# Alissandra Natalia Ayala

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#### **Research Interest**

I am interested in the study of ecological communities and the role that climate change and biodiversity plays in these communities.

**Education** 

2016 to Present University of Texas at Austin

Biology major, Creative Writing certificate

Current Cumulative GPA: 3.4112

Summer 2017 **Texas State Technical College, Harlingen** 

GPA: 4.0

Summer 2018 **South Texas College** 

GPA: 4.0

2016 South Texas High School for Health Professions

**Research Training** 

Fall 2018 to Present The Kemp Lab at UT Austin

Compiled data from spreadsheet, textbook, and research paper on all lizard

species in the West Indies

Photographed parietal and occipital bones of Elgaria multicarinata using a

microscope

Cleaned CT images of lizards

Worked on an independent project categorizing fossilized salamander vertebrae as paedomorphic or metamorphic from a collection spanning 20,000 years

Summer 2019 E3 REU at Harvard

Made biweekly phenology observations of a common garden using the BBCH

scale

Took DBH, width, and height using a clinometer of temperate trees and shrubs

Took SLA of leaves

Collaborated with a graduate student

Spring 2017 **Biofuels FRI program** 

Analyzed and documented lab data

Tended to research plants

Organized an independent research project

Isolated DNA from leaf samples Interpreted gel electrophoresis runs

Fall 2016 Scientific Inquiry: Imaginative

Practiced basic research skills such as pipetting

Wrote a research paper

Designed an independent experiment Delegated tasks to group members

#### Posters, Presentations, and Papers

**A. Ayala**, C. Chamberlain, N. Holbrook, "Temperate forests! How climate change affects growth and phenology", *poster presentation*, LANS 2019 Conference

**A. Ayala**, C. Chamberlain, N. Holbrook, "How climate change affects growth and phenology in temperate forests", *poster presentation*, Summer Undergraduate Research Programs at Harvard Poster Symposium 2019

#### **Professional Societies**

Ecological Society of America

The American Society of Naturalists

The Society for Integrated and Comparative Biology

#### **Relevant Course Work (134 total hours taken)**

Biology 1 and 2 (3 hours each)

Biology Lab- Biofuels Freshman Research Initiative (2 hours)

Biology of Birds lecture and lab (3 Hours)

Biostatistics (3 hours)

Cell Biology

Chemistry 1 and 2 (3 hours each)

Chemistry Lab (2 hours)

Computational Biology (3 hours)

Ecology (3 hours)

Evolution (3 hours)

Genetics (3 hours)

Organic Chemistry (3 hours)

Plant Molecular Biology (3 hours)

Plant Systematics (4 hours)

Principles of Animal Behavior (3 hours)

Science Communication (3 hours)

#### **Awards**

National Hispanic Scholar

AP scholar with distinction

#### Other Experience

ATX Science Writers (Fall 2018)

Volunteered at three workshops

Conversed with scientists and journalists

Learned about problems scientists and writers face and brainstormed solutions to these problems Learned techniques for effectively communicating science

#### Cashier at JCM (Fall 2018- Spring 2019)

Manage check out transactions in the busiest dorm on campus

Organize sales floor

Handle customer conflicts while providing customer service

# Food Prep Worker at J2 (Fall 2017- Spring 2018)

Learned how to work under pressure

Developed communication skills by assisting people from different backgrounds

## **Involvement**

ATX Science Writers Beevo Beekeeping Campus Environmental Center Students Fighting Climate Change

## References

Melissa Kemp Lab PI Assistant Professor at UT Austin mkemp@austin.utexas.edu

Noel Michele Holbrook Lab PI for summer REU Professor at Harvard holbrook@oeb.harvard.edu

Laura Gonzalez
Ecology professor
Assistant Professor of Instruction at UT Austin ligg@austin.utexas.edu