

MAGGIEDILLON

GRADUATE STUDENT

EDUCATION

MASTER'S IN BIOLOGY

California State Polytechnic University, Pomona

2022 – Present

Relevant Coursework:

- Fish Biology – Field sampling skills and fish ID
- R Coding and Stats
- Wildlife Interactions- Seminar on wildlife, human, and stakeholder interactions
- Hawaii Coral Reef Field Ecology

BACHELOR OF ARTS

St. John's College, Annapolis MD

2014 - 2018

RESEARCH EXPERIENCE

GRADUATE RESEARCH ASSISTANT/ CALIFORNIA POLYTECHNICAL UNIVERSITY POMONA/ CLAISSE LAB

POMONA, CA July 2022- present

- Analyzed artificial reef stereo video and identify fish
- Developed standard operating procedures for the deployment of ROVs
- Conducted a literature review of artificial reefs of California

FIELD AND LABORATORY TECHNICIAN/ THE VIRGINIA INSTITUTE OF MARINE SCIENCES (VIMS)/ FABRIZIO LAB

GLOUCESTER POINT, VA July 2021- July 2022

- Conducted Standard Metabolic Rate research using respirometry chambers on Blue Catfish
- Collected data and fishes on seine and trawl surveys
- Dissected and processed fish otoliths for microchemistry
- Mentored and managed undergraduate students in the lab and field

FIELD AND LABORATORY TECHNICIAN/ ANNE ARUNDEL COMMUNITY COLLEGE/ DOMANSKI LAB

ARNOLD, MD January 2021 – July 2021

- Performed in-lab aseptic microbiological culturing techniques, analytical chemistry and basic equipment maintenance
- Conducted water quality sampling from boat, shore, and by wading into streams
- Mentored and managed undergraduate students in the lab and field

OYSTER RESTORATION ASSISTANT/ CHESAPEAKE BAY FOUNDATION

ANNAPOLIS, MD April 2021 -July 2021

- Assisted with oyster restoration activities including spat-on shell growing, oyster cage construction, oyster reef building, and community engagement efforts
- Conducted water quality sampling
- Operated company boats and trucks

AQUARIST / GUIDED DISCOVERIES

CATALINA ISLAND, CA January 2019 – June 2020

- Created and maintained 15 diverse tank exhibits of local Catalina Island marine species and ecosystems including Chondrichthyes, Osteichthyes, and invertebrates
- Maintained detailed records on feeding, maintenance, and other husbandry related tasks

FIN FISH INTERN / NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION/ CHAMBERS LAB

HIGHLANDS, NJ May 2018 – August 2018

- Conducted experiments on the effects of ocean acidification and seasonal variation on early life stages of key marine fishes in future climate change models
- Analyzed survival, embryonic and larval development and size data of fish

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TEACHING & RELEVANT EXPERIENCE

DIVE CENTER LEAD ASSISTANT / *ASSOCIATED STUDENTS INC. PADI EDUCATIONAL DIVE FACILITY*
POMONA, CA July 2022-Current

- Managed and supervise a team of undergrad and graduate students
- Coordinated with school and community members to promote conservation and SCUBA diving

TEACHING ASSOCIATE / *CALIFORNIA POLYTECHNIC UNIVERSITY, POMONA*
POMONA, CA August 2022- December 2022

- Instructed BIO1220L an introductory lab studying Ecology, Evolution, and Biodiversity
- Lesson planned, graded, and administered exams

MARINE SCIENCE INSTRUCTOR / *GUIDED DISCOVERIES*
CATALINA ISLAND, CA January 2019 – June 2020

- Implemented the CIMI outdoor marine science education program in the field and in the classroom according to Next Generation Science Standards
- Led hundreds of students on kayak trips, hikes, and snorkels in varying conditions year round
- Operated and drove chase boats for educational programs in the ocean

