including Shalini Padmanbhan and Lucie Bruijn.

Why Attend?
Interact with attendees and speakers in small group and one-on-one settings to have in-depth discussions and foster new collaborations. The meeting will include two networking sessions focused on science and a third networking session focused on approaches to improve inclusivity in cell biology.

Join us for this full day packed with expert lectures, panel discussions, networking roundtables, and short talk presentations among peers!

Register today! www.ascb.org/2021doorstep

Need Financial Assistance to Attend?
ASCB is offering need-based grants to its members to offset registration costs to attend the meeting. The Doorstep Meeting is supported by a grant from The Kavli Foundation.

Apply online by November 10.
As ASCB and EMBO prepare to host their second “physically distant” annual meeting—Cell Bio Virtual 2021—it would be easy to reflect on the negative aspects or setbacks life scientists have experienced over the last 20+ months since the global pandemic began. However, our sessions on Education and Professional Development (EPD), which kick off the meeting on Wednesday, December 1, and continue through December 3, will focus on some of the “silver linings” we may not have fully appreciated since being forced to work and learn remotely.

Education Minisymposium Co-Chairs Kimberly Baker of the University of Indianapolis, Stephanie Levi Blumer of Oakton Community College, and MarinaCrowder of the University of California, Davis, have assembled an agenda that focuses on harnessing the advantages of remote learning, embracing and advocating for diversity, recognizing the importance of student mental health, and fostering distributed collaborations. The Minisymposium is entitled “Silver Linings: Responsive Teaching through Major Transitions and Beyond.”
“We are excited to hear about the lessons learned from teaching during uncertain times and the educational innovations born from overcoming the challenges experienced worldwide in the past couple of years,” Crowder said.

Featured talks include:

- Evaluating the Impact of Student Created Videos in an Undergraduate Biology Classroom—Kathleen Hefferon, Cornell University
- Student Outcomes from a Large-Enrollment Undergraduate Introductory Course-Based Undergraduate Research Experience in Remote Learning with Laboratory Kits Sent to Students—Stanley M. Lo, University of California, San Diego
- The Cell Biology Education Consortium. Building an Undergraduate Research Infrastructure—Nathan Reyna, Ouachita Baptist University (Reyna is the winner of ASCB’s new Innovation in Education Award.)
- Challenges and Opportunities for Students with Disabilities in Undergraduate Research—Logan Gin, D. A. Pais, Katelyn Cooper, and Sara Brownell, Arizona State University
- Examining How Graduate Research and Teaching Affect Depression in Life Sciences Ph.D. Students—Katelyn Cooper, Logan Gin, N. Wiesenthal, Arizona State University
- Reflections on Inclusive Excellence 1&2 and Building Capacity for Institutional Change in Science Education—Michelle Juarez, Howard Hughes Medical Institute

Educators won’t want to miss the workshop “Silver and Gold: Blending Lessons Learned from Pandemic-driven Virtual Education with the Gold Standard of in-Person Education.” Session organizers say this workshop “aims to provide space for reflection on what we learned during the COVID-19 pandemic and seek a professional silver lining in this challenging year. Specifically, this workshop will encourage the identification of best practices of virtual education, in both a classroom and a laboratory setting, that could be merged with traditional in-person education methods.”

A variety of professional development sessions, panel discussions, and workshops have been organized by the Education Committee, Minorities Affairs Committee (MAC), the LGBTQ+ Committee, Women in Cell Biology (WICB) Committee, Public Policy Committee, and COMPASS (Committee for Postdocs and Students). For trainees there are sessions on getting into and surviving graduate school and maintaining your mental health. For early-career scientists there are programs on searching for faculty positions, establishing your lab, funding your research, and publishing. A broad slate of sessions is devoted to scientists seeking to transition out of academia and into careers in biotechnology; quality, compliance, and marketing; computational biology; and science policy and advocacy.

This segment of Cell Bio Virtual 2021 features invited talks including the Scholarship of Diversity Keynote by Michelle (Mica) Estrada, University of California, San Francisco; the E.E. Just Award Lecture by Kizzmekia Corbett, Harvard T. H. Chan School of Public Health; the Mentoring Keynote by Beronda Montgomery, Michigan State University; the Bruce Alberts Award Lecture by Dave Micklos, Cold Spring Harbor Laboratory; and the LGBTQ+ Keynote by Jeremy F. Nance, New York University Grossman School of Medicine. Along with the keynote talk, the LGBTQ+ Committee has organized programing on allyship and deciding (or not) to come out during graduate school.

As part of their 50th year anniversary celebration and following their awards presentations, WICB will host an event featuring a series of skits “designed to spark discussion [that] will explore the changing social and academic landscape women in STEM have faced over the last 50 years.” Following the skits, actors will serve as panelists to facilitate an open-ended discussion with the audience.
On the evening of Thursday, December 2, ASCB MAC Faculty Research and Educational Development (FRED) Program participants and alumni will hold a symposium. The FRED program provides training and mentorship in grant writing for postdoctoral fellows and junior faculty members who identify as members of a group underrepresented in science or are faculty members at a minority-serving institution. Organizers said, “This symposium serves as a place to encourage interaction and networking among FRED participants and is open to all ASCB members. FRED Program mentee alums will showcase their research activities, while also encouraging interaction, networking, and the establishment of future collaborations between ASCB members.”

These are but a few highlights of events during the EPD segment of the meeting. Please visit the Cell Bio Virtual 2021 website (www.ascb.org/cellbio2021) for a complete and updated list of programming.
ASCB is pleased to present its cohort of 14 new Fellows for 2021.

“ASCB Fellows represent not only top-performing scientists who have contributed significantly to cell biology and to the community of scientists studying the cell, but also individuals who have demonstrated throughout their careers their commitment to ASCB’s mission,” said Kevin Wilson, Interim Co-CEO of ASCB. Election as a Fellow of ASCB is an honor bestowed upon ASCB members by their peers. The list of approved Fellow nominees is reviewed and approved by the ASCB Council. The new cohort of ASCB Fellows

Fourteen Scientists Elected to the 2021 Cohort of ASCB Fellows

By Mary Spiro

will be formally recognized before the Keynote at the 2021 Cell Bio Virtual meeting in December.

- Suresh Alahari, Louisiana State University
- Derek Applewhite, Reed College
- Daniel Colón-Ramos, Yale University
- Pierre Coulombe, University of Michigan
- Jennifer DeLuca, Colorado State University
- Andrew Ewald, Johns Hopkins University
- Primal de Lanerolle, University of Illinois at Chicago
- Ruth Lehmann, Whitehead Institute, MIT
- Lee Ligon, Rensselaer Polytechnic Institute
- Berl Oakley, University of Kansas
- Carole Parent, University of Michigan
- Thomas Surrey, Francis Crick Institute
- Yukiko Yamashita, Whitehead Institute, MIT
- Alpha Yap, University of Queensland

Pietro De Camilli Selected for 2021 E.B. Wilson Medal

By Mary Spiro

Pietro De Camilli, professor of Neuroscience and Cell Biology at Yale University and a Howard Hughes Medical Institute investigator, has been chosen by ASCB to receive the 2021 E.B. Wilson Medal. De Camilli is also the director of the Kavli Institute of Neuroscience at the Yale University School of Medicine.

