

Julia A. Bingham

PhD., Marine Science and Conservation

Postdoctoral Research Fellow, Coastal Resources Center & Rhode Island Sea Grant

University of Rhode Island Graduate School of Oceanography

NOAA Affiliate, Northeast Fisheries Science Center

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I am an interdisciplinary marine social scientist interested in knowledge, values, equity, and power. I study the intersections of social, ecological, and political dimensions of fisheries governance and coastal management. Through interdisciplinary, place-based, participatory research, I take a relational approach with community partners and seek to develop strategies which support environmentally and socially just management and governance for sustainable futures of coastal communities. I engage critical and feminist informed geographies and science & technology studies, political ecology, and sociology in my scholarship, and prioritize applied research products beneficial to the needs and interests of my research partners, which include commercial and recreational fisheries organizations, Indigenous communities, research and conservation oriented non-governmental organizations, and state & federal agencies.

II. EDUCATION

- 2023 **PhD., Marine Science and Conservation**, *Duke University*
Certificates: College Teaching
Primary fields: critical human geography, science & technology studies, political ecology
Advisor: Dr. Grant Murray
Thesis: *Knowledge and Power through Pluralisms and Relationality in the Governance of West Coast Vancouver Island Salmon Fisheries*
- 2016 **H.B.S., Biology**, *summa cum laude*, *Oregon State University*
Minors: Chemistry, Spanish
Specialty program: Marine Biology, *Hatfield Marine Science Center* (2015)
Research Fellow. Advisor: Dr. Mark Novak.
Thesis: *Sensitive Barnacles: A Case Study for Collaborative Sustainable Fishery Development*
- H.B.A., International Studies**, *summa cum laude*, *Oregon State University*
Language Focus: Spanish
Study Abroad: Ecuador, *Universidad San Francisco de Quito & Galápagos Academic Institute for the Arts and Sciences* (2014)

II. PROFESSIONAL POSITIONS

- Sept 2023 - **Postdoctoral Fellow**, *University of Rhode Island's Coastal Resources Center & Rhode Island Sea Grant; NOAA Fisheries Affiliate, Northeast Fisheries Science Center*
Present Develop an Integrated Ecosystem Assessment (IEA) between fisheries and offshore wind development in the Gulf of Maine in collaboration with NOAA Fisheries' Northeast Fisheries Science Center (NEFSC) and the Responsible Offshore Development Alliance (RODA), with consistent engagement with fishing communities. Steps include conceptual modeling, indicator identification and development, and indicator data collection informed through local ecological knowledge and knowledge co-production.
- May - **Social Scientist**, *Ocean Associates Inc.; NOAA Fisheries Affiliate*
Sept 2023 Contractor position with NOAA NEFSC to support the development of a conceptual model of interactions between fisheries and offshore wind development in the Gulf of Maine, and

plan and coordinate stakeholder workshops for iterative model development. The model will inform the development of an Integrated Ecosystem Assessment (IEA).

Aug- **Instructor of Record, Duke University**

Dec 2022 Designed and taught a three credit, two-hundred level Undergraduate course in Marine Policy, with a focus on how policy is informed through science, social values, and local and traditional ecological knowledges. Class was taught in a hybrid format to accommodate mix of mix of in-person and virtual/remote students. Primarily focused on domestic U.S. environmental and marine law and policy, with some international examples. Introduced students to the basics of governance, management, and the policy cycle, and overviewed a variety of different types of marine policy issues (e.g. fisheries, spatial planning, energy development, social impacts and equity issues). Students learned to write policy memos.

May - **Research assistant & intern, Nicholas Institute for Environmental Policy Solutions**

Aug 2020 Assisted in a multidisciplinary, inter-institutional project to develop coastal ecosystem service logic models. Duties included synthesizing literature concerning equity in environmental management interventions and develop a protocol for incorporating equity concerns into the coastal resilience projects such as coastal restoration and living shoreline development, particularly for the Gulf of Mexico and mid- Atlantic. Protocol is designed to guide practitioners in assessing equity of the process and outcomes of said projects in such a way that equity can be included in the logic models of the broader project.

May - **Graduate Student Research Assistant, Duke University Marine Lab**

Aug 2018 Assisted in qualitative research regarding social environmental values in small coastal communities, focusing on values and preferences regarding local oyster aquaculture. Methods include case study research, interviews, surveys, document review, and thematic analysis of qualitative data.

