



Supporting young scientists today for tomorrow's breakthrough discoveries

Date	Time	Track	Presentation Title	Speaker
6-Aug	08:30 - 10:00 AM	Lab Policy Workshop	Be 'System'atic: Creating Lab Culture and Training Environment Through Lab Policies	Jennifer M. Heemstra, PhD Associate Professor of Chemistry, Emory University
6-Aug	10:00 - 11:30 AM	Beckman Briefings Workshop	Part I: Scientific Storytelling	Bri McWhorter, MFA Founder & CEO of Activate of Captivate
6-Aug	10:00 - 11:00 AM	Beckman Briefings Workshop	Part II: Extracting Photochemical Design Principles from Biological Systems in vivo	Marco Allodi, PhD Arnold O. Beckman Postdoctoral Fellow, University of Chicago
6-Aug	10:00 - 11:30 AM	Beckman Briefings Workshop	Part III: Exploring the inhibition of Alk2 kinase and dimerization of EGFR kinase	Kumar Ashtekar, PhD Postdoctoral Fellow, Yale School of Medicine
6-Aug	10:00 - 11:30 AM	Beckman Briefings Workshop	Part IV: SPARC - A method to genetically manipulate precise proportions of cells	Jesse Isaacman-Beck, PhD Postdoctoral Fellow, Stanford University
6-Aug	10:00 - 11:30 AM	Beckman Briefings Workshop	Part V: Mechanisms for perceptual organization in the rodent visual cortex	Francisco Luongo, PhD Postdoctoral Fellow, California Institute of Technology
6-Aug	10:00 - 11:30 AM	Beckman Briefings Workshop	Part VI: Dissecting Cell Signaling Networks That Regulate Adult Neural Stem Cell Functions	Kira Mosher, PhD Postdoctoral Fellow, University of California, Berkeley

6-Aug	10:00 - 11:30 AM	Beckman Briefings Workshop	Part VII: From biochemical nanosensors to imaging to informatics to COVID-19 convalescent plasma - developing diagnostics and therapies for clinical medicine	Freddy Nguyen, MD, PhD Pathology Resident, Mount Sinai Hospital, Research Fellow, Massachusetts Institute of Technology, Co-Director of MIT COVID-19 Challenge, Massachusetts Institute of Technology
6-Aug	10:00 - 11:30 AM	Beckman Briefings Workshop	Part VIII: The "Real" Nuclear Physics: Tracking Genome Dynamics in Time and Space	Massa Shoura, PhD Postdoctoral Fellow, Stanford University
6-Aug	10:00 - 11:30 AM	Beckman Briefings Workshop	Part IX: Unraveling the interplay between transcription and RNA folding	Eric Strobel, PhD Postdoctoral Fellow, Northwestern University
6-Aug	11:30 - 01:00 PM	Communicating Science Workshop	Part I: How To Promote Your Science And Talk To Reporters Like A Pro	Carmen Drahl, PhD Freelance Science Journalist
6-Aug	11:30 - 01:00 PM	Communicating Science Workshop	Part II: How to Create the Ultimate Scientific Poster with User Experience Design	Mike Morrison User Experience Designer, Graduate Student, Michigan State University
6-Aug	12:00 - 12:05 AM	Bio-Chem	A novel superconducting family by design: how can we make superconductivity and magnetism coexist in one material?	Weiwei Xie, PhD Professor of Chemistry, Louisiana State University/Rutgers University
6-Aug	12:00 - 12:05 AM	BYI Final Presentation	An optical brain-machine interface through the development of protein, microscope, and deep learning tools	Yiyang Gong, PhD Assistant Professor, Departments of Biomedical Engineering, Electrical & Computer Engineering, and Neurobiology, Duke University
6-Aug	12:00 - 12:05 AM	Bio-Chem	Carbon dioxide utilization in plastic production: Development of a nickel catalyst	Vennela Mannava Undergraduate Student, University of Chicago
6-Aug	12:00 - 12:05 AM	BYI Final Presentation	Causes and consequences of rapid cancer cell adaptation to therapeutic drugs	Sabrina Spencer, PhD Assistant Professor of Biochemistry, University of Colorado, Boulder
6-Aug	12:00 - 12:05 AM	Bio-Chem	Copper Hydride Catalysis for the Synthesis of Axially Chiral Allenes	Liela Romero, PhD Assistant Professor of Chemistry, Baylor University

6-Aug	12:00 - 12:05 AM	Bio-Chem	Engineering electroautotrophy	Michaela TerAvest, PhD Assistant Professor of Biochemistry & Molecular Biology, Michigan State University
6-Aug	12:00 - 12:05 AM	Bio-Chem	From biochemical nanosensors to imaging to informatics to COVID-19 convalescent plasma - developing diagnostics and therapies for clinical medicine	Freddy Nguyen, MD, PhD Pathology Resident, Mount Sinai Hospital, Research Fellow, Massachusetts Institute of Technology, Co-Director of MIT COVID-19 Challenge, Massachusetts Institute of Technology
6-Aug	12:00 - 12:05 AM	BYI Final Presentation	Heterogeneous ultrafast relaxation in photosynthetic light-harvesting proteins	Gabriela Schlau-Cohen, PhD Associate Professor of Chemistry, Massachusetts Institution of Technology
6-Aug	12:00 - 12:05 AM	CubeSat	Irvine CubeSat STEM Program	Eric Ho Student
6-Aug	12:00 - 12:05 AM	CubeSat	Irvine CubeSat STEM Program	Jonathon Bower Student
6-Aug	12:00 - 12:05 AM	CubeSat	Irvine CubeSat STEM Program	Kaylee Kim Student
6-Aug	12:00 - 12:05 AM	CubeSat	Irvine CubeSat STEM Program	Sarina Doshi Student
6-Aug	12:00 - 12:05 AM	Bio-Chem	Liquid phase Peak Force Infrared Microscopy: Super-resolution Infrared Microscopy in the Aqueous Phase	Xiaoji Xu, PhD Assistant Professor of Chemistry, Lehigh University
6-Aug	12:00 - 12:05 AM	BYI Final Presentation	Mechanistic basis for the evolution of eukaryotic specialized metabolism	Jing-Ke Weng, PhD Associate Professor of Biology, Massachusetts Institute of Technology
6-Aug	12:00 - 12:05 AM	Bio-Chem	More Exquisitely Adapted Species Have Higher Structural Disorder in Vertebrate Protein Domains	Catherine Weibel Undergraduate Student, University of Arizona