The E.B. Wilson Medal is presented to distinguished researchers for their far-reaching contributions to cell biology over a lifetime in science. De Camilli has been a longtime member of ASCB, is a former president, and was inducted as an ASCB Fellow in 2017.

A native of Italy, De Camilli says his love for science stems from his admiration of the natural world.

“I love everything that has to do with nature,” he says. “I like gardening, hiking in the Connecticut woods and, when I have opportunity, in the Italian Alps. My love for science is the continuation of my love for nature.

The excitement of uncovering the inner works of nature is what drives my professional work.”

His professional work seeks to elucidate the “fundamental mechanisms underlying the dynamics and traffic of intracellular membranes, with emphasis on the role of these processes in the support of neurotransmission,” he said. “I am also interested in understanding how genetic perturbations of these mechanisms result in neurodegenerative diseases, Parkinson’s disease in particular.”

De Camilli began his career journey not with scientific training but with a medical degree. He earned his MD from the University of Milan. Later he became a postdoctoral fellow with Paul Greengard in the Department of Pharmacology at Yale, and subsequently an assistant professor in the Yale Section of Cell Biology.

Following a brief return to Milan, he moved back to Yale in 1988, where he has remained ever since, also
serving in leadership positions including chair of the Department of Cell Biology from 1997 to 2000, chair of the Department of Neuroscience from 2015 to 2021, founding director of the Yale Program in Cellular Neuroscience, Neurodegeneration, and Repair since 2005, and director of the Kavli Institute for Neuroscience since 2015. He became an investigator in the Howard Hughes Medical Institute in 1992 and in 2017 he served as ASCB president.

De Camilli’s approach to lab leadership is grounded in inclusivity.

“My aim is having a lab where everyone’s effort is valued and appreciated,” he said. “Likewise, in my academic leadership roles, I have attempted to be fair and to foster a sense of community. Over the years I have increasingly appreciated how diversity in the work environment not only enriches everyone in both personal and professional ways but also promotes better science.”

As part of receiving the E.B. Wilson Medal, De Camilli will deliver a lecture. He said he plans to present the talk “A Scientific Journey at the Interface of Cell Biology and Neuroscience: From Membrane Traffic to Neurodegenerative Diseases” during Cell Bio Virtual 2021.

“I feel very honored to receive this recognition by a scientific society whose scope and values have shaped my professional career,” De Camilli wrote to ASCB. “It is truly a special honor for me to follow in the footsteps of the founding fathers of cell biology, including George Palade, who launched my independent career by recruiting me as assistant professor to Yale Cell Biology.”

David A. Micklos Honored with 2021 Bruce Alberts Award for Excellence in Science Education

By Mary Spiro

The popularity of products that provide detailed insight into your personal DNA is proof that even folks who are not particularly science literate are still interested in their genetics—what makes them who they are. But basic, first-hand experiments with DNA are not something even most high school students across the nation, let alone the world, are able to experience in their classrooms.

David A. Micklos, executive director of the Dolan DNA Learning Center (DNALC) at Cold Spring Harbor Laboratory, is trying to change that by “developing lab and computer infrastructure that allows large numbers of students and citizen scientists to experience the thrill of biological research.”

Micklos’ work is being recognized with the 2021 Bruce Alberts Award for Excellence in Science Education from the ASCB. This award is given to an individual who has demonstrated innovative and sustained contributions to science education, with a priority on the national impact of...
the nominee’s activities. Micklos will receive the award during Cell Bio Virtual 2021 in December where he will also present the talk, “Preparing Teachers for Science: The Endless Frontier.”

Micklos’s team is devoted to developing methods and models to popularize hands-on genetics and genomics education.

“We simplified several contemporary research methods so that they can be rapidly, safety, and reproducibly done in pre-college and college classrooms—including bacterial transformation, eukaryotic PCR, and metabarcoding analysis,” Micklos said. “We conceived of kits and mobile labs to carry DNA training to teachers around the world, and we developed the first personal DNA experiment that allows students to analyze their own DNA sequence. Over the last decade, our methods for DNA barcoding and DNA Subway analysis platform have been widely adopted for authentic student research and citizen science studies of biodiversity.”

To get the most out of the kits, Micklos also trains life science educators on how to use them in their classrooms. By all accounts, the professional development training sessions seem intense. Mark Little, a past president of the National Association of Biology Teachers, has attended some of the training workshops presented by Micklos and his team.

“Micklos and his staff took us through a deep dive in the mornings about the mechanisms of RNA interference, and the afternoons were spent in the laboratory, learning experiments that could be done with high school students using C. elegans to demonstrate RNA interference,” Little wrote in his nomination letter for Micklos. “We learned the technical skills necessary to carry out these procedures in a high school classroom with future scientists as well as learning at first hand how to use some of the tools of bioinformatics. David’s instruction allowed me to take my DNA science teaching to a whole new level.”

Little continued: “David’s impact on DNA science education is far reaching. I know from my conversations with other teachers across the country that Micklos has taught and inspired many biological science educators and provided numerous educational opportunities for students and teachers. Over the years, I have told many colleagues about the DNALC professional development workshops, and recommended they attend if the opportunity arises. The DNALC and Micklos’s outreach is expansive; in 2018 there were at least 50,000 precollege students able to perform hands-on laboratory experiments at DNALC or with the help of the DNALC staff perform the labs at their schools or attended week-long summer camps in the area.”

Micklos’ work positively impacts life science education for disadvantaged and underrepresented groups.

“Throughout my career I have tried to level the playing field in biology by decreasing the cost of DNA experimentation and increasing access to computer programs for DNA analysis,” Micklos said. “By [placing] training workshops at minority-serving institutions, we have more than doubled the number of URM teachers served. In the same way, our DNA Learning Centers in Harlem and Brooklyn, NY, reach a natural constituency of diverse students. Our Research Ready Program works intensively with under-resourced schools to help them develop the same sort of project and research-based biology programs as the elite schools of Long Island and Manhattan.”

Micklos earned his BS in biology in 1975 from Salisbury University (then Salisbury State College) and his MS in science journalism in 1982 from the University of Maryland, College Park. He initially came to work in public affairs and development at Cold Spring Harbor Laboratory (CSHL) School of Biological Sciences. He became the Executive Director of the DNALC in 1988, and in 2009 was awarded a DSc Honoris causa by the CSHL School of Biological Sciences.