Aug 2017 – **Graduate Teaching Assistant, Duke University**

Dec 2019 Helped teach and lead students in lectures, field trips, and hands-on classroom assignments. Developed students' skills in critical thinking, problem solving, reading and synthesizing academic literature, conducting qualitative analysis, and scientific and professional writing and editing. Designed and graded student exams and assignments including written reports. Organized field trips. Taught guest lectures. Assisted professors in course design. Individual courses listed below.

Aug 2017 – **Graduate Student Researcher, Duke University**

Aug 2023 Designed and implemented dissertation research. Methodologies informed through traditions of sociology political ecology, and indigenous research methodologies. Methods include literature review, case study research, interviews, participant observation, document review, and qualitative analysis of data utilizing grounded theory. Presented at local, regional, and international conferences. Engaged in professional service, community outreach, and research communication. Wrote and successfully applied for fellowships and grants to support research. Wrote manuscripts for publication. In the process of writing dissertation thesis. Collaborating in additional research projects with other faculty and graduate student researchers, including an interdisciplinary project utilizing Q-method to describe social values and preferences of seafood production in local and regional communities.

Aug- **Education and Outreach Intern, South Slough National Estuarine Research Reserve**

Nov 2016 Led 'Watershed Hikes' with elementary school groups through the reserve and taught basic lessons about local species and ecosystems along the way. Developed a lesson plan to

introduce elementary students to the concept of a watershed. Developed adaptable lesson plans for introducing middle school and high school students to using Excel to collect and analyze data. Assisted in water monitoring and trawl surveys of the estuary.

July - **Research Assistant, Oregon Institute for Marine Biology**

Nov 2016 Designed a field-based study of *Pollicipes polymerus* for the purpose of informing fishery development and harvest management policy. Co-designed and assisted in experimental trials of onshore mariculture prototypes and assessing how differential feeds and water flow rates affect growth rates of transplanted *P. polymerus*. Gained experience in fieldwork, experimental design, and lab skills. Developed skills in quantitative data management, assessment, and statistics. Coordinated multiple public outreach events and assisted collaborators in gauging stakeholder interest in fishery development. Led writing a summary technical report of the project for funders and fishery managers.

Apr 2015 - **URSA Undergraduate Research Ambassador, Oregon State University Office of**

June 2016 *Undergraduate Research, Scholarship, and the Arts (OSU URSA)*

Assisted in connecting undergraduate students to research opportunities through providing advice and peer mentorship in contacting potential mentors and applying for research positions. Worked at campus tables during campus events to answer questions about the OSU URSA Engage program.

Sept 2013 - **Internal Coordinator, Oregon State University Center for Civic Engagement**

Aug 2014 Planned and organized local volunteer projects with community partners for undergraduate student participation. Coordinated student attendance and led student groups to participate in volunteer projects. Coordinated civic engagement themed campus-based events that connected students to off-campus volunteer opportunities. Matched individual undergraduate students to specific community partners for long-term volunteer engagement. Developed skills in networking, time management, collaboration, group leadership, project management, and inclusivity training.

Feb 2013 – **Undergraduate Research Assistant, Oregon State University**

June 2016 Assisted in set up, monitoring, and data collection for intertidal ecology field experiments assessing indirect effects of trophic interactions between intertidal invertebrates. Conducted fieldwork in extreme physical conditions. Assisted in analysis of photographed data by identifying and tallying organisms captured in images. Developed independent research project. Gained experience in experimental design and management. Gained experience in data collection, analysis, statistics, and scientific writing. Assisted in training future research assistants. Wrote and applied for research grants (total awarded \$13,200).

III. RESEARCH CONTRIBUTIONS

a. Projects

Ongoing

Integrated Ecosystem Assessment: Fisheries and Offshore Wind in the Gulf of Maine
Postdoctoral fellowship. Collaboration between the Responsible Offshore Development Alliance (RODA), the NOAA Northeast Fisheries Science Center (NEFSC), the University of Rhode Island Coastal Resources Center (URI CRC), and Rhode Island Sea Grant. Funded by NEFSC and BOEM Interagency Agreement No. M22PG00023.