MARINE LIFE PROGRAM LEADER / *RUSTIC PATHWAYS*
DOMINICAN REPUBLIC May 2019- August 2019

- Worked with local marine NGOs to educate students on current marine science and environmental issues
- Led high school students in coral reef and mangrove field surveys in the Dominican Republic
- Partnered with local NGOs to promote citizen science and conservation

EDUCATION AND FIELD INTERN / *KHALID BIN SULTAN LIVING OCEANS FOUNDATION*
ANNAPOLIS, MD September 2016 – May 2018

Education Intern

- Edited coral reef and mangrove curriculum
- Assisted at teacher development workshops hosted at the National Aquarium
- Wrote and published blogs on the Foundations website for a non-scientific audience

Field Education Assistant, Jamaica

- Assisted in teaching high school students about mangrove education ecosystems, food webs, and classifications of animals in the classroom and field

FUNDING & AWARDS

WESTERN SOCIETY OF NATURALIST STUDENT AWARD/ 2022

- Won Best Graduate Student Poster and awarded \$250

OFFICE OF UNDERGRADUATE RESEARCH TRAVEL GRANT/ 2022

- Awarded \$600 for travel and conference expenses

CALIFORNIA POLYTECHNIC INSTITUTE, POMONA FOUNDATION SCHOLARSHIP / 2022

- Awarded \$6,000 for tuition

ASI PROFESSIONAL DEVELOPMENT SCHOLARSHIP / 2022

- Awarded \$1,000 to complete PADI Divemaster training

VIMS Travel Grant / 2022

- Received \$800 to cover travel and conference expenses

ST. JOHN'S COLLEGE PRESIDENTIAL SCHOLAR RECIPIENT / 2014-2018

- Four year merit based scholarship

HODSON FELLOW / 2017 & 2018

- Awarded \$4,000 Stipend to fund internship work in the summers of 2017 and 2018

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PROFESSIONAL DEVELOPMENT & PRESENTATIONS

WESTERN SOCIETY OF NATURALIST CONFERENCE

Oxnard CA / November 2022

Won best graduate student poster for research on the effects of temperature on metabolic rates of Blue Catfish

AMERICAN FISHERIES SOCIETY TIDEWATER CONFERENCE

Nags Head NC / March 2022

Presented a poster on the effects of temperature on metabolic rates of Blue Catfish

NOAA DEEP SEA TEACHER WORKSHOP

Travel funding awarded from NOAA and The Catalina Island Marine Institute

Birch Aquarium San Diego CA / February 2020

NATIONAL AMERICAN FISHERIES SOCIETY CONFERENCE

Presented a talk on the effects of seasonal variation on Atlantic silverside early life

Atlantic City NJ / August 2018

AMERICAN ASSOCIATION OF WOMEN NATIONAL CONFERENCE OF COLLEGE WOMEN LEADERS

Received full funding from St. John's College to attend

Washington DC / June 2018

FUTURE PUBLICATIONS

SALINITY TOLERANCE OF INVASIVE BLUE CATFISH: IMPLICATIONS FOR DISPERSAL IN THE CHESAPEAKE BAY

Authors Dr. Vaksar Nepal, Dr. Mary Fabrizio, Dr. Troy Tuckey, Maggie Dillon

TEMPERATURE THRESHOLD OF INVASIVE BLUE CATFISH: IMPLICATIONS FOR FUTURE CLIMATE CHANGE SCENARIOS IN THE CHESAPEAKE BAY

Authors Dr. Vaksar Nepal, Dr. Mary Fabrizio, Dr. Troy Tuckey, Maggie Dillon

SKILLS & CERTIFICATIONS

- AAUS Scientific Diver
- DAN Diving First Aid for Professional Divers
- CPR/FirstAid/AED/Oxygen
- PADI Divemaster in Training
- MOTC Boaters Certification
- Intermediate R Programming Skills
- Closed System Aquarium Operation
- Open System Aquarium Operation
- EventMeasure
- Stereo video analysis
- Coral Point Count with Excel (CPCE)