“I am honored to join the company of a number of great educators I know who have received the Bruce
Alberts Award,” Micklos said. “This award is a nice bookend to the Charles A. Dana Award I received early in my career.”

Since moving to Manhattan, Micklos said he has become an avid biker.

“It requires a lot of focus. I especially love riding across the Brooklyn Bridge to work every day; it really makes me feel that I am living the life!” he said. “I collect antique furniture, lighting fixtures, and curios from my travels. I like to cook, and my friends ask for my seared tuna dish.”

Rebecca Heald to Deliver 2021 Keith R. Porter Lecture

By Mary Spiro

Cell and developmental biologist Rebecca W. Heald has been selected to deliver the Keith R. Porter Lecture at Cell Bio Virtual 2021. This lecture, presented annually since 1982, honors an outstanding and innovative leader at the forefront of cell biology who is actively contributing fundamental new knowledge to our understanding of cell biology.

Heald is a professor of Molecular and Cell Biology at the University of California (UC), Berkeley, well known for her work on mechanisms of cell division and biological size control using Xenopus as her model organism. So it should come as a surprise to no one that the title of her Porter Lecture will be “Fun experiments you can only do with frogs.”

“We use cytoplasmic extracts prepared from frog eggs and embryos to study how the mitotic spindle assembles and how subcellular structures scale to cell size across species and during the cleavage divisions of early development,” she wrote to ASCB.

A native of central Pennsylvania, Heald was born in Bellefonte and grew up in Greenville. She graduated in 1985 from Hamilton College in Clinton, NY, with a degree in chemistry. In 1993, she earned her PhD in Physiology and Biophysics from Harvard Medical School. She was a postdoctoral fellow at the European Molecular Biology Laboratory in Heidelberg, Germany, before joining the faculty at UC Berkeley in 1997.

She was awarded the NIH Director’s Pioneer Award in 2006 and was elected as an ASCB Fellow in 2017. Heald was recognized for postdoctoral mentoring and for promoting diversity and inclusion in the life sciences and was awarded the Leon K. Henkin Citation for Distinguished Service at UC Berkeley in 2019. She is a member of the National Academy of Sciences.

“Rebecca is a fearless and inspirational scientist,” said ASCB President Ruth Lehmann. “The question of what controls size has been a century-old puzzle for cell and developmental biologists. Rebecca has systematically addressed this fundamental question and her studies are revealing the molecular principles of scaling at the organelle, cell, and organismal level. Beyond her groundbreaking research, Rebecca is also a strong voice for equity and inclusion in our community, making her a particularly compelling recipient of this year’s Keith Porter lecture award.”

Heald is devoted to fostering growth for her trainees and colleagues.
“Aside from research, my overarching professional goal is to provide a productive and nurturing environment for my group members, help guide them to the next phase of their careers, and continue supporting them so that they reach their full potential wherever their paths take them,” Heald wrote to ASCB. “I am fortunate that leadership roles in my department, campus, and scientific community have enabled me to engage in mentoring efforts to enhance diversity, equity, and inclusion.”

Heald boasts a long and active career with ASCB, serving in numerous capacities.

“In the cell biology community, I have served as a member of ASCB Council and on the Women in Cell Biology Committee. One of my main efforts was to revamp an easily searchable list of excellent female speakers (www.ascb.org/career-development/speaker-referral-lists). ASCB Fellow Sandra Masur said Heald’s effort to transform the speaker list into a searchable database is more than just useful, it could be game-changing.

“Dr. Heald stepped up and transformed what had been a list into a searchable database. Each entry is now categorized by research area with keywords, institution, and a link to the person’s website…It is frequently used and recommended to organizers and to people searching for experts in various areas of cell biology. With this list in hand, cell biology ‘manels’ (male-only panels) may finally be a thing of the past.”

“I am incredibly honored to receive this award,” says Heald. “For my entire career, ASCB has always been my home as a scientific organization. The annual meeting is where I get to meet my very favorite scientists and people and have a reunion with my former lab members. The society represents the best efforts of our community to support one another and share our enthusiasm for the power and beauty of cell biology research.”

Frogs are not the only thing that fascinates Heald. She also enjoys cycling, camping, reading, gardening, and binge-watching her favorite TV shows.

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Kizzmekia Corbett Named 2021 E.E. Just Award Winner and Lecturer

By Mary Spiro

Kizzmekia S. Corbett, well known for her work on the mRNA vaccines used to protect against COVID-19, has been named the recipient of the 2021 E.E. Just Award by the ASCB.

Corbett is currently an assistant professor in the Department of Immunology and Infectious Diseases at the Harvard T. H. Chan School of Public Health. She is also the Shutzer Assistant Professor at Harvard’s Radcliff Institute of Advanced Study and an associate member of the Phillip T. and Susan M. Ragon Institute.

The E.E. Just Award honors early 20th century biologist Ernest Everett Just, who made groundbreaking contributions to cell and developmental biology. It recognizes the outstanding scientific achievements of a U.S. researcher belonging to a historically excluded racial or ethnic group, and the awardee is selected by the ASCB Minorities Affairs Committee.

“I am honored to receive the E.E. Just Lecturer Award for my contributions to COVID-19 vaccine development,” Corbett wrote to
ASCB. "Above my contributions to COVID-19 vaccine development, it’s an honor to be recognized among the ranks of a long list of accomplished peers who have received this award previously and who will in the future."

On December 9 Corbett will present the E.E. Just Lecture on the topic of the rapid development of the Moderna COVID-19 vaccine, giving a perspective of the history of the vaccine development timeline and the outlook of the vaccine in present time.

Corbett earned her BS in Biological Sciences with a secondary major in Sociology in 2008 from the University of Maryland, Baltimore County, where she was part of the elite Robert and Jane Meyerhoff Scholars Program, as well as a National Institutes of Health undergraduate scholar. She then earned her PhD in Microbiology and Immunology in 2014 from the University of North Carolina at Chapel Hill, where she received the Director’s Scholarship and the Doctoral Merit Award.

Prior to Harvard, Corbett was a research fellow and scientific lead for the Coronavirus Vaccines and Immunopathogenesis Team at the National Institute of Allergy and Infectious Diseases Vaccine Research Center. Her expertise in viral immunology propelled the development of novel vaccines for pandemic preparedness, including mRNA-1273, a leading vaccine against SARS-CoV-2. The vaccine concept—which incorporated mRNA-1273— was designed by Corbett’s National Institutes of Health team from viral sequence and rapidly deployed to industry partner, Moderna, Inc., for Phase 1 clinical trials, which began only 66 days from the release of the viral sequence—an unprecedented feat.

