# **Griffin Srednick**

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#### **EDUCATION**

12/2020 – 12/2024	The University of Melbourne Doctor of Philosophy in Biology Supervisor: Stephen Swearer
2014 – 2018	California State University, Northridge Master of Science Biology Supervisor: Mark Steele
2009 – 2014	California State University, Monterey Bay Bachelor of Science Marine Science, Minor: Outdoor Education Supervisor: Corey Garza

## PEER-REVIEWED PUBLICATIONS

- **Srednick, G**, Swearer SE. (2024). Understanding diversity–synchrony–stability relationships in multitrophic communities. *Nature Ecology & Evolution*:1–11.
- **Srednick G**, Swearer SE. (2024) Effects of protection and temperature variation on temporal stability in a marine reserve network. *Conservation Biology*. DOI: 10.1111/cobi.14220.
- **Srednick**, **G**., Cohen, A., Diehl, O., Tyler, K. & Swearer, SE. (2023). Habitat attributes mediate herbivory and influence community development in algal metacommunities. *Ecology*, e3976.
- **Srednick, G.**, Edmunds, PJ. (2023). Corallivory on small Porites colonies increases with coral colony size but is reduced by macroalgal associational refuge. *Coral Reefs*:1–5.
- **Srednick, G.**, Davis, K. & Edmunds, PJ. (2023). Asynchrony in coral community structure contributes to reef-scale community stability. *Scientific Reports*, 13, 2314.
- **Srednick, G.** & Steele, MA. (2022). Macroalgal physical structure predicts variation in some attributes of temperate fish assemblages better than macroalgal species composition. <u>Marine Biology</u>., 169, 147.
- **Srednick, G.**, Bergman JL, Doo SS, Hawthorn MJ. Ferree R. Rojas R. Arias, Edmunds PJ, and Carpenter RC. (2020). Shallow coral reef free ocean carbon enrichment: Novel in situ flumes to manipulate pCO2 on shallow tropical coral reef communities. *Limnology and Oceanography: Methods* 18.
- **Srednick GS**, Steele MA. (2019). Macroalgal height is more important than species identity in driving differences in the distribution and behavior of fishes. <u>Marine Ecology Progress Series</u> 613:139–149

### PROFESSIONAL ACTIVITIES

#### Peer review

- Ecology Letters
- Marine Ecology Progress Series
- PLOS One
- Science of the Total Environment
- Marine Environmental Research

#### Research

Aug 2019 – Dec 2020

National Science Foundation – Mo'orea Coral Reef Long Term

Ecological Research Program: Research Technician – Pl's: Peter J.

Edmunds, Robert Carpenter – conducted and oversaw extensive boating, diving, and research operations. Contributed to and maintained long-term datasets, detailed benthic surveys, use and maintenance of maritime

equipment and oceanographic instrumentation.

Aug 2017 – Jun 2019 National Science Foundation Ocean Acidification: Research

**Technician** – Pl's: Peter J. Edmunds, Robert Carpenter – conducted extensive boating and diving operations inside and outside reef passes, towing 2-ton floating platforms at sea, construction/maintenance/repair to on-land and at-sea aquariums, electrical and solar systems, etc., carbonate chemistry methods, use and maintenance of oceanographic instrumentation, domestic and international shipping and travel logistics,

large dataset management and analysis.

May – July 2017 Channel Islands National Park Kelp Forest Monitoring Program:

**Seasonal Biological Technician** — PI: David Kushner – extensive diving operations on live-aboard vessel at Channel Islands, comprehensive kelp forest species identification and survey methods, data management and

quality control, group management.

Jan – May 2017 Resource Conservation District of the Santa Monica Mountains: Field

**Biologist and Data Management Assistant** – Supervisor: Rosi Dagit –

fish and invertebrate stream surveys.

Jan 2015 – May 2017 San Onofre Nuclear Generating Station Mitigation and Monitoring

**Project**: **Research Assistant** – PI: Mark A. Steele – subtidal fish surveys, fish collection via spear, fish demographic processing and otolith

nogeuromonte

measurements.

