



- Poster Presentation: Vanderbilt Summer Science Research Symposium  
**Analysis of upstream motifs related to PPR genes in *Rhazya strica* genome**  
Edgar Marroquin, Bob Jansen, Dhivya Arassapan  
Date: 2016

- Poster Presentation: FRI Undergraduate Research Forum  
Collaborations  
**The role of Innate Immune response in Chronic Alcohol Abuse and other psychiatric disorders**

Khoi Le, Lee Rao, Edgar Marroquin, Dhivya Arassapan, Dayne Mayfield  
Date: 2018

- Poster Presentation: Texas Research Society on Alcoholism 28<sup>th</sup> annual meeting, FRI Undergraduate Research Forum

**Bioinformatics Methods for Analysis of Multifactorial RNA-seq Data**

Nicholas Dawes. Edgar Marroquin, Dhivya Arassapan, Xiaoyu Weng, Thomas Juenger  
Date: 2018

- Poster Presentation: FRI Undergraduate Research Forum

## Teaching Experience

---

Cornell University - CS 3410 - Computer System Organization and Programming.  
Teaching assistant Spring 2021

A course introducing students to processors and what happens at the low levels of a computer! Introduces students to basic processor design, assembly languages (RISC-V), and more about how computers work at a lower level.

Responsibilities included: Holding office hours, grading homeworks, editing and writing homeworks, managing undergraduate TAs, editing exams, and grading exams.

Cornell University - CS 2110 - Object Oriented Programming and Data Structures.  
Teaching assistant Spring 2020, Fall 2020

Typically the second course in the CS sequence at Cornell, this class is often the first class to introduce the concepts of OOP and introduces students to many of the core ideas of computer science such as data structures (ranging from lists to trees and more), interpreting and analysing algorithms, asymptotic complexity, and concurrency in addition to teaching students how to program in Java.

Responsibilities included: Holding office hours, grading homeworks, writing and editing the exams, and grading the exams.

Cornell University - CS1110 - Introduction to Computing Using Python. Teaching Assistant Summer 2020

Introductory Python course that introduces students to the syntax of a modern high level programming language and also introduces students to thinking in a computational mindset.

Responsibilities included holding office hours, aiding with course administrative functions and grading coursework.

Cornell University - CS 3110 - Data Structures and Functional Programming. Teaching Assistant Fall 2019

Course that covers data structures more in depth than in 2110 and introduces students to often their first functional programming language (Ocaml).

The University of Texas Austin - Bio 321G Computational Biology - Peer Mentor Spring 2017 - Spring 2019 - Covers the basics of Computational Biology, including fundamentals of Biology, Computer Science, Genetics, and Statistics. Students were also assigned research projects and I acted as a mentor to the students, helping them communicate with their PI's and facilitating their research goals by introducing new methods and covering research methodology.

## **Fellowships and REUs**

---

McNair Scholar

TIDES Undergraduate Research Fellowship

Leadership Alliance Summer Research Experience - Early Identification Program

Vanderbilt NSF-REU in Chemical Biology