The mRNA-1273 vaccine was shown to be 94.1% effective in Phase 3 trials and was authorized for use in multiple countries. Alongside mRNA-1273, Corbett boasts a patent portfolio that includes universal coronavirus and influenza vaccine concepts and novel therapeutic antibodies. In all, she has over 15 years of experience studying dengue virus, respiratory syncytial virus, influenza virus, and coronaviruses, garnering her several prestigious awards, such as the Benjamin Franklin Next Gen Award and the Salzman Memorial Award in Virology.

Corbett will continue this type of research in her new role at Harvard. According a news release from the institution, “Corbett will head the new Coronaviruses & Other Relevant Emerging Infectious Diseases (CoreID) Lab to study and understand the interface between hosts’ immune systems and viruses that cause respiratory disease, with the goal of informing development of novel and potentially universal vaccines.” Combining her research goals with her knack for mentorship, Corbett also invests much of her time in underserved communities as an advocate of STEM education and vaccine awareness.

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Omar A. Quintero-Carmona Named Winner of 2021 Prize for Excellence in Inclusivity

By Mary Spiro

Omar A. Quintero-Carmona, associate professor of biology at the University of Richmond, has been named the recipient of the 2021 ASCB Prize for Excellence in Inclusivity. The prize is an annual award recognizing a scientist who has a strong track record in research or serves a critical role in fostering cell biology research, and has demonstrated the importance of inclusion and diversity in science through mentoring, cultural change, outreach, or community service. It is made possible by a grant from the Howard Hughes Medical Institute.

Quintero will receive a cash award of $5,000 to be used at the awardee’s discretion to further inclusion activities; be featured in a video at the Cell Bio Virtual 2021 Keynote; be featured in an article in the ASCB Newsletter; and contribute an essay in Molecular Biology of the Cell.

Quintero joined the faculty at the University of Richmond in 2012. He earned a BS in Biochemistry in 1996 at The Pennsylvania State University, received his PhD in Cell Biology at Duke University in 2002 with Jo Rae Wright, and completed his postdoctoral work as a SPIRE Fellow at the University of North Carolina at Chapel Hill with Richard Cheney. He was previously on the faculty of Franklin and Marshall College, Mount Holyoke College, and the College of Medicine at Penn State.

Quintero continuously seeks opportunities to advance diversity, equity, and inclusion. Most recently he launched the George M. Langford Scientists of Color Speaker Series at Richmond to feature notable as well as up-and-coming Black scientists. Langford is a long-time ASCB member, Council member, and ASCB Fellow.

“It is a one-of-its kind series not only for the College of Arts and Sciences but in the history of the institution,” said one of Quintero’s mentees, Hijab Fatima. “I hope it motivates University of Richmond’s other colleges to organize something similar.”

But Quintero’s efforts to improve equity and inclusion reach back many years.

“In some ways, it is hard to know where to begin with considering Dr. Quintero’s commitment to Inclusivity. This is part of his soul!” wrote Tama Hasson, assistant dean of undergraduate research at the University of California, Los Angeles, in her nomination letter. “Dr. Quintero was selected as one of the most inspiring Hispanic/Latinx scientists in America, one of only a handful who are faculty at [primarily undergraduate institutions]. He has served on the University of Richmond’s President’s Advisory Committee for Making Excellence Inclusive, and on the Faculty Learning Community for Inclusive Pedagogy in Science, Technology, Engineering, and Mathematics. He also was instrumental in rewriting the policies regarding faculty hires at the University of Richmond to ensure that selections were inclusive and equitable.”

Hasson continues, saying that at the time of her letter, “Dr. Quintero has mentored over 75 undergraduates, which is extraordinary given how long he has been a research mentor. As a result, nearly every publication from Dr. Quintero’s group has undergraduate authors. These include students of color, women, and international
students. Indeed, in every position he has held as an academic, Dr. Quintero has thought outside the box to expose everyone (undergraduates, graduate students, technicians, medical school students, even elementary school students) to the magic that is research.”

Quintero’s research focuses on the mechanisms of mitochondrial transport and organization inside cells, and utilizes modern quantitative microscopy approaches. His lab is made up almost exclusively of undergraduate scientists, and he often incorporates components of his research into his classroom teaching. He recently received the Distinguished Educator Award in 2019 and the Outstanding Faculty Mentor Award in 2021 from the University of Richmond. He has served in leadership roles for ASCB on both the Education Committee and as a member of Council.

“Broadly speaking, I’m interested in cellular dynamics, whether dynamics of whole cells like motility, or dynamics of cellular components like organelle traffic,” Quintero said. “My research focuses on the connections between the cytoskeleton and mitochondria. Mostly I am focusing on the role of MYO19 and actin in mitochondrial dynamics.”

Quintero has offered research opportunities to undergraduates with no prior laboratory experience whatsoever.

“Dr. Quintero has been a mentor to me for five years now,” said Jennifer L. Bocanegra, now a PhD candidate at the University of Washington. “We met when he was recruiting a post-baccalaureate position for his lab. At the time, I was living in Puerto Rico and had absolutely no bench research experience but was very much interested in trying. He gave me an opportunity, understanding what it would take to train someone from scratch. I worked in his lab for two years, and I blossomed there. When I began in his lab I wasn’t convinced that I could be an ideal candidate for graduate school, even though I was interested. Dr. Quintero helped me hone my research skills while providing an environment that made me feel welcomed and included. Through his mentoring and guidance, I was able to publish my first first-author publication, as well as a review chapter on Myosin XIX, and eventually enter graduate school.”

Having a positive impact on inclusion and equity in the support of sustainable diversity is “no easy task,” Quintero said, but is possible if faculty take an intentional approach.

“As individuals, we can be purposeful in how we mentor our students and how we build classroom and research lab experiences,” Quintero said. “One of my aims is to provide opportunities for individual students that build from who they are in a way that aids their development in who they want to become. That aspect of supporting inclusion came more easily because I could recognize what the most impactful mentors in my life had done for me, and I put those opportunities to work for my students.”

Quintero added that improved inclusion and equity should not fall on the shoulders of just one or a few people but needs to be a community-wide, sustained, and concerted effort.

“Now, as part of a community (like a department, a university, or a professional society), the challenge is different,” he said. “Although communities are built by individuals, no one individual is responsible for persistent community structures. Improving a community’s ability to support meaningful diversity through equitable and inclusive practice requires networking, consensus-building, and learning from each other’s experiences. Together we have to improve the path for all those who come along after us. My accomplices and I will continue to actively encourage the rest of our community to share the burden of such a glorious purpose as making a better world, and so that we can all share the benefits as well.”

Quintero says he plans to use the $5,000 cash award to support opportunities for students to participate in summer research, including attending meetings such as ASCB and/or the Society for Advancement of Chicanos/Hispanics and Native Americans in Science. And he says he hopes to limit some of his professional
involvements to reconnect with his family. “I’m proud of what I’ve been able to do, but it has come at a cost in other ways. I haven’t had sufficient free time lately. I’m trying to step back and reevaluate how much of my energy goes towards career stuff,” he said. “My two children are now teenagers. My wife and I want to be as much a part of their lives as they’ll allow us to be as they really grow up and move on with their own independent lives. I’m also willing to admit that I am not an avid reader—instead I watch ridiculous amounts of movies and television spanning a pretty wide range of genres.”