2020

Gulf of Mexico Ecosystem Service Logic Models & Socio-Economic Indicators (GEMS)
Assignment: *Development of protocols to assess and integrate equity concerns into outcome monitoring of living shorelines and coastal restoration interventions.* Research Assistantship. Supervised by Rachel Karasik and Lydia Olander. Duke University, Nicholas Institute for

Environmental Policy Solutions. Funded by Duke University, The Harte Research Institute, The Nature Conservancy, and The Bridge Collaborative

2019-2023 **Knowledge and Power in Governance and Management of West Coast Vancouver Island Salmon Fisheries.** Doctoral research. Advised by Dr. Grant Murray. In partnership with Tla-o-qui-aht First Nations and Ha'oom Fisheries Society. Duke University Marine Lab; Funded by Duke University, Genome British Columbia, and Genome Canada.

2019-2021 **Enhancing Production in Coho: Culture, Community, Catch (EPIC4).** *Activity 5: Assessing the effectiveness of EPIC4 technologies through GE3LS Research Assignment: Description of Knowledge Mobilization (KM) of Coho through First Nations evaluative and regulatory structures to potential implementation.* Supervised by Dr. Grant Murray. Duke University Marine Lab; Funded by Genome British Columbia, Genome Canada

2018-2021 **The Value of Fishing, Farming and Eating: new approaches to understanding coastal community well-being.** Supervised by Dr. Grant Murray. Duke University Marine Lab; Funded by NC Sea Grant.

2018-2019 **Growth and Opportunity for Whom? Aquaculture Narratives in Down East, NC** Research Assistantship. Supervised by Dr. Grant Murray. Duke University Marine Lab; Funded by NC Sea Grant.

2018 **Development of an Environmental Report Card to Track the Impact and Subsequent Recovery of Hurricane Irma (September 2017) on the Natural and Human Ecosystems in Northern Central Cuba.** *2018 Gulf of Mexico Student Workshop on International Coastal and Marine Management (SWIMM).* Research workshop coordinated by The Harte Research Institute at Texas A&M University Corpus Christi, Universidad de la Habana, and Caguanes National Park. Supported in part by The National Academies of Science Engineering Medicine Gulf Research Program.

2016 **Development of a Sustainable Gooseneck Barnacle Fishery; Initial Investigations** Research assistantship. Supervised by Dr. Alan Shanks. Oregon Institute of Marine Biology, University of Oregon; Funded by Oregon Sea Grant.

2015-2016 **Sensitive Barnacles: Case Study for Collaborative Sustainable Fishery Development** Undergraduate Honors Thesis. Advised by Dr. Mark Novak. Oregon State University Dept. of Integrative Biology; Funded by Oregon State University

b. Journal Publications

Bingham, J.A., Milne, S., Murray, G., and Dorward, T. (2021). Knowledge pluralism in First Nations' Coho salmon fisheries management. *Frontiers in Marine Science*. 8: 405.
doi.org/10.3389/fmars.2021.671112

Campbell, L.M., Fairbanks, L., Murray, G., Stoll, J., D'Anna, L., and **Bingham, J.** (2021). Blue Communities: Reframing the Blue Economy for Wellbeing. *Marine Policy*. 124: 104361.
doi.org/10.1016/j.marpol.2020.104361

c. Reports & Theses

Tyrell, A., **Bingham, J.A,** Hogan, F., Pavlovich, T., Silva, A., McCann, J., and Lipsky, A. (2023). *A comprehensive assessment of existing Gulf of Maine ecosystem data and identification of data gaps to inform future research: Conceptual Model and Workshop Synthesis Report.* [Technical Report]. Northeast Fisheries Science Center. Interagency Agreement No. M22PG00023.

Bingham, J.A. (2023). *Knowledge and Power through Pluralisms and Relationality in the Governance of West Coast Vancouver Island Salmon Fisheries*. [Doctoral Thesis]. Duke University.

Koop, B., Davidson, W., Bernatchez, L., Beacham, T., Bendriem, N., Berseth, V., **Bingham, J.**, Chan, M., Matthews, R., Milne, S., Murray, G., Sumaila, R., Yáñez, J.M. (2021). *Coho Genomics: Conservation, Production, Management & Communities*. [Technical report]. EPIC4 – Enhancing Production in Coho: Culture, Community, Catch. www.sfu.ca/epic4/EPIC4SummaryForPolicymakers.pdf

Murray, G., **Bingham, J.A.**, Milne, S., and Dorward, T. (2020). *Governance and knowledge mobilization in Coho fisheries of Tla-o-qui-aht First Nations and T'aaq-wiihak Fisheries, and consideration of fit for integration of EPIC4 technologies*. [Technical Report]. EPIC4 Activity 5 project report.

