## Jordan Rodriguez

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## **EDUCATION**

University of Oregon, Eugene, OR, USA PhD in Biology Exp. Grad.: 06/2026 Current GPA: 4.0

Texas A&M University-Corpus Christi, Corpus Christi, TX, USAGrad.:12/2021B.S. in Environmental Science – Marine and Coastal ResourcesInst. GPA: 4.0

## **PROFESSIONAL INTERESTS**

I have broad interests in evolutionary biodiversity studies. Specifically, I am interested in biodiversity informatics (methods and tools development), population genetics, and community ecology studies that aid present-day conservation efforts. It is my goal to pursue a career in academia studying these topics.

## HONORS AND AWARDS

Achievement Rewards for College Scientists (ARCS) Foundation Scholar Award	2022-25
Rising Scholar Award, University of Oregon	2022-23
Society for the Advancement of Chicanos/Hispanics & Native Americans in Science (SACNAS) National Diversity in STEM (NDiSTEM) Chapter Officer Leadership October Retreat Scholarship 2023	
SACNAS NDiSTEM, Best Life Sciences Poster Award	2022
National Science Foundation (NSF) Research Experience for Post-baccalaureate Students (REPS)Scholar, Texas A&M University-Corpus Christi2021-22	
College of Science and Engineering Dean's List Recipient	2018-21
Honors Program Undergraduate Scholarship, Texas A&M University-Corpus Christi	2018-22
Snyder Memorial Endowed Scholarship in Marine Science, Harte Research Institute	2020-21
Achieve Scholar Institutional Scholarship, Texas A&M University-Corpus Christi	2018-21
Marine Technology Society Endowed Scholarship, Marine Technology Society	2020
Ann Degaish Leadership Award, Texas A&M University-Corpus Christi	2020
First Place Student Presentation Award, Gulf Estuarine Research Society	2020
L. Smith Environmental Scholarship for Women, Texas A&M University-Corpus Christi	2019
Wright Family Scholarship, Wright Family Foundation	2018-19

## **PUBLICATIONS**

#### 2023

Daru, B.H. & **Rodriguez**, J. (2023) Mass production of unvouchered records fails to represent global biodiversity patterns. *Nature Ecology & Evolution* 7: 816–831.

Rodriguez, J., Roberts, R., Magnuson S., Bird, C. (2023) Successful whole genome sequencing of century old *Salarias fasciatus* specimens using Low Coverage Whole Genome Sequencing, *in prep.* 

### **ASSOCIATION MEMBERSHIPS**

Achievement Rewards for College Scientists (ARCS) Foundation Scholar	2022-25	
University of Oregon Dept. of Biology Diversity, Equity, & Inclusion Committee, Graduate Student Member 2023-present		
University of Oregon Institute of Ecology & Evolution Seminar Committee, Member	2023-24	
Genetics Society of America, Graduate Student Member	2023-present	
Society of Molecular Biology & Evolution, Member	2022-present	
Graduate Evolutionary Biology & Ecology Students, Member	2022-present	
Society for the Advancement of. Chicanos/Hispanics and Native Americans in Science University of Oregon Chapter Marketing & Outreach Coordinator 2022-present		
Texas A&M University-Corpus Christi Honors Program Scholar	2018-21	
Society for the Advancement of Chicanos/Hispanics and Native Americans in Science Texas A&M University-Corpus Christi Chapter President 2021		
Islander Green Team Departmental Organization, President	2020-21	
Psychopharmacology Student Organization, Historian	2021	
South African Association of Botanists, Member	2020-21	
Gulf and Estuarine Research Society, Member	2020-21	
Coastal Alliance to Protect our Environment, Member	2019-21	
Honors Student Association, Librarian	2019	
Texas Coastal Bend Chapter-Surfrider's Foundation, Member	2018-21	

## **RESEARCH & PROFESSIONAL EXPERIENCE**

Graduate Employee and Doctoral Researcher, University of Oregon

• Member of the Kern-Ralph Co-lab, machine learning and population genetics dry-lab

2022-present

- Perform statistical analysis on the High Performance Computer
- Develop machine learning methods for population genetics
- Serve as a Teaching Assistant for three 10-week terms
- Take classes and join seminars to deepen expertise in the field
- Mentor undergraduates throughout their studies in the sciences

Post-Baccalaureate Researcher, Bird Lab, Texas A&M University-Corpus Christi 2021-22

- Expand professional network while under Philippine PIRE NSF Award #1743711, supervised by Dr. Christopher E. Bird
- Conduct original research utilizing historical and contemporary fish specimens
- Learn and use established bioinformatic pipelines for genetic data
- Develop a lab specific bioinformatic pipeline for Low Coverage Whole Genome sequencing of fish specimens
- Attend and aid in field work collections around the islands of the Philippines
- Present the Low Coverage Whole Genome Sequencing portion of the Omics workshop in Dumaguete, Philippines