Innovation in Education Award Goes to Nathan S. Reyna

By Mary Spiro

Nathan S. Reyna, an associate professor and the principal investigator of the Cell Biology Education Consortium (CBEC) at Ouachita Baptist University in Arkadelphia, AR, has won the 2021 Innovation in Education Award.

This new honorific designation from the ASCB is given to an individual who has demonstrated innovation in education, defined as a novel educational accomplishment that significantly impacts progress in improving education, promoting professional development, and increasing diversity in the scientific workforce. As the former PI of Arkansas-CURE (2016–2020) and the current PI of the CBEC (2018–2023), both NSF-funded groups, Reyna’s work aims to fulfill ASCB’s mission to improve education, create professional development opportunities, and improve diversity in STEM.

“In five years, I went from working alone on projects to working with faculty at tribal colleges, large state schools, small undergraduate institutions, community colleges, and minority-serving institutions,” Reyna explained. “My teaching philosophy of incorporating authentic research and undergraduates into all aspects of a project is ingrained in everything that I do. It is this combination of education and research that has allowed the CBEC (www.cellbioed.com) to form true collaborations with so many faculty. The CBEC has grown into a national project that incorporates a diverse group of faculty and students throughout the U.S. and Puerto Rico.

Research in the Reyna Laboratory focuses on the role exosomes play in the tumor microenvironment. “Undergraduates in my lab use RNA sequencing data and cancer cell-culture to address these questions,” he said. “In addition, we have begun to sequence patient circulating tumor DNA as a means for early detection of breast cancer reoccurrence. All projects are incorporated into the classroom.”

Reyna will receive a plaque and present a talk during the Education Minsymposium at Cell Bio Virtual 2021.
Beronda Montgomery will present the Mentoring Keynote at Cell Bio Virtual 2021. Montgomery is the Michigan State University Foundation Professor and Assistant Vice President for Research & Innovation at Michigan State University (MSU). She is a member of the faculty of the MSU Departments of Biochemistry & Molecular Biology and Microbiology & Molecular Genetics.

Montgomery’s research group investigates how photosynthetic organisms adapt to changes in their environment, and she is the author of the recent book *Lessons from Plants*. For her talk, she plans to draw from her personal and academic experience working with and observing the photosynthesizing residents of our planet to talk about effective mentoring.

In a video interview earlier this year for Point Reyes Books, Montgomery pointed out that if a plant in our care fails to thrive, we seek to remedy the conditions that impede that growth or we seek to improve our own skills as caretakers. However, with our fellow humans, for some reason we take a “deficit perspective.”

“If you don’t expect that a human in your space should grow, you assume that anything they do that does not come out the way that you expected is because there is something wrong with them.” Montgomery said.

“My scholarship extends beyond biology and into studying mentorship, faculty development, and academic leadership to develop evidence-based strategies to foster equity and inclusion in academia,” Montgomery wrote to ASCB.

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The Newsletter Welcomes Letters to the Editor

Have thoughts you’d like to share with your colleagues? We’d be happy to consider your Letter to the Editor for publication in the ASCB Newsletter. Write to the Editor at mleader@ascb.org.
Perera Named 2021 Günter Blobel Early Career Awardee

By Mary Spiro

Rushika M. Perera, associate professor at the University of California, San Francisco, has been awarded the 2021 Günter Blobel Early Career Award. This award is given to an outstanding life scientist who has served as an independent investigator for no more than seven years as of the annual nomination deadline. It was previously called the Early Career Life Scientist Award but was renamed in 2020 to honor Günter Blobel.

Perera’s research seeks to find out how changes in organelle composition and function contribute to cancer cell metabolism, growth, stress adaptation, and survival. She will present the talk “New Features and Functions of Cancer Lysosomes” during a Minisymposium at Cell Bio Virtual 2021. She will also receive a $1,000 cash prize.

“I have had a long-standing interest in understanding how cancer cells evolve, adapt, grow, and migrate to distant sites,” Perera wrote to ASCB. “We have focused on defining how highly aggressive Pancreatic Ductal Adenocarcinoma (PDA) cells utilize autophagy and the lysosome to adapt to stress. Our studies have uncovered new mechanisms for how lysosome biogenesis is uniquely regulated in PDA, how autophagy and lysosomes cooperate to shield cancer cells from detection by the immune system, and identified how PDA cells hijack membrane repair pathways to protect and prolong the activity of their lysosomes. Together, these studies highlight my overall mission of applying fundamental principles in cell biology to unravel unique vulnerabilities of cancer cells.”

Perera completed her doctoral research between the University of Melbourne in Australia and the Department of Cell Biology at Yale School of Medicine, under the joint supervision of Derek Toomre and Pietro De Camilli.

“I carried out initial postdoctoral studies at Yale, before joining the lab of Dr. Nabeel Bardeesy at Massachusetts General Hospital and Harvard Medical School,” she explained.

Perera is well traveled and has lived in four different countries: Sri Lanka, Hong Kong, Australia—where she grew up—and now the United States.

“These experiences have allowed me to absorb the cultures of different people and to fully appreciate the benefits of open-mindedness, inclusiveness, and collaboration,” she said. “Teaching in the classroom and in the lab has been one way that I can help level the playing field and ensure everyone—regardless of background, learning style, and prior experience—has an equal opportunity to excel. I am incredibly grateful to the ASCB for recognizing our work at the interface of cell biology and cancer. It is truly an honor to receive this award.”
Emerging Voices

Developing Future Biologists Opens New Vista in STEM

By Fatima Javed

Most students who start in STEM do not fully realize the breadth of scientific career opportunities available to them. I know for myself while growing up in Pakistan, I thought the only careers in science were either medicine or engineering. I remember being super excited in my biology class when I started learning the details of what goes on inside a cell. However, when I used to think about a future in biology, the only path for me seemed to lead toward becoming a physician, and that path did not appeal to me.

Unbeknownst to me at the time, there is a vast ocean of careers in STEM. Now, as a graduate student at the University of Michigan, I realize that I was not alone in thinking that becoming a physician or an engineer are the only career options in STEM. To help other young students overcome this misconception, I volunteer with an organization called Developing Future Biologists (DFB).

DFB was founded by Andrea Ramos, a former graduate student at the University of Michigan, with the goal of eliminating barriers to a career in STEM. In line with this goal, the DFB short course was created. Andrea’s vision was to provide hands-on research experience in developmental biology to undergraduate students who did not have access to these opportunities at their own colleges or universities, providing them with research experience and making other research opportunities more attainable.

