

A SEMINAR SERIES WITH

# HARTE

2022

**AUGUST 24th | 2PM- 3PM | HRI CONFERENCE ROOM 127**  
**(ZOOM MEETING OPTION AVAILABLE IN QR CODE LINK BELOW)**

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## **ECOLOGICAL DETECTIVES:**

**Quantitative methods to describe biodiversity and understand ecological patterns, and processes**

Understanding the factors underpinning the current distribution of biological diversity on earth is the ultimate aim of the ecological research agenda. Given the rapid changes triggered mainly by the anthropogenic actions on earth, comprehension of processes and mechanisms that shape and maintain biodiversity is more important and urgent than ever. To accomplish this aim, ecologists rely on mapping the distribution of biodiversity on earth and unveiling the processes and mechanisms responsible for generating these patterns. Consequently, success depends on detecting and explaining biodiversity patterns reliably. In this talk, numerical, statistical, and computational tools will be shown which have been developed to detect patterns in different facets of biological diversity (taxonomic, functional, and phylogenetic). These numerical tools can be used to elaborate explanations that reveal the mechanisms underpinning the distribution of diversity on earth.

## MORE ABOUT OUR **SPEAKER**

**DR. GABRIEL NAKAMURA DE SOUZA**



Dr. Nakamura is an ecologist working as a postdoctoral research assistant at Texas A&M University-Corpus Christi. He is focused on understanding how historical and contemporary factors

influence the observed patterns of biological diversity. His “fieldwork” consisted mainly of going inside the landscapes of computer cores to investigate the effectiveness of numerical methods and diversity metrics to detect these patterns and processes driving the assembly of ecological assemblages.



Parking permits are required on campus so visitors must reserve space online via [ParkMobile](#). Due to **limited seating**, online participation via **Zoom** is available see link below.