Del Angel, D., **Bingham, J.**, Díaz, B.A., Suárez, A.M., Fabián, M.R., and Palacioa, G.F. (2018). “Proposed Socio-economic Environmental Health Report Card Indicators for Cauguanes National Park, Cuba.” Student Contributions in: McLaughlin et al. (ed) 2018. *Development of an Environmental Report Card to Track the Impact and Subsequent Recovery of Hurricane Irma (September 2017) on the Natural and Human Ecosystems in Northern Central Cuba*. SWIMM Student Workshop on International Coastal and Marine Management 2018 workshop, Hart Research Institute and Texas A&M Corpus Christi. [Technical Report]. Available at: www.harte.org/sites/default/files/inline-files/SWIMM%202018%20Student%20Contributions%20Report.pdf

Bingham, J., Thomas, M., and Shanks, A. (2017). *Development of a Sustainable Gooseneck Barnacle Fishery; Initial Investigations*. [Technical Report]. Oregon Sea Grant. Available at: https://seagrant.oregonstate.edu/sites/seagrant.oregonstate.edu/files/sgpubs/onlinepubs/s-17-002_development_of_a_sustainable_gooseneck_barnacle_fishery.pdf

Bingham, J. and Novak, M. (2016). *Sensitive Barnacles: A Case Study for Collaborative Sustainable Fishery Development* [Undergraduate Honors Thesis]. Oregon State University. https://ir.library.oregonstate.edu/concern/honors_college_theses/7w62fb385

d. Additional Products for Research Partners

Bingham, J.A. (2024). “Public Engagement in the Development of Offshore Wind Energy: How to submit a comment to BOEM regarding proposed projects and environmental reviews,” *National Sea Grant Offshore Wind Energy Liaison Public Engagement Guide*. Rhode Island Sea Grant.

Bingham, J.A., Chukwuma, A., & Choi, B. (2023) *Timeline of Canadian fishery development, colonial legislation, and Indigenous organizing and rights affirmation. Emphasis on West Coast Vancouver Island (WCVI), BC, Pacific salmon fisheries, Nuu-chah-nulth First Nations, and the Five Nations’ rights - based multispecies fishery, 1003 – 2022*. [Infographic]. Available at: www.juliaabingham.com/research/nuu-chah-nulth-shing-rights-assertion

Bingham, J.A., Chukwuma, A., & Choi, B. (2023) *WCVI Salmon Fisheries Timeline: Nuu-chah-nulth and Canadian policies, conflicts, and rights assertion*. [Archive]. Available at: www.juliaabingham.com/research/nuu-chah-nulth-shing-rights-assertion

Tla-o-qui-aht First Nation. (2023) *2023 Fisheries Strategic Plan for Tla-o-qui-aht First Nation*. Eds. Milne, S., Atleo, F., **Bingham, J.A.**, & Masso, S. Tla-o-qui-aht First Nations Lands and Natural Resources Department.

Bingham, J.A. (2022) *Review of the Realized Effects of License Buyback Programs in B.C. Salmon Fisheries, and Implications for the Pacific Salmon Strategy Initiative (PSSI)*; Briefing and Review for the Administrative Leadership of Ha'oom Fisheries Society. [Technical Report].

Bingham, J.A., Milne, S., Dorward, T., and Murray, G. (2020). *Governance and knowledge mobilization in Coho fisheries of Tla-o-qui-aht First Nations and T'aaq-wiihak Fisheries, and consideration of fit for integration of EPIC4 technologies; summary of work and partnership*. EPIC4 Activity 5 project report for the Tla-o-qui-aht First Nations Lands Department. [Technical Report].

Bingham, J. and Masso, S. (2020). *Decision-Making Support Tool and Protocol for Restoration, Enhancement, and Harvest Management of Cuwit (Coho Salmon)*. Tla-o-qui-aht First Nations Lands and Natural Resources Department.

e. Papers in preparation or review

Choi, J., Gaskins, L., Morton, J., **Bingham, J.A.**, Blawas, A., Hayes, C., Hoyt, C., Halpin, P., and Silliman, B. The critical role of small journals in U.S. Endangered Species Act implementation. *Conservation Biology*. (in review)

Bingham, J.A., Reid, A., Murray, G., and Riddick, S. Participation and Power: Critically Reviewing Efforts to “Integrate” Indigenous Knowledges and Western Science in Fisheries Governance and Management. (in preparation for submission)