The DFB course is an intense week full of a variety of learning experiences. During the week, the students attend introductory lectures on developmental biology, perform corresponding hands-on lab experiments, and attend various professional development sessions and career panels. Some of the professional development sessions include how to write a good CV and personal statement.

A big part of DFB week-long courses are the career panels. These panels include (but are not limited to) discussion of various career options in STEM and Meet-the-Scientist-Graduate Student. One of the most successful panels from last year was the Meet-the-Alumni panel. Participating students were really excited to meet various DFB alumni and had the opportunity to network and ask questions. This panel enabled interaction across previous DFB student cohorts and helped build a sense of community among students.

By the end of the week, students were equipped with basic knowledge of developmental biology and, perhaps more importantly, were aware of the vast career opportunities available in STEM.

To further the mission of DFB, our team is currently working on planning events to help engage with our alumni throughout the year. These sessions will include professional development opportunities, summer research opportunities, one-on-one mentoring, helping students with their personal statements, and Meet-the-Scientist sessions. The year-long programming enables us to extend our commitment to fostering the development of our DFB students throughout the entire year and further expose our alumni to STEM career options. Therefore, this programming will serve to highlight important career options such as...
academic or industry research, scientific consulting, patent work, journal or grant editing, and many more! Even among students who go to graduate school, career paths are becoming much less linear, and it is important to us that we make all these options as accessible as possible to our students.

Being a first-time instructor this year, I am super excited about this year’s course. Even though we will be online again, I am excited to engage with our course participants and involve the students with at-home hands-on research! DFB is thriving because of the support we have received from our partners over the years, including funds from an ASCB COMPASS Outreach Grant. DFB is exactly the type of program I wished I had when growing up in Pakistan, and I hope that our DFB course participants really enjoy this year’s course and learn about all the opportunities available to them.

About the Author
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Science and Society

White House Outlines R&D Objectives

By Kevin M. Wilson

Each year, just as Congress begins to start its work on the federal budget for the next year, the White House begins to plan for the budget request for the year after that. For example, the federal government is currently in FY21, Congress is working on FY22, and now, the White House is sending out the initial memos to federal agency heads for FY23.

These planning memos are viewed as offering initial insights into the goals of an administration. The goals outlined in the FY23 memo (https://bit.ly/3tNM4wv) focus on research and development priorities across the federal government. The three focal points are addressing climate change, making sure the United States is prepared for the next pandemic, and promoting equity for all Americans.

Agency heads are directed to increase supply chain resiliency and the development of products produced in the United States. Agencies are instructed to focus their pandemic preparedness on the development of early detection methods and the development and manufacture of both therapies and vaccines.

The White House also directs agencies to “identify and prioritize R&D investments that advance understanding of climate change and the development of mitigation and adaptation solutions.” It also strongly instructs federal agencies to prioritize research and development projects “with a strong potential to advance equity for all, including people of color and others who have been historically disadvantaged.”

The memo recognizes the economic benefits federal research and development can have on the economy, saying that the administration wants to replace the decades-old habit of inventing products in the United States and having them produced in other countries. Instead, the administration wants to develop an “invent it here, make it here” approach.
COVID and Grant Applications: ASCB Asks NIH for Clarification

By Kevin M. Wilson

When the Public Policy Committee reviewed the results of its survey about member productivity during the COVID-19 pandemic, one of the more concerning results was that almost 80% of the primary investigators said they had lost between three and nine months of productivity on their federal research grants.

Public Policy Committee members have also heard reports that grant applicants are not including any discussion of individual COVID-related difficulties as part of grant applications and that study section reviewers have been given varying instructions on how or even if they should consider any COVID-related difficulties when reviewing grant applications.

In July, ASCB President Ruth Lehmann sent a letter (https://bit.ly/3zfoXvT) to Noni Byrnes, Director of the U.S. National Institutes of Health (NIH) Center for Scientific Review (CSR), urging that CSR and other NIH offices provide grantees and reviewers with “clear guidance about the role research-related COVID-19 experiences should play in future grant applications.” In particular, she asked CSR to clarify for reviewers how to consider the impact COVID-19 may have had on applicants. In follow-up conversations with CSR, they committed to giving reviewers a clearer understanding of how they should consider any such information provided by applicants.

ASCB also sent a letter (https://bit.ly/3kvV8mZ) to the NIH Office of Extramural Research (OER) asking for “clearer guidance about the role research-related COVID-19 experiences should play in future grant applications.” OER recently issued an announcement (https://bit.ly/2XsLAjV) that says that “applicants may address effects due to the pandemic on productivity or other scoreable issues.” In asking for further clarification, our letter makes the point that “those most in need may be hesitant to ask for help out of concern that asking for assistance will cast them and their research in a negative light.”
NIGMS Changes Policy on Support of Well-Funded Investigators

By Kevin M. Wilson

Since 1998, the National Institute of General Medical Sciences (NIGMS) has had a policy to address how it would provide support for already well-funded investigators. Any investigator with other direct support (https://bit.ly/3CrhJXV) over the threshold would require special review by the NIGMS Advisory Council. The initial level of “other direct support” was $500,000 in 1998 and it was increased to $750,000 a year later. The level has stayed the same since that time.

Earlier this year, NIGMS made two critical changes to its funding policy, in response to a new U.S. National Institutes of Health (NIH) policy (https://bit.ly/3CnIk85). The new NIH policy will require grantees to report both direct and indirect costs. This policy change in reporting other support will take effect January 25, 2022.

In response to the new NIH policy, NIGMS has raised the threshold for council review from $750,000 in other direct support to $1.5 million in other support. NIGMS grantees are encouraged to check in with their NIGMS program officer for more information.
ASCB’s education journal, CBE—Life Sciences Education (LSE), is your source for

- Tried and tested ideas for improving your teaching and mentoring
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Here are some highlights from the September 1, 2021, issue:

COVID-19 and Undergraduates with Disabilities: Challenges Resulting from the Rapid Transition to Online Course Delivery for Students with Disabilities in Undergraduate STEM at Large-Enrollment Institutions
Logan E. Gin, Frank A. Guerrero, Sara E. Brownell, and Katelyn M. Cooper

Design and Implementation of a Tool to Assess Students’ Understanding of Metabolic Pathways Dynamics and Regulation
Sachel M. Villafañe, Vicky Minderhout, Bruce J. Heyen, Jennifer E. Lewis, Andrew Manley, Tracey A. Murray, Heather Tienson-Tseng, and Jennifer Loertscher

Are Faculty Changing? How Reform Frameworks, Sampling Intensities, and Instrument Measures Impact Inferences about Student-Centered Teaching Practices
Gena C. Sbeglia, Justin A. Goodridge, Lucy H. Gordon, and Ross H. Nehm

A Detailed Characterization of the Expert Problem-Solving Process in Science and Engineering: Guidance for Teaching and Assessment
Argenta M. Price, Candice J. Kim, Eric W. Burkholder, Amy V. Fritz, and Carl E. Wieman

Transfer Student Experiences and Identity Navigation in STEM: Overlapping Figured Worlds of Success
Austin L. Zuckerman and Stanley M. Lo


New to education research? Explore the Anatomy of an Education Research Study at http://www.ascb.org/annotations and learn about the design, conduct, interpretation, and presentation of education research.

