2016 PECASE ROUNDTABLE PARTICIPANTS

Marcel Agüeros
Columbia University
National Science Foundation

Marcel Agüeros is an assistant professor of astronomy whose research interest is in stellar astrophysics, and specifically in using new data sets and technologies to address classic questions in stellar evolution. He is currently leading large-scale observational campaigns exploring the angular-momentum content and magnetic activity of Sun-like stars over billion-year timescales. Marcel is also the director of Columbia's Bridge to the Ph.D. Program in the Natural Sciences, which is designed to increase the number of underrepresented minorities transitioning into STEM graduate programs.

Erin Carlson
University of Minnesota
National Science Foundation

A chemistry professor at the University of Minnesota, Erin Carlson is working to identify strategies that lead to the development of antibiotics that will inhibit or slow the evolution of resistance. She was nominated for the PECASE recognition for her discovery of novel chemistry underlying a new approach to treat antibiotic-resistant infections, her leadership in the chemistry and women-chemists communities, and for developing new hands-on laboratory activities to engage K-12 students in natural product chemistry.

Gijs de Boer
University of Colorado
NOAA

Gijs de Boer is a researcher with the Cooperative Institute for Research in Environmental Sciences (CIRES) at the University of Colorado Boulder. He works at NOAA ESRL's Physical Sciences Division (PSD) to understand Arctic clouds, aerosols and precipitation, and their connections to the Earth's surface. He is recognized for fundamental contributions to the understanding and modeling of Arctic atmospheric processes and their impact on global climate, and for the effective communication of Arctic science to indigenous Arctic populations.

Jordan Green
Johns Hopkins University
National Institutes of Health

Dr. Jordan Green is an associate professor of biomedical engineering, ophthalmology, oncology, neurosurgery, and materials science & engineering at the Johns Hopkins University School of Medicine. His research includes using tiny, biodegradable particles to teach the immune system to recognize and eliminate cancer cells. His investigations have led to improvements in prolonged, time-delayed release of drugs and other therapeutic agents — and shows particularly promising results related to macular degeneration and cancers of the skin, liver, and brain. He is also the CEO and co-founder of the Baltimore biotech startup company AsclepiX Therapeutics.

Tessa Hill
University of California Davis
National Science Foundation

Tessa Hill is an associate professor in the Department of Earth and Planetary Sciences and at the UC Davis Bodega Marine Laboratory and an associate director of the UC Davis Coastal and Marine Sciences Institute. She studies the response of marine life to environmental changes, such as ocean acidification, and leads a National Science Foundation-supported program to promote climate change science in K-12 classrooms.

Jennifer Miksis-Olds
Pennsylvania State University
Department of Defense

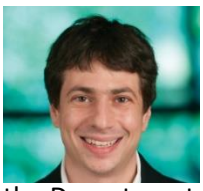
Jennifer Miksis-Olds is the co-director of The Penn State Center for Marine Science and Technology and a senior research associate in the Applied Research Laboratory (ARL). She is working to answer biological questions in both the marine and terrestrial environments. She was recognized for her work in the field of marine bioacoustics – a highly interdisciplinary field that combines expertise in biology, oceanography, physics, math and engineering.

Dave Pagliarini
University of Wisconsin-Madison
National Institutes of Health

Dave Pagliarini is an associate professor of biochemistry at University of Madison-Wisconsin and Director of Metabolism at the Morgridge Institute for Research. His work centers on mitochondria, tiny cell structures integral to metabolism and energy production, and how cells turn mitochondrial functions on or off. This research could prove very important for treating mitochondrial dysfunction, which is associated with as many as 150 human diseases, including cancer, diabetes and Parkinson's.

James Rondinelli
Northwestern University
Department of Defense

James Rondinelli is an assistant professor of materials science and engineering at Northwestern's McCormick School of Engineering. His passion is to manipulate materials at their fundamental electronic level, pushing electrons to do new things in materials and to realize new functionalities — by designing materials atom by atom. His work focuses on the theory, design and applications of complex ternary/quaternary metal oxide and fluoride ceramics, including crystals and thin films, for low-power electronics, high-temperature applications, non-linear optical and oxidation-resistant systems and devices.



Aaron Roth
University of Pennsylvania
National Science Foundation

Aaron Roth is an assistant professor in the Department of Computer and Information Science in the University of Pennsylvania's School of Engineering and Applied Science. His interests lie in designing new algorithms for querying large datasets that protect an individual's personal information while leading to more reliable outcomes. Roth and his colleagues are developing a "differentially private" approach that allows a company like Google to examine consumer trends in data while ensuring that individual information is not revealed.

Erika Wolf
VA Boston Healthcare System
Boston University School of Medicine
Department of Veterans Affairs

Erika Wolf is a clinical psychologist in the National Center for PTSD/VA Boston Healthcare System and an assistant professor in the department of psychiatry at Boston University School of Medicine. Her areas of expertise include genetic and environmental contributors to PTSD and related comorbidity, PTSD-related accelerated cellular aging and latent variable approaches to measuring posttraumatic psychopathology. Her work on the genetics of PTSD is on the cutting edge of neuroscience.

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