Thomas, M., **Bingham, J.A.**, and Shanks, A. Growth and survival of the gooseneck barnacle (*Pollicipes polymerus*, Sowerby) in a low flow mariculture system under different diets. (in prep)

Bingham, J.A., Silver, J., Milne, S., Murray, G., and Campbell, L. Disrupting Colonial Feedback Loops to Reimagine Fisheries through Strategic Pluralities in Five Nuu-chah-nulth First Nations' Rights-based Multispecies Fisheries. (in prep)

Bingham, J.A., Milne, S., Basurto, X., and Murray, G. Knowledge Pluralisms and Relational Partnerships enable Local Governance of Salmon Management in Clayoquot Sound. (in prep).

Smith, S. L., McAnn, J., Walsh, J.P., and **Bingham, J.A.** Multi-use in Offshore Wind Energy Planning: Perceptions and Opportunities in Southern New England, U.S. (in prep.)

IV. RESEARCH FUNDING

2023, 2021 **International Dissertation Research Travel Award** (\$4,000, 2x), *Graduate School of Duke University (Duke GS)*

2022 **Grants-in-Aid of Research Award** (\$1,000), *Sigma Xi Honors Society*

2022, 2020 **Graduate Award for Research & Training** (\$1,000, 2x), *Duke University Center for International & Global Studies (DUCIGS)*

2021 **Anne Firor Scott Public Scholars Fellowship**, *Duke Forum for Scholars and Publics (FSP)*

2021, 2022 **Summer Research Fellowship** (\$8,250, 2x), *Duke GS*

2020 **James B. Duke International Research Travel Fellowship** (\$26,300), *Duke GS*

2016 **Program Development Grant** (\$10,000), *Oregon Sea Grant*

2015 **Science Scholarship** (\$1,000), *OSU College of Science*

2015 **Grants-in-Aid of Research Award** (\$1,000), *Sigma Xi Honors Society*

2014 **International Degree Research Award** (\$1,200), *Oregon State University*

V. HONORS, FELLOWSHIPS, & AWARDS

2023 **Dean's Award for Excellence in Teaching**, *Duke GS*

- 2022 **Bass Instructional Fellowship: Instructor of Record, Duke GS**
- 2017-2020 **Marine Science & Conservation Academic Award, Duke GS**
- 2015 **Best Undergraduate Poster, Western Society of Naturalists 2015 annual meeting**
- 2015 **Honors Experience Scholarship, Oregon State University**
- 2014, 2015 **Alex Riazance Scholarship, Oregon State University College of Science**
- 2014, 2015 **Merrill Family Fund Scholarship, Oregon State University College of Science**
- 2012-2016 **Provost Scholarship, Oregon State University**
- 2012-2014 **Evergreen Colorado Bootstraps Award, Bootstraps, Inc.**

VI. TEACHING EXPERIENCE

a. Instruction

- 2022 *Marine Policy*, with special topic: Informing Policy through Science, Social Values, and Local and Traditional Ecological Knowledges. Duke University Marine Lab. Undergraduate course, hybrid online and in-person format. Instructor of Record.
- 2021 *Indigenous knowledges and Science in Fisheries*, Duke University Marine Lab. Graduate Student Seminar, co-instructed with Dr. Grant Murray
- 2019 *Conservation Biology and Policy*, Duke University Marine Lab. Undergraduate field-based course, co-instructed with Dr. Rachel Gittman

b. Teaching Assistantships

- 2020 **Social Impact Analysis**, Duke University Marine Lab, teaching assistant for Dr. Grant Murray
- 2019 **Marine Policy**, Duke University Marine Lab, Dr. Grant Murray
- 2019 **MPAs and Marine Spatial Planning**, Duke University Marine Lab, Dr. David Gill
- 2018 **Marine Megafauna**, Duke University, Dr. Meagan Dunphy-Daly
- 2017 **Ocean and Coastal Law and Policy**, Duke University School of Law, Prof. Steve Roady