Genomics Core Lab Researcher, Texas A&M University-Corpus Christi 2021-22

- Participate in wet lab duties such as library prepping, sample organization, and DNA extractions
- Perform gel electrophoresis and imaging
- Develop lab-specific Hi-C sequencing pipeline
- Create order sheets for reagents and lab materials

Herbarium Technician, Ruth O'Brien Herbarium

- Digitize specimen collection in partnership with the Texas Oklahoma Consortium of Herbaria (TORCH) under NSF award #1902078, supervised by Dr. Barnabas H. Daru
- Process specimens from collection and quarantine to mounting and organizing
- Identify plant collections from the coastal bend area
- Manage education & outreach efforts

Daru Evolutionary Biogeography Lab Research Intern

- Researcher on "Mismatches in plant sampling biases between observations and vouchered specimens" project, supervised by Dr. Barnabas H. Daru
- Analyze open access species occurrence records using R statistical computing environment for assessing spatial, temporal, and taxonomic biases
- Manuscript submission and acceptance to Nature Ecology & Evolution, 2023
- Present research findings at an international conference

Surfrider Foundation Storm Drain Initiative Intern

- Co-lead in Corpus Christi Storm Drain Marking initiative, supervised by Neil McQueen
- Utilize Geographic Information Systems (GIS) Mapping Software through the Environmental Systems Research Institute (ESRI) to locate and track storm water drains in Corpus Christi, TX
- Attend leadership initiatives and webinars to gain understanding and expertise on tools utilized in this study

## PRESENTATIONS

#### Protein Embeddings: Exploring expansion of the protein universe

Winter Quarter Biology Rotation Student Presentation Symposium, University of Oregon, Eugene, Oregon, Oral Presentation, March 2023

#### **Quantifying Global Prokaryotic diversity: Exploring methods and tools for big data** <u>analysis</u>

2019-20

2020-21

2019-21

Fall Quarter Biology Rotation Student Presentation Symposium, Eugene, Oregon, Oral Presentation, December 2022

#### <u>Enhancing Diversity & Inclusion in Ecology: An Acknowledgement Towards</u> <u>Underrepresented groups in STEM</u>

Ecological Society of America & Canadian Society of Ecology & Evolution Meeting, Diversity & Inclusion Inspire Session, Quebec, Montreal, Canada, Oral Presentation, August 2022

#### Low Coverage Whole Genome Sequencing Pipeline

PIRE omics workshop for biologists, Silliman University, Dumaguete, Philippines, Oral Presentation, July 2022

#### <u>Successful whole genome sequencing of century old Salarias fasciatus specimens using Low</u> <u>Coverage Whole Genome Sequencing</u>

Philippine PIRE student research presentations, Silliman University, Dumaguete, Philippines, Oral Presentation, July 2022

Association of Tropical Biology & Conservation, Cartagena, Columbia, Oral Presentation, July 2022

SACNAS NDiSTEM Conference, Puerto Rico, Poster Presentation, October 2022

Department of Biology Recruitment Poster Session, Eugene, OR, Poster Presentation, 2023

Biology Research Symposium, Eugene, OR, Poster Presentation 2022

#### Mismatches in plant sampling biases between observations and vouchered specimens

South African Association of Botanists (SAAB) International Conference, University of the Free State, Qwaqwa campus, Puthadijaba, South Africa, Oral Presentation, January 7-11, 2020

Gulf Estuarine Research Society Virtual Conference, Corpus Christi, TX, Oral Presentation, November 16-18, 2020

Daru Lab Symposium, Texas A&M University-Corpus Christi, Corpus Christi, TX, Oral Presentation, December 11, 2019

#### **Biogeochemistry of hydrothermal vents**

First Year Research Conference, Texas A&M University-Corpus Christi, Corpus Christi, TX, Oral Presentation, November 29-30, 2018

## REFERENCES

#### Dr. Andrew Kern

Associate professor of Biology – University of Oregon College of Arts & Sciences – Department of Biology – Institute of Ecology & Evolution E: <u>adkern@uoregon.edu</u> Website: <u>https://kr-colab.github.io/</u>

#### Dr. Peter Ralph

Associate professor of Biology & Mathematics – University of Oregon College of Arts & Sciences – Department of Biology – Institute of Ecology & Evolution College of Arts & Sciences – Department of Mathematics E: <u>plr@uoregon.edu</u> Website: <u>https://kr-colab.github.io/</u>

#### Dr. Michelle Wood

Professor – University of Oregon College of Arts & Sciences – Department of Biology – Institute of Ecology & Evolution T: +1 541 346 0454 E: <u>miche@uoregon.edu</u>

#### Dr. Barnabas H. Daru

Assistant professor of Biology and Center Fellow – Stanford University Department of Biology E: <u>bdaru@stanford.edu</u> Website: <u>https://darulab.org/</u>

#### Dr. Christopher E. Bird

Associate professor of Biology – Texas A&M University-Corpus Christi College of Science & Engineering – Life Sciences Department T: +1 361 825 6024 E: <u>chris.bird@tamucc.edu</u> Website: <u>https://birdlab.tamucc.edu</u>