Abstract
What is sustainability? We're all familiar with the idea of solar panels and recycling, but what else does it involve? Join the Director of the USC Wrigley Institute for Environmental Studies to discuss exciting new advances in sustainable solutions. This conversation invites science-minded and non-science minded students alike to think about alternative paths for our energy, water, food and waste. We will discuss some of the most exciting USC research happening today and other sustainability examples from around the world. From bacteria that generate electricity to food-recycling flies and the idea of harvesting kelp for biofuel, this wide-ranging conversation will open your mind to the possibilities. By the end, we hope students will come away inspired and informed about how to get involved in sustainability research at USC.

Faculty Biography
Dr. Kenneth Nealson is Director of the USC Wrigley Institute for Environmental Studies, a professor of Earth Sciences and Biological Sciences at USC and holds the Wrigley Chair in Environmental Studies. He is an accomplished microbiologist and astrobiology expert, studying the evolution of life in the universe and microbial life in extreme environments. His research addresses marine and freshwater bacteria that oxidize and reduce manganese, iron and other metals; and investigations of aquatic bacteria that live in extremely alkaline conditions to better understand how they survive in conditions normally thought to be incompatible with life. His lab has also been working on the development and testing of microbial fuel cells, which generate power through microbial conversion of organic biomass and offer potential as sustainable systems for processing municipal and industrial waste. In his position as the Wrigley Institute's Director, Dr. Nealson is spearheading an ambitious new vision for the institute and USC Dornsife to play a leading role in addressing the world's evolving environmental and sustainability issues. He has produced more than 400 peer-reviewed papers, edited three books, and submitted more than a dozen patents.