

Casey Brian Pua
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Pomona, California
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EDUCATION

M.S. Biology: California State Polytechnic University, Pomona 2023 - present
Thesis: Explaining Planktivore and Predator Density on Southern California Artificial Reefs by Quantifying Habitat Characteristics

Advisor: Dr. Jeremy Claisse

Committee: Dr. Jeremy Claisse, Dr. Angel Valdes, and Dr. Rachel Vera Blakey

B.S. Environmental Biology: California State Polytechnic University, Pomona 2019-2023
Senior Project: The potential effects of marine protected areas on fish age structure

- Summa Cum Laude
- GPA: 3.89
- Dean's List: 2020, 2021, 2022, 2023
- Presidents List: 2020, 2021, 2022, 2023

RESEARCH EXPERIENCE

Master's Research, Cal Poly Pomona Jul 2023 - present
Explaining Planktivore and Predator Density on Southern California Artificial Reefs by Quantifying Habitat Characteristics

- ESRI ArcGIS Pro and R-Studio to characterize artificial reef habitats from sonar data
- ROV and SCUBA to collect biological fish data
- Funded through CSU COAST SSINP Grant

PI: Dr. Jeremy Claisse, Biological Sciences Department

Undergraduate Research, Cal Poly Pomona Jan 2023 – May 2023

- The potential effects of marine protected areas on fish age structure
 - Literature review of species-specific fish movement patterns, life history, and fisheries to predict potential for MPA effects on age structure.
 - Fish dissection to extract otoliths and tissue samples.
 - Data entry, QA/QC and management in MS Excel

PI: Dr. Jeremy Claisse, Biological Sciences Department

Panama Field Biology Course

Jan 2024 – May 2024

School course spending 11 days conducting field work and independent pilot studies in Bocas Del Toro, Panama

- Used transects for surveying
 - Data collection of fish count and nudibranch species
 - Learned how to ID Panamanian species
 - Learned higher taxa, genus, species, and common names
 - Perform data analyzation using R studio

Professors: Dr. Jeremy Claisse, Biological Sciences Department & Dr. Angel Valdes, Biological Sciences Department

Coral Reef Ecology Field Course

Jan 2023 – May 2023

School course spending 10 days conducting fieldwork along the coast of Kona, Hawaii

- Use transects for surveying
 - Data collection of coral substrate/cover, invertebrate count, and fish count
 - Learn how to ID local Hawaiian marine species
 - Learn scientific, common, and island names of marine species
 - Perform data analyzation of data collection
 - Contributing to 6 year-long project

Professors: Dr. Jeremy Claisse, Biological Sciences Department & Dr. Jayson Smith, Biological Sciences Department

PUBLISHED PAPERS

Neill, J.L., Dillon, M.M., Cassie, B., Bollinger, S., Dansereau, S.C., Flores, A., Garcia, K.B.G., Hernandez-Thorn, R.A., Kim, M., Martinez, P.V., Pua, C.B., Ramirez, D.F., Sebastian, D., Scott, J.A., Wong, B., Yuen, A.A., Claisse, J.T., Valdés, A. 2024. New contributions to the heterobranch sea slug biodiversity of Bocas del Toro, Panama. *The Nautilus* 138: 75–81.

TEACHING/WORK EXPERIENCE

Teaching Associate, Cal Poly Pomona

BIO 1110L Biology for non-majors

F23, F24, Sp25

- Provided mini-lectures and guidance on various scientific topics to college students not enrolled in STEM majors

BIO 1210L Foundations of Biology: Energy, Matter, and Information

Sp23

- First of two foundation lab courses required for all Cal Poly Pomona students who are in a Department of Biological Sciences Major
- Teaching students how to examine the flow of energy, the cycling of matter, and the flow of info through various timescales and organizational levels of life

Dive Center Assistant, Cal Poly Pomona

Dec 2023 – Present

- Organizing and setting up for CPP school dive trips
- Provide aid to try-it-scubas and discovery scubas at the CPP pool
- Create SOPs
- Aid in tabling and recruitment programs

Mentor Ernest Prete Jr. Fellowship Program, Cal Poly Pomona

Sept 2023 – May 2024

- Weekly mentorship and in-class supervision of undergraduate teaching fellows in Ernest Prete Jr. Program in local elementary
- Monthly 1-on-1 meetings with fellows to discuss lesson plans and tutoring strategies
- Plan and hold tutoring and lesson-planning workshops

Biotrek Student Assistant, Cal Poly Pomona

June 2022 - May 2023

- Provide educational tours to K-12 students at Cal Poly's Rain Bird Biotrek, Mesozoic Gardens, and Project Blue
- Maintenance of plants

Ernest Prete Jr. Fellow, Cal Poly Pomona

Dec 2022 – May 2023

Supervisor: Dr. Janel Ortiz, Biological Sciences Department

- Aid teachers in local elementary schools with their lesson plan
- Provided small-group and one-on-one teaching to fourth students
- Create and teach one biology-themed lesson plan

PRESENTATIONS

(April 2025; Poster) Casey B. Pua, Natalie Shubin, Matthew Kim, Jeremy T. Claisse
“Explaining Planktivore and Predator Density on Southern California Artificial Reefs by Quantifying Habitat Characteristics”

