



9th Annual LLNL/LPC Science and Engineering Seminar Series
Theory to Practice: How Science is Done



DREAM BIG: ENGINEERING OUR WORLD

Monday, November 5, 2018, 6:00-7:30 pm
Main Theater in Mertes Center for the Arts (Bldg 4000)
Free and open to the public



Dream Big: Engineering Our World is a first of its kind film that will transform how we think about engineering. From the Great Wall of China and the world's tallest buildings, to underwater robots, solar cars and smart, sustainable cities, Dream Big celebrates the human ingenuity behind engineering marvels big and small, and reveals the heart that drives engineers to create better lives for people around the world. In Partnership with American Society of Civil Engineers. Presented by Bechtel Corporation.

After the documentary, students will get the opportunity to engage with a panel of LLNL engineers:



William Smith, Staff Engineer

Center for Engineered Materials and Manufacturing, LLNL

Originally hailing from the Chicagoland area, William Smith obtained his BS in Engineering Mechanics from the University of Illinois at Urbana-Champaign in 2013. Will started at LLNL as an engineering intern in the summer of 2012 working in microfluidics. Since being hired as a staff engineer in 2014, he has ventured into the design of 3D printed metamaterials and studying their mechanical properties. While at LLNL, Will is concurrently pursuing an MS degree in Mechanical Engineering at UC Davis through the lab's Distance Learning Program.



Julie Mancini, Staff Engineer

Center for Engineered Materials and Manufacturing, LLNL

Julie Mancini received her B.S. in Mechanical Engineering from UC Davis in 2013, after graduating from Livermore High School and attending Las Positas College for 3 years. She started as a summer intern at LLNL in 2012. In 2014, she was hired as a Staff Engineer working in the Center for Engineered Materials and Manufacturing. Her research interests are in 3D printing, metamaterials, and mechanics of materials. Julie is currently pursuing a M.S. degree from UC Davis in Mechanical and Aeronautical Engineering as part of LLNL's Distance Learning Program, which allows employees to complete graduate engineering and computer science programs online.



Suzanne Singer, PhD, Energy Systems and Thermal Fluids Staff Engineer
Computational Engineering Division, LLNL

Suzanne L. Singer is an energy and thermal fluids analyst at Lawrence Livermore National Laboratory (LLNL) where she supports engineering and energy security with projects in energy efficiency and renewable energy. She is a diversity ambassador for LLNL, was a featured Women @ Energy, and remains committed to STEM enrichment by supporting the American Indian Science and Engineering Society (AISES). Suzanne earned her Ph.D. and M.S. in Mechanical Engineering from the University of California, Berkeley, while investigating microscale heat transfer of nanostructured materials to improve thermoelectric device efficiency for power generation or refrigeration. She completed a B.S. from the University of Arizona in Mechanical Engineering.



Javier Alvarado, Engineering Technician

Center for Micro and Nano Technology, Materials Engineering Division, LLNL

Javier Alvarado graduated from UC Santa Cruz with a Bachelors of Science in Neuroscience & Behavior and later developed his Molecular Biology skills by earning a Biotechnology certificate at Ohlone College. Interested in learning engineering principles and their application to biological systems, he attended classes at Las Positas College. Javier currently works as an Engineering Technician at LLNL contributing to several bioengineering projects. His research interests include 3D Cell Culture, biomaterials, and applying 3D Bioprinting techniques to model in vitro the neurovascular environment.