



Living World Lecture
Friday March 23, 7:30 P.M.
Earth and Space Sciences Lecture Hall

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Extinction, Extinction: How it Was and How to Stop it From the Miocene to Today

The central question of our time is whether we can manage global ecosystems to support us today and into the future, or we continue on current trends of ever-increasing extinction rates and ecosystem loss. But while many current challenges, such as massive carbon dioxide or nitrogen output, are unprecedented, others have in fact been unfolding for thousands of years. Here I show the results of studies combining the fossil record with DNA techniques to discover the footprint of human activities deep into the past. Using the islands of the Caribbean as a microcosm offers crucial lessons for the future: it would take nature millions of years to restore what was lost over only a few hundred years.

Liliana M. Dávalos is Associate Professor of Conservation Biology at Stony Brook University, Stony Brook, New York. She is interested in the forces shaping biodiversity in time and space, including effects from human activities. Her research focuses on the evolution of species and trait diversity, and on how to conserve ecosystems today and into the future. Professor Dávalos is a 2013 Kavli Frontiers of Science Fellow for outstanding early career, a 2012 National Academies of Sciences Education Fellow in the Life Sciences, and has advised the United Nations Office of Drug and Crime on deforestation since 2007. She is a coauthor of the 2016 World Drug Report.