Stay up to date with all that LSE has to offer by following us on Twitter @CBELifescied.
Creating an inclusive conference environment depends not only on the conference organizers but also on the participation of trainees and mentors. However, for some trainees, the traditional scientific conference experience may seem intimidating and exclusive. We all can play an active role in shaping the landscape of future meetings. The current environment of virtual meetings presents a timely opportunity to address this issue and take practical steps toward fostering a more inclusive conference experience for all. These practices also have great potential to inform the planning of future in-person meetings to cultivate a sustainable culture of inclusivity throughout the scientific community. Here we provide practical advice for trainees, their mentors, and conference organizers to help make meetings more inclusive, beneficial, and enjoyable for all.

**Demystifying the conference experience.** When facing a daunting task like attending an event that advertises participant numbers in the high hundreds, thousands, or even ten-thousands, it often helps to understand the landscape. At most scientific conferences, you can expect to be surrounded by a mix of heavily curated research, displayed for public consumption. Some conferences also specialize in the sharing of preliminary work, and these tend to be smaller, more intimate conferences that allow for maximum benefit from participant feedback. Whatever the size of the conference, it is important that you make the best of all that the conference experience has to offer.

**Tips for leveraging the conference experience.**
Create a plan. As scientists, we can appreciate the
value of a solid plan/approach. Conferences usually publish their programs in advance on their websites (for virtual and in-person meetings), but at some in-person meetings you can also get a paper program at check-in. Take some time to look through the program and take note of the different events (e.g., opening ceremony talks, minisymposia, poster session presentations, and exhibit hall sessions). Using the program, you can plan out your time wisely for the duration of the conference.¹

You also want to keep an eye out for social events, as these are a great way of meeting peers at your career level, connecting with potential future mentors, and networking for your next career stage. Many conferences schedule networking and social events and they are perfect settings for building community and even connecting with potential future collaborators. If you are attending an in-person conference and you already know other participants, you could also try to plan a group outing where you go sightseeing together. Take advantage of everything around you, especially if you do not travel often. A virtual meetup is also an option if you plan on attending the meeting remotely.

Scientific conferences can seem a bit intimidating, especially if you are planning to attend by yourself, but you should know that the more you immerse yourself in the conference experience, the harder it will be to feel alone or without community. ASCB and EMBO have many great events during their annual conference and provide a number of opportunities and resources to help young scientists like you get involved and attend. For example, the ASCB Women in Cell Biology (WICB) Committee and the Minorities Affairs Committee (MAC) offer a number of community-building activities through multiple panel discussions followed by themed networking events. Importantly, these events are scheduled in both the virtual and in-person meeting settings and have proved to be effective toward maximizing interactions among attendees with common interests.

Benefits of attending a scientific conference.
Preparing to attend a scientific conference can present many career development opportunities, from crafting an excellent poster and an attention-grabbing elevator pitch to developing effective networking strategies.²,³ The scientific conference presents a great impetus to work on perfecting one’s elevator pitch, which can be used as a verbal business card. It can also be an excellent exercise to gain constructive feedback from your mentor.

Similarly, the scientific conference can be a great way to get a fresh perspective about your research. Through proactive networking, you could also use this opportunity to identify potential graduate school or postdoctoral mentors, meet contacts for your next career stage, or learn more about other types of scientific careers. In these tech-forward times, conferences can also be helpful in building an audience or following for your work and in honing critical skills, like giving engaging presentations.

Research Mentors
As experienced scientists, research mentors have a deep appreciation for all of the great benefits an inclusive scientific conference has to offer. The scientific conference is an ideal venue for professional and career development for more senior scientists, as well as an opportunity to actively engage with early-career trainees in a productive manner to enhance the mentee experience and their participation in this important scientific activity. It is also a great place to recruit students and postdocs for your lab. ASCB poster sessions that feature MAC members also provide a place to identify and recruit potential faculty colleagues from groups historically underrepresented in science.

Maximizing pre-meeting activities. Mentors often have a full schedule of a meeting that can be shared with lab members ahead of time. The schedule can
facilitate appropriate planning, budgeting, and coordination of subsequent activities needed for abstract, travel award, and/or scholarship application submissions. Conference activities can also be used to create working timelines around preparing abstract and travel award applications. Mentors can further use the pre-conference period to help trainees set realistic goals and communicate expectations for their research plans. Preparing for conferences also provides a mentor multiple opportunities to share constructive feedback with mentees about their work.

Strategies to increase participation and promote inclusion of underrepresented individuals at scientific meetings include encouraging mentee participation in workshops and special interest group meetings and encouraging trainees to apply for conference awards/scholarships (e.g., travel or childcare grants managed by the MAC and WICB, etc.). Senior mentors can also use their expertise to nominate fellow Persons Excluded because of Ethnicity or Race (PEER) scientists for mentoring and for keynote, plenary, and special lectures at meetings. These strategies can greatly increase the participation, diversity, and inclusivity of scientific meetings.

Enhancing participation. Participation of experienced lab members can be enhanced through active networking and the formation of new collaborations and opportunities to mentor junior trainees. Helpful suggestions include mentors asking senior lab members to complete evaluation forms after visiting posters and attending talks. This encourages the conference coordinators to propose popular sessions in the future, as well as reinforcing the need for recurrent sessions that feature scientists from underrepresented groups. Mentors could also encourage trainees to attend the conference, even if they are not planning on presenting, especially in virtual conference settings because registration and travel costs are often reduced. Trainee participation helps to maximize the lab group’s overall scientific conference experience.

Post-meeting activities also enhance the meeting experience. Consider scheduling a post-conference meeting to discuss all of the meeting highlights with the rest of the lab or department. Conference participants can use this opportunity to discuss favorite talks, feedback received during presentations, future research directions, and new collaborations. Post-conference sessions help to foster an open forum to discuss and share experiences from the conference, which can reinforce a sense of validation, encouragement, and belonging. An additional bonus of virtual scientific conferences is the accessibility of conference presentations posted online for viewing after the meeting.

Conference Organizers
What can organizers do to create an inclusive conference? Planning committees spend months organizing annual conferences. From finding the keynote lecturer to organizing minisymposia and poster sessions, the organizers do their best to make the science and featured activities as diverse as possible. Here we highlight action items that conference organizers can use to help create an inclusive conference experience.