May 2015 – Sep 2016 Size-selective mortality of sex-changing fishes, National Science

Foundation Project: Research Assistant – Pl: Mark A. Steele –

extensive diving operations, constructing, surveying, and stocking artificial reefs with small temperate reef fish, constructing large underwater cages.

July 2014 California State University, Monterey Bay: Research Assistant – Pl's:

Tom Oliver & Cheryl Logan – thermal tolerance in corals, tropical reef ecology – remote field and laboratory operations in American Samoa.

June – Aug 2013 Ichthyology Lab – Moss Landing Marine Labs: Research Assistant –

PI's: Scott Hamilton & Devona Yates – performed subtidal SCUBA

research, video analysis, basic statistical analysis, and crustacean husbandry

Jan 2013 – May 2014 Marine Landscape Ecology Lab – CSU Monterey Bay: Undergraduate

Research Intern – PI: Corey Garza – Monterey operations for California Department of Fish and Wildlife Dungeness Crab Larval Recruitment Project, daily collection and processing of specimens from light trap,

management, analysis, and presentation of data.

Mentoring

2023 – present The University of Melbourne Undergraduate Research Supervisor

Emily Pinto – Title: Habitat complexity and resource availability shape

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urchin grazing behaviours

May – Aug 2015 National Science Foundation Research for Undergraduates –

Mentored undergraduate students on project assessing influence on algal

structure on fish communities

Teaching

July 2022 The University of Melbourne: Casual Demonstrator

• First years biology BIOL10011 & 10012

• Ecology ECOL20003

2015 – 2017 California State University, Northridge: **Teaching Associate** 

Biology 101L: General Biology for non-majors

Aug 2015 – May 2017 California State University, Northridge: **Graduate Assistant** 

Biology 322: Evolutionary Biology

Biology 529: Marine Ecology

Biology 100

May 2016 California State University, Northridge: Guest Lecturer

Biology 322: Evolutionary Biology

## PROFESSIONAL PRESENTATIONS

### **Conference Oral Presentations:**

- Understanding stability in multitrophic marine ecosystems. Srednick G., Swearer S.
  - o 2023 Western Society of Naturalists Annual Meeting Monterey, CA
  - o 2023 Coastal and Estuarine Research Federation Meeting Portland, OR
  - 2023 University of Melbourne Biosciences Postgraduate Society Annual Symposium

     Parkville, VIC
- Structural complexity and spatial heterogeneity mediate herbivory and influence asynchrony in algal metacommunities. **Srednick G.**, Swearer S.
  - o 2021 Western Society of Naturalists Annual Meeting Virtual
- Macroalgal associational refuge depends on coral colony size. Srednick, G.
  - o 2020 Western Society of Naturalists Annual Meeting Virtual
- Influence of the structure of algae on the distribution and behavior of fishes. Srednick G, Steele MA
  - 2016 Western Society of Naturalists Annual Meeting Monterey, CA

- 2016 USC Wrigley Symposium Los Angeles, CA
- Influence of the structure of an invasive alga on the distribution of fishes at Santa Catalina Island. **Srednick G**, Steele MA
  - o 2016 Southern California Academy of Sciences Annual Meeting Los Angeles, CA
  - o 2016 20th Annual Student Research and Creative Works Symposium Northridge, CA
  - o 2015 Western Society of Naturalists Annual Meeting Sacramento, CA
  - 2015 USC Wrigley Symposium Los Angeles, CA
- A Latitudinal Examination of *Metacarcinus magister* (Dungeness crab) Megalopae Recruitment through abiotic factor analysis on the Central California Coast. **Srednick G.**, Garza C.
  - 2014 CSU Monterey Bay Capstone Festival Seaside, CA

## **Invited Talks:**

- Influence of the structure of algae on the distribution and behavior of fishes. Srednick G.
  - 2017 University of California, Berkeley Mo'orea Seminar Series Mo'orea, French Polynesia
  - o 2016 USC Wrigley Fellowship Saturday at the Lab Catalina Island, CA
  - 2015 USC Wrigley Fellowship Saturday at the Lab Catalina Island, CA

