

Department of Physics and Materials Science



SEMINAR

Biodiversity and evolution in the sunflower family

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Abstract: The Asteraceae family, or sunflower family, is the largest and most diverse family of plants on earth, with considerable economic and ecological importance. Asteraceae are distributed worldwide, from nearly polar latitudes all the way to the tropics and occur across a diverse range of habitats from extreme deserts to swamps and from lowland rainforests to alpine tundra. The family represents an excellent system for addressing a broad range of questions in ecology and evolution including systematics, comparative genomics, and plant conservation. This seminar will discuss the genetic and genomic tools The Mandel Lab has developed and address questions including: What is the role of gene duplication and genome evolution in driving evolutionary novelty? What are the underlying processes that lead to repeatability of the evolution across lineages? What role does genetic variation play in the conservation of species?

Bio: Jennifer Mandel is an Associate Professor in the Department of Biological Sciences at the University of Memphis with expertise in the ecology and evolution of plants. She obtained her PhD from Vanderbilt University studying biodiversity and conservation. Dr. Mandel conducted postdoctoral research at the University of Georgia where she worked on crop genomics. Her current research program applies concepts from ecological and evolutionary genetics to understand the patterns and processes that generate the global plant diversity and distributions. She is a specialist on the sunflower family which comprises 30K+ species including lettuce, artichoke, and safflower. Specific projects include systematics and evolution, comparative genomics, plant conservation, and crop-wild relatives studies.

YOU ARE INVITED!

Friday Apr. 21st, 3 - 4 PM Manning Hall 201



Driven by doing.