Cast a broader net. Although many scientists know the names ASCB and EMBO, many trainees are unfamiliar with these organizations and their many available resources. To encourage representation at scientific conferences like the ASCB|EMBO meeting, organizers could consider extending their reach by leveraging connections with college student chapters, minority-serving institutions, and outreach programs and using databases of underrepresented scientists (e.g., WICB’s Speaker List, MAC’s Speaker List).
Spotlight first-time attendees. To increase inclusion and active participation, as well as retain new first-time attendees for future meetings, small additions such as the use of name badge “first-time attendee” ribbons can be easily implemented. The distribution of the ribbons could be managed during registration or check-in at the conference. One ribbon could be attached on the name badge, and a second ribbon placed on the participant’s poster board to increase visibility. For virtual meetings, a special banner or symbol can be displayed on the screen of first-time attendees to facilitate easy identification and encourage participant interaction.

Encourage informal discussions. Because large conferences like the annual ASCB|EMBO meeting can feel overwhelming to first-time attendees or PEERs, it is important for organizers to consider increasing informal interactions. For example, hosting a pre-meeting meet-and-greet for first-time attendees or attendees traveling alone. This would give attendees an opportunity to meet new people and find peers or a “conference buddy.” However, a meet-and-greet event could be a daunting activity in and of itself, with potential for further isolation. Therefore, it may be beneficial to incorporate more “artificial” interactions that will facilitate new meetings between people who may not have naturally interacted (e.g., “speed-networking”). Additional informal interactions include ice breaker sessions, scavenger hunts, or ASCB’s Mentoring Round Table and Scientific Round Table discussions.

Take-Away Message
Many of our suggestions can be easily implemented in scientific conference plans. Strategies like the ones discussed throughout this article can greatly influence the success of societies like ASCB to foster an inclusive community through the scientific conference. We can each play an active role in shaping the landscape of future meetings, and the opportunities to get involved are plentiful. We encourage you all to participate in making conferences like the ASCB|EMBO annual meeting a truly inclusive experience for everyone.

References

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Concerns of a Trailing Spouse

DEAR LABBY: My spouse and I are PhD postdocs, working in different labs and currently on the job market for our first independent positions. Although we are at about the same stage in our careers, my spouse’s postdoctoral work has been wildly successful, resulting in four high-impact first-author papers. My spouse interviewed at a top research institution, received a great offer, and is now very keen to accept it. For my spouse’s future research there are great resources and many opportunities for collaboration. My own work has not been quite as successful. I have one published first-author paper and one review article and have one manuscript submitted. My work has also not been quite as impactful as that of my spouse. The institution that made the offer to my spouse is aware of our dual career situation and has offered to work to find a position for me. I think it is unlikely that I would have independently been offered a position from this institution if not for my spouse. That makes me hesitant, since it seems that I am being forced upon them. What should I do?

—Trailing Spouse

DEAR TRAILING: Labby congratulates your spouse on getting a great offer from a top research institution. Dual-career situations are extremely common in science, and most institutions have learned to anticipate this issue when they are recruiting. The initial big question is what does the institution mean when it says it will “work to find a position” for you.

First, your spouse must not accept the position until your position is completely worked out and defined on paper. Now is the time that you both have bargaining power. Once your spouse accepts the position, that power is largely lost. If the institution is enthusiastic about hiring your spouse, then they will work to accommodate your needs.

Second, what type of position do you want? If you prefer a position in industry, for example, the institution may not be able to accommodate you, and you should focus on whether or not appropriate opportunities are available nearby. If you prefer an academic position, you must carefully consider what you might be able to accept and still set yourself up for a successful career. At the bottom end an academic institution might offer another postdoctoral position. Or the institution may offer you a non-tenure-track or research assistant professor position. In some institutions, this position allows you to focus wholly on your independent research without teaching obligations. Beware though, in some institutions, such a position carries less independence, requiring you to work under the supervision and control of a senior investigator. Also, this position often requires that you generate your salary entirely from grants.

Overall, if you are planning to do independent research, the major questions you need to ask are the degree to which the institution will provide laboratory space and initial support to get your independent research program off the ground. If you are applying to a medical school, the institution might offer you a position in a clinical department. If your work is translational, the appointment might provide access to clinical collaborators, but sometimes PhDs can find themselves less valued in a clinical department. Whatever the offer, ask to talk with others who hold similar positions at the institution and make sure it is something that you believe will allow you to be successful.

Crucially, your spouse must have your best interests at the top of their priority list, meaning that they must be willing to decline the position if your needs are not met. Finally, do not hold onto the perception that you are being offered a position not because of your own talents but because of those of your spouse. Instead, take up the challenge to demonstrate to your new departmental colleagues what an extraordinarily brilliant decision it was to recruit you when they did.

—Labby
It is with regret that we inform you that William (“Bill”) Brinkley passed away on November 10, 2020, at the age of 84. Bill was a past president of ASCB (1979–1980). He was dean of the Graduate School and vice president at Baylor College of Medicine. Bill was a widely respected scientist who made many important contributions to the mitosis field. He was one of the first to describe the ultrastructure of the kinetochore and to discover that it functions as a microtubule organizing center. Moreover, using the then newly developed method of indirect immunofluorescence, he found that tubulin was organized as a cytoplasmic microtubule array in interphase that was transformed into the mitotic spindle during M-phase. In 2014 he was awarded the E.B. Wilson Medal, the highest scientific award from the ASCB.

In addition, Bill was a passionate advocate for biomedical research through his outstanding activities in public policy. As but one of many examples, he was instrumental in the doubling of the National Institutes of Health budget (1999–2003). Two decades earlier, Bill had founded the ASCB Legislative Alert Committee, the first nationwide science advocacy group. Subsequently, soon after the establishment of the ASCB Public Policy Committee Bill served as its chair (1990–1992).

Besides serving as ASCB president, Bill was elected president of the International Federation for Cell Biology; the Federation of American Societies for Experimental Biology; and the Academy of Medicine, Engineering, and Science of Texas. He was the founder and first chair of the Association of American Medical Colleges (AAMC) Graduate Research Education and Training Group, providing a national forum to discuss issues of biomedical graduate education. He also served the biomedical research community in numerous other ways. Bill was a member of the Institute of Medicine (now the National Academy of Medicine).

Further details about his illustrious career can be found in two recent in memoriam articles that also contain some delightful anecdotes.1,2

References

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About the Program
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Program Goals:
- Help African and South American scientists gain exposure in research and teaching.
- Support African and South American scientists who want to experience an R1 institutional environment or teaching environment.
- Provide mentoring and networking opportunities to African and South American scientists.

Eligibility: African and South American early career graduate students, postdocs, and junior faculty
Location: Cold Spring Harbor Laboratory, Marine Biological Laboratory, or an independent lab
Date/Time: Courses or work to take place in 2022 and early 2023

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