#### **Poster Presentations:**

- A Latitudinal Examination of *Metacarcinus magister* (Dungeness crab) Megalopae Recruitment through abiotic factor analysis on the Central California Coast. **Srednick G.**, Garza C.
  - o 2013 Western Society of Naturalists Oxnard, CA
  - o 2013 SACNAS Annual Meeting San Antonio, TX

## GRANTS IN SUPPORT OF RESEARCH

2024	National Science Foundation Postdoctoral Research Fellowship – (\$316,457 USD)
2024	Albert Shimmins Award – (\$3000 AUD)
2023	F.H. Drummond Travel Award – (\$1,500 AUD)
2023	Parks Victoria Applied Park Management Research Scholarship – (\$5,000 AUD)
2022	Melbourne Welcome Grant – (\$4000 AUD)
2022	Alfred Nicholas Scholarship – (\$16,261 AUD)
2022	David Ashton Scholarship – (\$2,600 AUD)
2020	Melbourne Research Scholarship
2016	Myers Oceanographic & Marine Biology Trust – (\$865 USD)
2016	PADI Foundation Grant – (\$2,300 USD)
2016	International Women's Fishing Association – (\$1,000 USD)
2016	Lerner-Gray Memorial Fund – (\$1,885 USD)
2015	<b>Graduate Student Thesis Support</b> – CSU Northridge, Office of Graduate Studies (\$1,000 USD)
2015 – 2016	Wrigley Graduate Student Fellowship – University of Southern California

# RELATED EXPERIENCE

2017	Research Technician – Assisted operations for NASA CORAL project in Guam and Hawaii. – PI: Robert Carpenter
2014	CSU Catalina Semester Program – Attended field courses and conducted field research out of USC's Wrigley Marine Science Center on Santa Catalina Island, CA

2013 – 2014	<b>Volunteer Diver</b> – Monterey Bay Aquarium – ARCC Facility, Performed routine tank cleaning, experience around pelagic marine animals
2013	<b>MSCI 395 – Research Diving,</b> CSU Monterey Bay, Organizational Member - American Academy of Underwater Sciences
2012 – 2014	<b>Teaching Assistant</b> – CSU Monterey Bay SCUBA, Assisted with Open Water, Advanced/Rescue, Master Diver, and AAUS Research Diving courses

### AWARDS AND HONORS

2012 – 2014	Dean's List - Department of Science, Technology, and Policy, CSU Monterey Bay
2014	<b>2</b> <sup>nd</sup> <b>place in Poster competition</b> – Monterey Bay National Marine Sanctuary Currents Symposium
2014	Student Travel Award – Council on Ocean Affairs, Science, and Technology (COAST)

## PROFESSIONAL ROLES

2014 – 2017	<b>Student Representative –</b> Diving Control Board, Ocean Sciences Institute
2013 – 2014	Officer of Public Relations – CSU Monterey Bay Marine Science Club
2011 – 2014	Vice President – CSU Monterey Bay Outdoor Adventure Club

#### PROFESSIONAL AFFILIATIONS

- American Academy of Underwater Sciences (AAUS)
- Western Society of Naturalists (WSN)
- Divers Alert Network (DAN)
- CSU Northridge Marine Biology Graduate Student Association (MBGSA)
- University of Melbourne Biosciences Postgraduate Society (BioPS)

## **SKILLS**

- Proficient in R, ArcGIS, Arduino, PRIMER
- Basic woodcraft, electronics, and aquarium maintenance
- Carbonate chemistry measurement methods
- Proficient with general oceanographic instrumentation
- AAUS Scientific Diver (> 600 hrs)
- NAUI Divemaster
- Small Boat Operator (> 500 hrs; vessel length ≤ 7m)
- Operation of 4WD vehicles in rugged terrain; towing vessels up to 10m