

Hugh Hanson Ecology Seminar Series and Global Drylands Center present



Maria Natalia Umaña

Assistant Professor
Forest Functional Ecology Lab
University of Michigan

Date: Wednesday, Feb. 13

Time: 3 - 4 p.m.

Place: LSC 202

“Tropical diversity along environmental gradients: insights from functional ecology”

Tropical forests are a hotspot of biodiversity in various groups, including plants. Understanding the mechanisms that promote high diversity in this region is a central goal of ecology. Although some studies have revealed the important role of environmental factors associated to current patterns of species diversity, most of these studies have taken a purely taxonomic approach that offers limited information concerning how organismal strategies and plant life histories have been selected in different environments. Without this information, ecologists have limited insight into the forces that govern diversity of tree communities along environmental gradients.

In this talk, I will examine ecological hypotheses for explaining patterns of diversity along environmental gradients by combining taxonomic and functional approaches. I present examples that account for intraspecific trait variation and the role of distinct environmental factors to illustrate how ecological forces may have led to the high diversity in tropical plant communities.

sols.asu.edu/seminars

ASU School of
Life Sciences
Arizona State University