All events held in Room 1-131, unless otherwise noted. Events open to CEE female postdocs & senior graduate students (RSVP required, please contact Colette Heald). Faculty welcome throughout except lunches.

**Thursday, October 12, 2017**

8:30 a.m.-9:00 a.m. Welcome from Dean of Engineering and Professor Anantha Chandrakasan
Welcome from CEE Department Head and Professor Markus J. Buehler
Welcome from Professor Colette Heald, Chair of CEE Rising Stars Steering Committee

9:00 a.m.-9:30 a.m. Introductions (1 minute elevator pitch!)

9:30 a.m.-12:30 a.m. 11 Research Talks

“Quantifying Flood Hazard & Risk in Highly Urbanized Coastal Watersheds”, Antonia Sebastian (TU Delft)
“Augmented-Reality for Environmental Visualization”, Maider Llaguno-Munitxa (Princeton)
“Advancing performance-based multi-hazard engineering: risk informed approaches”, Yufen Zhou (Colorado State University)
“An Evaluation of Various Shallow Ground-Improvement Methods Intended to Inhibit Earthquake-Induced Soil Liquefaction”, Julia Roberts (University of Texas, Austin)
“Internal Stress State of Unsaturated Clay”, Idil Akin (Washington State University)

**BREAK**

“Water Microbes: Comprehension and Control”, Natalie Hull (University of Colorado, Boulder)
“nL-qPCR Pathogen Chip: a tool for stool”, Jessica Grembi (Stanford University)
“Microbial contaminants and water sustainability: assessing potential water quality risks associated with non-ingestion exposures to reclaimed water”, Emily Garner (Virginia Tech)
“Exploring the fate and removal of trace organic contaminants in the water cycle”, Stephanie Spahr (Stanford University)
“Tracking organic compounds in indoor and outdoor air”, Yingjun Liu (University of California, Berkeley)
“Spatiotemporal variability in the vegetation sink of tropospheric ozone and implications for air pollution”, Olivia Clifton (Columbia University)

12:30 p.m.-1:15 p.m. Lunch

1:30 p.m.-2:30 p.m. Panel #1: The Job Search & Interview Process
(Prof. Markus Buehler, Prof. Jaime Peraire, Prof. Benedetto Marelli, Prof. Serguei Saavedra)

2:30 p.m.-3:00 p.m. Coffee Break

3:00 p.m.-4:00 p.m. Panel #2: The First Few Years of a Faculty Career (Mentoring, Promotion & Tenure)
(Prof. Penny Chisholm, Prof. Carolina Osorio, Prof. Colette Heald, Prof. Ali Jadababaie)
4:30 p.m.-6:00 p.m. MIT Campus Tour with brief Lab Tours in Parsons and Pierce
6:30 p.m.-8:30 p.m. Dinner with MIT faculty (Evoo Restaurant, 350 Third Street, Cambridge)

**Friday, October 13, 2017**

9:15 a.m.-11:45 a.m. 9 Research talks

“The Water-Food-Energy Nexus: A Data-Driven, Interdisciplinary Approach to Inform Decision Making”, Thushara Gunda (Vanderbilt University)

“Efficient Solar Energy Conversion and Waste Heat Storage Enabled by Molecular Designs”, Grace Han (MIT)

“Nanomechanical property coupling towards self-sensing, damage-tolerant, and self-healing materials”, Shilpa Raja (MIT)

“Smart Traffic Control: from Urban Arterial Networks to Freeways”, Negar Mehr (University of California, Berkeley)

**BREAK**

“Shared Vehicles and their Impacts on Congestion”, Karina Hermawan (University of California, Irvine)

“Methods for Optimization under Uncertainty with Applications in Fleet Management”, Ilke Bakir (Georgia Tech)

“Topics on Materiel Convergence”, Trilce Encarnacion (Rensselaer Polytechnic Institute)

“Urban Spatiotemporal Flux”, Neda Mohammadi (Georgia Tech)

“Uncertainty management for complex civil engineering systems”, Negin Alemazkoor (University of Illinois, Urbana-Champaign)

12:00 p.m.-1:00 p.m. Lunch with Chancellor Cynthia Barnhart

1 p.m.-2 p.m.  
*Panel #3: Work-Life Balance (Time Management, Career & Family)*  
(Prof. Heidi Nepf, Prof. Franz Ulm, Prof. Tal Cohen, Prof. Jesse Kroll)

2 p.m. Adjourn