

TCH - Version Sci10 | Last Edited: April 30<sup>th</sup>, 2020

Anticipated Graduation: 05/2021

# **Tristan Henderson**

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### **Education:**

Houston Baptist University [Houston, Texas]

Bachelor of Science (In Progress)

- Major in Biochemistry/Molecular Biology
- Additional classes in physics and music.
- Class: Junior (Hrs: 80)
- Current GPA: 3.902
- Student Researcher, Mentor, Teaching Assistant, and Tutor

### Statement of Interests:

My interests are rooted in the evolutionary history of life. To satisfy these increasingly diverse interests, I take an interdisciplinary approach to understanding life's history. In a world where we can instantly connect with each other, no scientific approach should be off limits. There is an increasing need for field biology. Specifically, for the discovery and development of new early branched eukaryotic model organisms (protists). [1] Finding and characterizing new protist species is insightful for biology yet it is often ignored. More so, establishing model organisms is fundamental to biological research. More research information can be found on my [Website].

<u>Co-interests</u>: Science communication and teaching. Organismal photography and microscopy. Husbandry. Field research and specimen hunting.

*Biological subdisciplines:* Comparative biology. Eukaryotic microbiology. Field protistology. Molecular biology and biochemistry. Paleontology. Biogeography. Biophysics (mainly of light and fundamental particles).

<u>General interdisciplinary study:</u> Physics of matter. Electricity and magnetism. Microscopy and optics. Biochemistry. Photography and videography. Model organism biology.

# **Research Experience:**

## Presentations

Presented my research at...

- Two Houston Baptist University symposiums (2018, 2019)
- > Two State-wide Tri-Beta conventions (2018, 2019)
- Research at the Capitol (in Austin 2019, Capitol building)
- Under the microscope series (@ HBU Fall 2019)
- Baylor McNair Research Conference (@ BU, Waco, Fall 2019)
- Capitol of Texas Undergraduate Research Conference (@ UT Austin, Fall 2019)

I am continually learning new things about the world of science. If you are interested in what I can or cannot do, go to my [Scientific Repertoire].

## Houston Baptist University (Fall 2017-Present)

Student Researcher | Faculty mentor: Agnieszka Czopik, Ph.D.

Used Lancelets as models for ancient chordates. We were particularly interested in ancient adaptive immunity.

- In past research, my thinking was submerged in a variety of approaches, such as molecular cloning, husbandry of marine protists and amphioxi, and building 3D Paleoearth models.
- Developed methods of researching an uncommon model organism: The Amphioxus.
- ➤ Invited to present our research at the Texas state capitol building in Austin (4/1/2019), and at two Tri-Beta conventions.
- Mentored a select number of students in research life and methodologies.

## Research Internship(s)

Baylor College of Medicine SMART > Children's Nutrition Research Center | Davis Lab | Teresa Davis, Ph.D. (May-August 2019) – Paid Intern – Medical Research

One goal of the Davis lab is to figure out how to enhance muscle growth in preterm infants to prevent developmental problems and metabolic disease. I was involved in analyzing muscle samples of preterm piglets from a study about how feeding schedules affect growth.

The Baylor College of Medicine SMART program is NIH funded and highly competitive for entry.

\*Was accepted to the University of Iowa evolution REU to do research on beetle antennae diversification before it was canceled. Covid19 got in between me and beetle antennae. Quite disappointing.

## Job Experience:

## Houston Baptist University

Teaching Assistant: General Biology (Spring 2018-Present)

Tutor: (Fall 2018-Present)

- Biology (Introductory, General, Cellular, Genetics, Immunology)
- Chemistry (Introductory, General, Organic)
- Physics (Principles)

Worm Babysitter (Dec. 2019)

### **Awards and Honors:**

Grace Hopper Scholarship:

(Twice: 05/06/2019 and 04/25/2020)

An award of \$5000 per year for high achieving students in STEM-related academic programs.

Texas TRIO Association's 2019 Walter O' Mason Scholarship:

(05/10/2019)

A \$1500 scholarship based on strong academic performance, leadership ability, and community involvement for TRIO scholars.

#### **Involvement:**

### **Professional Organizations**

International Society of Protistologists (ISOP) – Student Member

### Houston Baptist University

#### **Organizations**

▶Tri-Beta (Biology Club)

▶ American Chemical Society

▶ American Physics Society

▶Chemistry Journal Club

▶Biology Journal Club

▶Student Music Association

▶ Ratio Christi: Apologetics

club

▶TRIO Student Support Services (First Generation

Student)

# Texas Children's Hospital

Volunteer – (2019-Present)

I cheerfully served tea and bakery items to medical personnel throughout the hospital.

#### Low Priority Skills, Certifications, Licenses, etc.

## • Music

Instruments: Viola (10yrs); Piano/Synthesizer (1yr) Composition: 4 pieces (1yr)

Advanced Open Water Diving (PADI, Issued) 2014)

#### Medical

Basic Life Support (AHA) Clinical Experience (1yr)

> Blood Pressure (Manual), IM Injections, ECG/EKG, Urine Analysis.

#### • Hobbies and Interests

- Symphony, opera, ballet, and other performance
- Microscopy and photomicrography
- Music composition in the classical and funk genres.
- Animal and protist husbandry.
- Coding HTML/CSS