c. Guest Lectures

- 2024 *Quantitative Tools in Mixed Methods for Marine Social Science*, University of New Haven
- 2024 *Community Perspectives on Offshore Wind Energy and Fisheries*, University of Rhode Island
- 2023 *Environmental Justice in Fisheries and Aquaculture*, Duke University
- 2022 *Resource Sovereignty and Environmental Justice*, Duke University
- 2020 *Political Ecology of Marine Sciences*, Duke University Marine Lab (DUML)
- 2020 *Marine Trophic Ecology*; Duke University
- 2019 *Social Environmental Values of Aquaculture in Down East NC*, DUML
- 2019 *Social-ecological Impacts and Trade-offs in Coastal Conservation*, DUML
- 2019 *Social Environmental Values and Discourse in Coastal Conservation Policy*, DUML
- 2019 *Marine Trophic Ecology*; Duke University
- 2019 *Adaptive Management in Marine Spatial Planning*, DUML
- 2018 *Physiology and Ecology of Pinnipeds*; Duke University
- 2018 *Marine Trophic Ecology*; Duke University
- 2018 *Evolutionary Biology of Marine Megafauna*; Duke University
- 2017 *Fisheries and Ocean Ecosystems: ecosystems and policy*; Duke University School of Law
- 2017 *Coastal watersheds: ecosystems and policy*; Duke University School of Law
- 2017 *Gooseneck Barnacle Fishery Development & Research*; Pacific University

d. Pedagogy

- 2022 Facilitating Student Learning and Teaching Innovation; Duke University [online course]
- 2019 College Teaching and Course Design; Duke University [seminar]
- 2019 “Teaching Triangles”: 4+ hours college level teaching experience under peer observation, 4+ hours observation of peer teachers, two professor interviews on teaching pedagogy

VII. MENTORSHIP

- 2021-2022 Bentley Choi, Undergraduate Student Researcher, Duke University Marine Lab
Student assisted conducting a historical grey literature and public legal records review and timeline development project for the third chapter of doctoral dissertation.
- 2021-2022 Ariel Chukwuma, Undergraduate Student Researcher, Duke University Marine Lab
Student assisted conducting a historical grey literature and public community records review and timeline development project for the third chapter of doctoral dissertation.
Mentored student's independent research project following timeline development.
- 2020-2021 Sage Riddick, MSc, Graduate Student Researcher, Duke University Marine Lab
Student assisted conducting a literature review project for the first chapter of doctoral dissertation, particularly sorting of literature and analysis of results

VIII. CONFERENCES, WORKSHOPS, SEMINARS, AND OTHER PRESENTATIONS

- 2024 Seminar Speaker, University of Massachusetts Dartmouth School of Marine Science and Technology; New Bedford, MA (presentation)
- 2024 Ocean Sciences Meeting, American Geophysical Union (AGU); New Orleans, LA (presentation)
- 2024 NOAA/URI Partnership Webinar: Ocean planning and Human Dimensions of Offshore Wind Energy research; remote (presentation)
- 2024 Cooperative Institute of the North Atlantic Region Workshop: Socioeconomic Impacts of Offshore Wind in the Gulf of Maine; Gulf of Maine Research Institute, Portland, ME (presentation)
- 2022 POLLEN (Political Ecology Network) asynchronous workshop; remote (presentation)
- 2022 Dimensions of Political Ecology (DOPE) annual conference; remote (presentation)
- 2022 Pathways: Life without Salmon? Human Dimensions of Natural Resources annual conference; remote (presentation)
- 2021 International Congress for Conservation Biology (ICCB) by the Society for Conservation Biology; annual conference; remote (presentation)
- 2021 Centre for Maritime Research (MARE) biannual conference; remote (presentation)
- 2020 International Marine Conservation Congress sixth annual conference (IMCC6), by the Society for Conservation Biology; remote (presentation)
- 2019 American Association of Geographers annual meeting; Washington, DC (presentation)
- 2019 World Aquaculture Society annual meeting; New Orleans, LA (presentation)
- 2018 MarCuba 2018, XI Congress on Marine Sciences; Havana, Cuba (presentation)
- 2018 Graduate Association of Food Studies annual meeting; UNC Chapel Hill (presentation)
- 2016 Gooseneck Barnacle Fishery Public Seminar; Port Orford, OR (presentation)
- 2016 Gooseneck Barnacle Fishery Public Seminar; Coos Bay, OR (presentation)
- 2016 Western Society of Naturalists annual meeting; Monterey, CA (presentation)
- 2016 Oregon Sea Grant Scholars Symposium; Corvallis, OR (presentation)
- 2016 Gooseneck Barnacle Public Seminar, OSU Port Orford Field Station (presentation)
- 2015 Western Society of Naturalists annual meeting; Sacramento, CA (poster)
- 2015 OSU Center for Genome Research and Bioengineering Conference; Corvallis, OR (poster)
- 2015 OSU Summer Undergraduate Research Experience Symposium; Corvallis, OR (presentation)

