

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:

Observations of living organisms show that life on Earth has a unique and complex story. My interests are rooted in the evolutionary history of life. The events in prehistory that created perplexing features in modern organisms urge me to ask: How, why, when, and where did that evolve? In past research, I was enveloped the world of Lancelets and used them as models of ancient chordates. Most recently, my research interests involve protists and early multicellular evolution. I have ongoing and future collaborations with researchers in Louisiana, South Padre (TX), and Spain. More 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.

General interdisciplinary study: Biochemistry and molecular biology. Microscopy and optics. Science history. Physics of matter. Electricity and magnetism. Photography and videography.

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

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 my research at the Texas state capitol building in Austin (4/1/2019), and at two Tri-Beta conventions.

Research Internship(s)

Baylor College of Medicine SMART > Children's Nutrition Research Center | <u>Davis Lab</u> | <u>Teresa Davis, Ph.D.</u> (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.

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:

(05/06/2019)

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(Fall 2017-Present) Aid and mentor students in Biology research
- American Chemical Society (Fall 2017-Present)
- American Physics Society (Fall 2018-Present) We don't do much honestly
- Chemistry Journal Club(Spring 2018-Present) Frequently present fun research papers
- Biology Journal Club(Fall 2018-Present) Teach others how to read scientific papers
- Student Music Association(Fall 2019-Present) I compose music.
- Ratio Christi: Apologetics club (Spring 2019-Present) Religious and philosophical discussion.
- 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 Museums.
- Extreme Macro/micro-Photography.
- Music composition in the classical and funk genres.
- Animal and protist husbandry.