- Southern California Academy of Sciences (SCAS) 2025 – University of California, Irvine

(November 2024; Poster) Casey B. Pua, Natalie Shubin, Matthew Kim, Jeremy T. Claisse
“Explaining Planktivore and Predator Density on Southern California Artificial Reefs by Quantifying Habitat Characteristics”

- CPP GIS Day – California Polytechnic State University, Pomona

(November 2024; Poster) Casey B. Pua, Natalie Shubin, Matthew Kim, Jeremy T. Claisse
“Explaining Planktivore and Predator Density on Southern California Artificial Reefs by Quantifying Habitat Characteristics”

- Western Society of Naturalists (WSN) 2024 – Portland, Oregon

(October 2024; Poster) Casey B. Pua, Natalie Shubin, Matthew Kim, Jeremy T. Claisse
“Explaining Planktivore and Predator Density on Southern California Artificial Reefs by Quantifying Habitat Characteristics”

- Council on Ocean Affairs, Science & Technology (COAST) 2024 Annual Meeting – Long Beach, California

(May 2024; Poster) Casey B. Pua, Natalie Shubin, Matthew Kim, Jeremy T. Claisse:
“Quantifying remotely-sensed habitat characteristics on artificial reefs in southern California”

- Geological and Biological Habitat Mapping (GEOHAB) 2024 – Arendal, Norway

(May 2024; Poster) Casey B. Pua, Daniel Ramirez, Abigail Flores,
Jeremy T. Claisse, Angel Valdes:

“Size class specific habitat use of Caribbean juvenile snappers in Bocas Del Toro, Panama”

- College of Science Research Symposium 2024 – California Polytechnic State University, Pomona

(November 2023; Poster) Casey B. Pua, Natalie Shubin, Matthew Kim, Jeremy T. Claisse:
“Quantifying remotely-sensed habitat characteristics on artificial reefs in southern California”

- Western Society of Naturalists (WSN) 2023 – Monterey, California

(April 2023; Poster) Casey B. Pua, Natalie Shubin, Jeremy T. Claisse:
“The Potential Effects of MPAs on Fish Age Structure”

- College of Science Research Symposium 2023 – California Polytechnic State University, Pomona

GRANTS/AWARDS/SCHOLARSHIPS

Amount

CPP Office of Undergraduate Research Conference Presentation Award; Fall 2024	(\$300)
Project LOGRAR Travel Funds: Spring 2024	(\$1500)
COAST AY 2023-2024 Student Travel Award: Spring 2024	(\$1500)
COAST AY 2023-2024 Dr. Kenneth H. Coale Graduate Scholar Award: Spring 2024	(\$4000)
Rachel Carson Environmental Science Scholarship, CPP: Spring 2024	(\$2500)
Ernest Prete Jr. Fellowship Mentorship, CPP: Fall 2023 – Spring 2024	(\$6000)
State University Grant: Fall 2023	(\$2082)
College of Science Scholarship: Fall 2023	(\$2957)
CSU COAST Undergraduate Research Award: Spring 2023	(\$800)
Erenest Prete Jr. Fellowship, CPP: Fall 2022 -Spring 2023	(\$5000)
CSU COAST Field Experiences Award: Spring 2022	(\$625)

HONORS

Summa Cum Laude, 3.89 GPA, Cal Poly Pomona

- (Spring 2023)

Dean's List, Cal Poly Pomona

- (Fall 2019, Spring 2020, Fall 2020, Spring 2021, Fall 2021, Spring 2022, Fall 2022, Spring 2023)

Presidents List Cal Poly Pomona

- (2020, 2021, 2022, 2023)

CLUBS

CPP Biology Graduate Student Association (Bio GSA) Fundraiser Chair (2024 – 2025)

CERTIFICATIONS & TRAININGS

GIS for Climate Action (April 2025)
Motivating Learners Course (May 2024)
Red Cross CPRO Certification (Jan 2024)
MOTC Small Boat Operator Certification (Aug 2023)
AAUS Scientific Diver (Jun 2023,)
NAUI Rescue Diver (June 2023)
DAN Pro Diving First Aid for Professional Divers Certification (June 2023)
Caulerpa Identification Certification (May 2023)
PADI Advanced Open Water (Nov 2022)
PADI Open Water (Aug 2022)
CITI Program Training (IACUC):

- For Protocol Personnel (ID 182415)
- Animal Biosafety (ID 70051)

CSU Employee Safety Training

- CSU - Injury and Illness Prevention Program
- Emergency and Disaster Preparedness – Cal/OSHA
- Fire Safety and Prevention 2.0
- CSU Lab Safety Fundamentals
- Heat Stress Recognition and Prevention – Cal/OSHA
- Hazard Communication (HAZWOPER)

SKILLS

ESRI ArcGIS Pro
ESRI ArcStory Maps
Fish Dissection
Mini-ROV Operating
Microsoft Office
R-Studio
SeaGIS EventMeasure
Zotero Reference Management Software

REFERENCES

Jeremy T. Claisse, Ph.D. jtclaisse@cpp.edu
Professor, Biological Sciences Department, Cal Poly Pomona,
3801 W Temple Ave, Pomona, CA 91768
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3801 W Temple Ave, Pomona, CA 91768
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