IX. PROFESSIONAL SERVICE & OUTREACH

- 2024 **Committee member**, Narragansett Bay Campus Justice, Equity, Diversity and Inclusion (JEDI) professional development sub-committee, University of Rhode Island
- 2022-2023 **Graduate Student Organizer**, Duke Marine Lab Diversity Equity & Inclusion subcommittee on equity and safety in fieldwork, DUML
- 2021 **C-Coast Listening Session Facilitator**, Collaboratory for Coastal Adaptation over Space & Time (C-Coast), Carteret County, NC

- 2021 **Mission Statement Development and Event Planning**, *Girls Engaging in Science and Technology (GEST)*, DUML
- 2020-2021 **Graduate Communications Coordinator**, DUML
- 2020 **VanDover Inclusivity Travel Award Program Coordinator**, DUML
- 2019-2020 **Volunteer Educator**, *Community Science Initiative*, DUML
- 2019 **Activity Leader and Panelist**, *Girls Engaging in Science and Technology (GEST)*, University of North Carolina Institute for Marine Sciences
- 2018-2023 **Group Leader**, *Girls Engaging in Science and Technology (GEST)*, DUML, 3x
- 2018-2019 **Seminar Series Coordinator**, DUML
- 2018 **Open House participant host**, DUML
- 2017-2018 **MSC PhD Student Representative**, *Graduate and Professional Student Council General Assembly*, Duke University
- 2013-2015 **Activity Host**, *Marine Science Day*, OSU Hatfield Marine Science Center, 2x

X. COMMUNITY SERVICE & ENGAGEMENT

- 2022-2023 **Recreational Soccer Coach**, *Seashore Soccer League*, Under-6 co-ed & youth TOPSoccer for players with physical and learning disabilities (Carteret County, NC)
- 2019-2022 **Volunteer**, Misplaced Mutts (Beaufort, NC)
- 2018-2021 **Summer Soccer Tournament Coordinator**, DUML
- 2018-2020 **Recreational Soccer Coach**, *Seashore Soccer League*, Under-10 co-ed (Carteret County, NC)
- 2019 **Volunteer**, Carteret County Humane Society (Newport, NC)
- 2015-2018 **OSU DIVEST Campus Coordinator**, OSU Divest Student Movement, OSU
- 2014-2016 **Volunteer Project Lead and Participant**, Center for Civic Engagement, OSU
- 2013-2016 **NSCS member**, National Society of Collegiate Scholars (NSCS), OSU Chapter
- 2013-2015 **Club Officer and Project Coordinator**, OSU Food Group, OSU
- 2013 **Math Tutor**, College Hill Alternative Learning High School (Corvallis, OR)
- 2013 **Market Assistant**, Indoor Winter Farmers Market SNAP Benefits Table (Corvallis, OR)
- 2012-2014 **Club Member**, OSU Organic Growers Club, OSU
- 2010-2013 **Visitor Assistant**, Evergreen Nature Center (Evergreen, CO)
- 2010-2012 **Judge's Assistant**, WJMS Science Fair, West Jefferson Middle School, 3x (Conifer, CO)
- 2009-2012 **Judge**, Marshdale Elementary Science Fair, Marshdale Elementary, 4x (Evergreen, CO)

XI. ADDITIONAL SKILLS

Workshop facilitation, in person and virtual	Ethnographic fieldwork
Community Engagement	Marine and coastal ecological fieldwork
Participatory & Collaborative Research	Public Speaking
Systematic literature review using Colandr	Policy Analysis
Figure design in Adobe Illustrator	Strategic Organizing
Qualitative Analysis in NVivo	SCUBA PADI Certified Advanced Diver
Quantitative analysis using R	Environmental education & outreach
Conceptual Mapping	Spanish fluency
Project Management	Basic German language skills

XII. PROFESSIONAL REFERENCES

Dr. Grant Murray: Associate Professor, Duke University Nicholas School of the Environment, Duke University Marine Lab; grant.murray@duke.edu

Dr. Saul Milne, Strategic Coordinator, Ha'oorn Fisheries Society; saul@haoom.ca

Steve Roady, Professor of the Practice of Law at Duke Law School, Professor of the Practice for Marine Science and Conservation at the Duke Nicholas School of the Environment; steve.roady@duke.edu