

# Gabriella Herrera

Texas A&M University – Corpus Christi  
Department of Science and Engineering

6300 Ocean Dr.  
Corpus Christi, TX, 78412

## **Education**

Texas A&M University – Corpus Christi (December 2022)

**BS, Biology** with a focus in **Marine**

## **Relevant Coursework**

Biology I & II, General Chemistry I & II, Organic Chemistry I & II, Principles of Evolution, Biochemistry, Genetics, Microbiology, Principles of Ecology, Marine Ecology, Marine Botany, Global Change Ecology, Oceanography, Biology and Ecology of Corals, Belize: Ridges to Reefs.

## **Research Experience**

**Animal Care Trainee**, (March 2023 – July 2023)

Jackson Laboratory

- Mouse husbandry
- Maintain and monitor mouse health and welfare
- Maintain a sanitary environment and prepare animals for shipping
- Working in a highly controlled clean room environment

**Undergraduate Research Assistant**, (October 2019 – March 2023)

Bahr Marine Ecology Lab, Texas A&M University – Corpus Christi

- Set up and organized coral biology laboratory.
- Created Standard Operating Procedures for Pulse Amplitude Modulation Fluorometry.
- Collected environmental data for plankton, coral, and oyster research.
- Processed corals using various laboratory techniques and protocols.
- Conducted individual research project and presented the results.

**Researcher**, (February 2020 – March 2023)

Texas State Aquarium

- My research focuses on implementing a standardized assessment of coral health at the Texas State Aquarium to assess the health of their corals effectively and rapidly, improving overall coral wellness.

**Marine Botany Researcher**, (August – December 2021)

Texas A&M University – Corpus Christi

- Participated in field research looking at mangrove growth.
- Organized and lead mangrove assessments for a three-month research project.
- Managed and processed data to be used for a presentation

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## **Belize: Ridges to Reefs**, (June 2022)

Texas A&M University – Corpus Christi

- Conduct research in terrestrial and marine environments in Belize.
- Performed coral health assessments, mangrove assessments, fish surveys.
- Performed bird and insect surveys, measured river velocity with a velocity meter.
- Worked closely with a team in a stressful environment.
- Formulated a research question and presented the results.

## **Research Interests**

I have broad interests in **marine biology**, particularly **marine conservation**. I am interested in the impact global climate change has on **coral reefs** and **kelp forests**.

## **Teaching Experience**

### **Lead Environmental Educator**, (August 2023 – Present)

Boston Outdoor Preschool Network

- Nurture the spirit and curiosity of each child while using a nature-based and child-centered approach.
- Manage risk and address conflict in an outdoor setting.
- Develop engaging nature-based early childhood curriculum that connects children with one another and to biology.
- Document children's growth and learning on a daily basis.

## **Scholarships and Awards**

- NSF GRFP, National Science Foundation, 2022, Applied.
- Louis Stokes Alliances for Minority Participation, Texas A&M University – Corpus Christi, *\$1600*, 2022
- Louis Stokes Alliances for Minority Participation, Texas A&M University – Corpus Christi, *\$1400*, 2022
- Student Research Competition, Department of Research and Innovation, Texas A&M University – Corpus Christi, *\$800*, 2020
- Honors Scholarship, Texas A&M University – Corpus Christi, *\$2000*, 2019, 2020, 2021
- Presidential Scholarship, Texas A&M University – Corpus Christi, *\$4000*, 2018, 2019
- Atkins Top Scholar, Texas A&M University – Corpus Christi, *\$1000*, 2018
- Magnet Student Scholarship, Heights High School, *\$500*, 2018

## **Publications**

**Herrera G**, AM Good, A Hirota, C Razal, N Gaertner, J Sefcik, J Gilber, and KD Bahr.

Understanding color hues to assess coral health and welfare.

## **Presentations**

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**Herrera G**, E TenBrink, I Rueda, K Montanye, O Stokes, Y Carcamo, V Blesa, K Love, K Matthews, N Bell, E Cano. *Ridges to reefs: using environmental indicators to determine ecosystem condition and connectivity*. Texas A&M University – Corpus Christi Study Abroad. Corpus Christi, TX. Oral Presentation. (June 2022).

**Herrera G**, AM Good, A Hirota, C Razal, N Gaertner, J Sefcik, J Gilber, and KD Bahr. *A coral's true colors: understanding color hues to assess coral health and welfare*. Texas A&M University – Corpus Christi Marine Science Graduate Student Organization 10<sup>th</sup> Annual Research Forum. Corpus Christi, TX. Oral Presentation. (April 2022).

**Herrera G**, AM Good, A Hirota, C Razal, N Gaertner, J Sefcik, J Gilber, and KD Bahr. *A coral's true colors: understanding color hues to assess coral health and welfare*. Benthic Ecology Meeting Society. Portsmouth, NH. Poster Presentation. (March 2022).

**Herrera G**, AM Good, A Hirota, C Razal, N Gaertner, J Sefcik, J Gilber, and KD Bahr. *A coral's true colors: understanding color hues to assess coral health and welfare*. Texas A&M University System 17<sup>th</sup> Annual Pathways Student Research Symposium. College Station, TX. Poster Presentation. (March 2022).

Razal CM, KD Bahr, **G Herrera**, A Hirota, AM Good. *A Coral's True Colors: Using color hues to assess coral health and welfare*. Association of Zoos and Aquariums. *Virtual*. (September 2021).

**Herrera G**, AM Good, A Hirota, C Razal, N Gaertner, J Sefcik, J Gilber, and KD Bahr. *A coral's true colors: understanding color hues to assess coral health and welfare*. Texas A&M University – Corpus Christi Marine Science Graduate Student Organization 9<sup>th</sup> Annual Research Forum. *Virtual*. (April 2021).

## **Community Service**

- University Beach clean-ups with Bahr Marine Ecology Lab
- Participant in The Big Event, a campus-wide volunteer effort to help the city of Corpus Christi, Spring 2019, Spring 2022