

**UF/IFAS 103 Black Hall**

School of Natural Resources and Environment PO Box 116455 Gainesville, FL 32611-6455

(352) 392-9230

(352) 392.9745 Fax

**Spring 2022 Interdisciplinary Ecology Seminar Series**

|  |  |  |
| --- | --- | --- |
| **Title:**  **Faculty Advisor:**  **Date:**  **Time:**  **Location:** | **Of rodents and randomness: macroecological approaches to community structure**  **Dr. Morgan Ernest, Wildlife Ecology & Conservation**  **Monday, 28 February 2022**  **1:55 pm – 2:45 pm (Eastern)**  **Zoom** [**LINK**](https://ufl.zoom.us/j/95634184190?pwd=aDVpQm5YcFVUUGhtc21rNmFxcVlzQT09)  **Passcode: SNRE22** | **Speaker: Renata M. Diaz** |

The aggregated attributes of ecological communities - such as community-level abundance and metabolic flux, and how these are distributed among species and organisms - emerge from a web of environmental constraints, complex species interactions, and ubiquitous mathematical rules. I use a telescoping perspective to explore how these factors shape community properties and determine how they change over time, building from a granular focus on species interactions in a well-studied experimental system, to successively broader organizational and conceptual scales in pursuit of general insights. First, I use 30 years of accumulated data and natural history knowledge to explore the effects of species loss on community function in an experimentally manipulated desert rodent community. Second, I undertake a continental-scale comparison across communities to explore how shifts in community body size distributions modulate the long-term dynamics of total abundance, biomass, and energy use in North American breeding birds. Finally, I step further back to examine how fundamental mathematical constraints inform our understanding of ecological “laws”, using the species abundance distribution as a case study.

This is the exit seminar for Interdisciplinary Ecology PhD candidate Renata Diaz. Renata uses computationally-intensive theoretical and empirical approaches to study the emergent properties of ecological systems. For additional information, contact Renata Diaz at: [diaz.renata@ufl.edu](mailto:diaz.renata@ufl.edu)

*All viewers will start in a waiting room and need to be admitted by the meeting host. Viewers of the live stream may now ask questions by clicking on the message icon at the bottom. Questions will be read at the end during the question and answer portion. In addition, all seminars are archived for viewing on* ***SNRE website****.*

*The Foundation for The Gator Nation*

An Equal Opportunity Institution