

RUTH RAICHUR

STUDENT

CONTACT DETAILS

ruth.raichur@utexas.edu
ruthraichur.github.io
600 West 26th St, Apt 3402 A, Austin TX 78705
Citizenship: U.S citizen

RESEARCH EXPERIENCE

UNDERGRADUATE RESEARCHER - JAYARAM LAB

University of Texas at Austin | November 2020 - Present

Undergraduate research volunteer and independent researcher in a molecular biology faculty lab under the guidance of Dr. Makkuni Jayaram and Dr. Vishy Iyer.

- Research in understanding the hitchhiking mechanisms of selfish DNA elements.

FUNCTIONAL GENOMICS STREAM - IYER LAB

University of Texas at Austin (FRI) | January 2019 - Present

Peer mentor and Researcher for FRI Functional Genomics Stream.

- Research to understand the function and evolution of organisms using next-generation sequencing technologies and the CRISPR-Cas9 system to explore the molecular biology of organisms on a genome-wide scale.
- Using computational methods to obtain a mechanistic understanding of transcriptional regulation and evolutionary underpinnings of molecular behavior.
- Working with new FRI students in mastering essential bioscience lab skills and adjusting to the intellectual demands of research.

RELEVANT LAB SKILLS

- Preparing chemically competent yeast and E.coli cells
- Yeast and E.coli Transformations
- PCR/Primer Design
- Gel Electrophoresis/Gel Extraction
- DNA and Plasmid extraction/NanoDrop
- Agar plate preparation
- Mutagenesis
- Enzyme Digestion and Ligation
- Protein Extraction/SDS Page/ Western Blot

RELEVANT COMPUTATIONAL SKILLS

- Proficiency in R and Python

CAREER SUMMARY

TIDES - FRI PEER MENTOR & UGS TEACHING ASSISTANT

UT Austin TX | August 2020 - Present

Texas Institute for Discovery Education in Science (TIDES) - Freshman Research Initiative (FRI) peer mentor and Undergraduate Studies (UGS) course TA

- TA for an Intro to Research Methods UGS for incoming freshmen: assisting in grading and running the course.
- FRI paid peer mentor for Functional Genomics Stream

LIFE AND EARTH SCIENCES MEDIA CONTENT AUTHOR

Macmillan Learning, Austin TX | August 2019 - Present

Assisting the Life and Earth Sciences media content team with authoring and management of online learning systems.

LIFE AND EARTH SCIENCES MEDIA CONTENT INTERN

Macmillan Learning, Austin TX | May 2019 - August 2019

GRAPHIC DESIGN AND CREATIVE ASSISTANT

Ingenium Global, Dallas TX | September 2018 - May 2019

Design participant guides, slide decks and other forms of visual media for upper-level management training workshops.

RESEARCH INTERN

Indian Institute of Science, Bangalore, India | July 2017

Department of Molecular Biology.

Learned about the genetic techniques employed to decipher the genomic background of neglected diseases, more specifically, the workings of PCR and mass spectroscopy, and a DNA extraction technique. The topic of applying scientific research to benefit the community was discussed.

ACADEMIC BACKGROUND

UNIVERSITY OF TEXAS AT AUSTIN

College of Natural Sciences | 2018 - Present

- GPA: 3.86
- B.S in Biology, Genetics and Genomics (expected May 2022)
- Minor in Business (expected May 2022)
- Credential in Applied Statistical Modeling (expected May 2022)
- Freshman Research Initiative - Functional Genomics Stream
- Freshman Research Initiative Peer Mentor
- Texas Chinese Students Association
- Research Students Advisory Council
- University Honors - Fall 2018, Spring 2019, Fall 2019, Spring 2020, Fall 2020, Spring 2021

MALLYA ADITI INTERNATIONAL SCHOOL, BANGALORE, INDIA

Class of 2018

- Awarded a Cambridge Advanced International Certificate of Education (AICE) Diploma with Distinction