6-Aug	12:00 - 12:05 AM	BYI Final Presentation	Nanomaterials Engineering to Probe and Control Living Systems	Markita Landry, PhD Assistant Professor of Chemical and Biomolecular Engineering, University of California, Berkeley
6-Aug	12:00 - 12:05 AM	Bio-Chem	Neuromechanics of Locomotor Transitions on Energy Landscapes of Complex Terrain	Chen Li, PhD Assistant Professor of Mechanical Engineering, Johns Hopkins University
6-Aug	12:00 - 12:05 AM	Bio-Chem	Prevalence and reactivity of fused-rubredoxin AlkBs	Shoshana Williams Graduate Student, Stanford University
6-Aug	12:00 - 12:05 AM	BYI Final Presentation	Probing (intracellular) physicochemical environments at the nanometer scale, one molecule at a time	Ke Xu, PhD Assistant Professor of Chemistry, University of California, Berkeley
6-Aug	12:00 - 12:05 AM	Bio-Chem	ShadowAuxin: Optimization of Quenching FRET Pairs for a Fluorescent Auxin Biosensor	Silas Miller Undergraduate Research Assistant, Whitman College
6-Aug	12:00 - 12:05 AM	Bio-Chem	SPARC - A method to genetically manipulate precise proportions of cells	Jesse Isaacman-Beck, PhD Postdoctoral Fellow, Stanford University
6-Aug	12:00 - 12:05 AM	BYI Final Presentation	Systematic, organism-wide gene regulation drives individual lifespan in <i>C. elegans</i>	Zachary Pincus, PhD Assistant Professor, Departments of Biology and Genetics, Washington University School of Medicine
6-Aug	12:00 - 12:05 AM	Bio-Chem	Tracking Genome Dynamics in Time and Space	Massa Shoura, PhD Postdoctoral Fellow, Stanford University
7-Aug	09:00 - 10:15 AM	Profiles in Science: Academia Careers	Part I: The Team, the Generalist, and Seeing Through Blind Spots	Jeffrey S. Moore, PhD Beckman Institute Director, University of Illinois, Urbana- Champaign, Stanley O. Ikenberry Endowed Chair, Professor of Chemistry and Materials Science and Engineering, HHMI Professor

7-Aug	09:00 - 10:15 AM	Profiles in Science: Academia Careers	Part II: Adventures in Molecular Recognition	Ming Chen Hammond, PhD Associate Professor of Chemistry, University of Utah
7-Aug	10:30 - 11:45 AM	Profiles in Science: Industry Careers	Part I: Adventures in Chemical Biology and Drug Discovery	Christopher am Ende, PhD Associate Research Fellow, Pfizer, Inc.
7-Aug	10:30 - 11:45 AM	Profiles in Science: Industry Careers	Part II: From the Ivory Tower to the Newsroom: Careers in Science Communication	Carmen Drahl, PhD Freelance Science Journalist
7-Aug	12:00 - 02:30 PM	Profiles in Science: Medicine Careers	Part I: Dual Degrees and Dual Careers -- The Interface between Neurology and Neuroscience	Terrance T. Kummer, MD, PhD Director of Neurotrauma ICU, Barnes Jewish Hospital, Assistant Professor of Neurology, Washington University School of Medicine
7-Aug	12:00 - 12:30 PM	Profiles in Science: Medicine Careers	Part II: From Oil Refineries to Cataract Surgeries: My Life through Process Flow Diagrams	Shameema Sikder, MD Director of the Center of Excellence for Ophthalmic Surgical Education and Training, Johns Hopkins Hospital Associate Professor of Ophthalmology, Johns Hopkins Medicine
7-Aug	12:00 - 12:30 PM	Profiles in Science: Medicine Careers	Part III: The physician scientist track: long trajectory and worth it	Kirk Wangenstein, MD, PhD Physician, Penn Medicine, Assistant Professor of Medicine and Assistant Professor of Medicine in Genetics, University of Pennsylvania
7-Aug	12:00 - 12:30 PM	Profiles in Science: Medicine Careers	Part IV: How to be a sane clinician scientist - a timeline	Lois Smith, MD, PhD Clinician Scientist Ophthalmology, Harvard Medical School, Boston Children's Hospital Professor of Ophthalmology, Harvard Medical School
8-Aug	09:30 - 11:00 AM	Mental Health in the Sciences	Self-care is Not the Enemy of Performance	Jennifer M. Heemstra, PhD Associate Professor of Chemistry, Emory University
8-Aug	11:00 - 12:00 PM	Closing Remarks	Appreciation Award Presentation and Closing Remarks	Anne Hultgren, PhD Executive Director, Arnold and Mabel Beckman Foundation William H. May Chairman of the Board of Directors, Arnold and Mabel Beckman Foundation