

Jennifer Hoey

California Academy of Sciences • Golden Gate Park
55 Music Concourse Drive • San Francisco, CA 94118

EDUCATION:

Rutgers University (2014 – 2020)

PhD, Graduate Program in Ecology and Evolution

Advisor: Malin Pinsky

University of California, Berkeley (2006 – 2010)

B.A. with Distinction in Integrative Biology

RESEARCH INTERESTS:

Marine ecology, adaptation, evolution, climate change, population genomics, conservation, science education

RESEARCH EXPERIENCE:

NSF-OCE Postdoctoral Fellow

December 2021-present

Bongaerts Lab, California Academy of Sciences

Project: The landscape of hybridization and adaptation across reef depth in a coral community

Postdoctoral Scholar

June 2020-October 2021

Palkovacs and Garza Labs, University of California Santa Cruz

Project: Genomics of maturation age in Yukon Chinook, genetic stock composition of river herring bycatch, genetics of landlocked river herring

Graduate Assistant/Fellow

August 2014-May 2020

Pinsky Lab, Rutgers University

Project: Adaptation and evolutionary potential in light of anthropogenic stressors in the ocean

Field Assistant in Trinidad & Tobago

September 2011-June 2012

Reznick Lab, University of California Riverside

Project: Evo-eco feedback interactions between guppies (*Poecilia reticulata*), killifish (*Rivulus hartii*) and their environment in Trinidadian streams

AmeriCorps Volunteer

September 2010-August 2011

University of California Cooperative Extension – Sonoma County & Conservation Corps North Bay, Santa Rosa, CA

Project: Monitoring and restoration of the endangered Coho salmon in the Russian River Basin

Undergraduate Researcher

September 2009-May 2010

Roderick Lab, University of California Berkeley

Project: Parrotfish population biology of the Indo-Pacific using microsatellites

NOAA Summer Intern

May 2009-July 2009

Fishery Resource Analysis and Monitoring Division, NOAA Northwest Fisheries Science Center, Oregon

State University Hatfield Marine Science Center, Newport, OR

Project: Life history characteristics of the curlfin sole (*Pleuronichthys decurrens*) along the U.S. West Coast

Undergraduate Field Researcher

August 2008-December 2008

Biology and Geomorphology of Tropical Islands Field Course, University of California Berkeley Richard B. Gump South Pacific Research Station, Mo'orea, French Polynesia

Project: The effect of herbivory by the long-spined sea urchin, *Diadema savignyi*, on algae growth in the coral reefs of Mo'orea, French Polynesia

NSF Research Experiences for Undergraduates Summer Intern

June 2008-August 2008

Gaylord & Sanford Labs, University of California Davis Bodega Marine Laboratory

Project: The effect of ocean acidification on larval growth in the native oyster *Ostrea lurida*

NOAA Summer Volunteer

May 2007-August 2007

Fisheries Research Division, NOAA Southwest Fisheries Science Center, La Jolla, CA

Project: Population structure of shortfin mako shark, *Isurus oxyrinchus*, in the Pacific as inferred through mtDNA

GRANTS:

2018 - 2020 New Jersey Sea Grant. "Quantifying the effects of a changing climate on summer flounder recruitment." Pinsky, M.L., J.A. Hoey, R.C. Chambers. \$139,859

PUBLICATIONS:

Frade, P.R., **J.A. Hoey**, G. Goodbody-Gringley, K. Latijnhouwers, H. Silberhumer, R. Arrigoni, P. Muir, and P. Bongaerts. Hybridization as a driving force for cryptic species diversity in the Caribbean coral genus *Madracis*. *Submitted*.

Cramer, A.N.*, **J.A. Hoey***, T.E. Dolan, R. Gatins, J.A. Toy, J.L. Chancellor, E.P. Palkovacs, J.C. Garza, and R.S. Beltran. 2023. A unifying framework for understanding ecological and evolutionary population connectivity. *Frontiers in Ecology and Evolution* 11.

<https://doi.org/10.3389/fevo.2023.1072825>.

* These authors contributed equally

Reid, K.*, **J.A. Hoey***, B.I. Gahagan, B.P. Schondelmeier, D.J. Hasselman, A.A. Bowden, M.P. Armstrong, J.C. Garza, and E.P. Palkovacs. 2023. Spatial and temporal genetic stock composition of river herring bycatch in southern New England Atlantic herring and mackerel fisheries. *Canadian Journal of Fisheries and Aquatic Sciences* 80(2): 360–374. <https://doi.org/10.1139/cjfas-2022-0144>

* These authors contributed equally

Hoey, J.A., K.W. Able, and M.L. Pinsky. 2022. Genetic decline and recovery of a demographically rebuilt fishery species. *Molecular Ecology* 31:5684-5698. <https://doi.org/10.1111/mec.16697>

Bonanno, A., M. Ennes, **J.A. Hoey**, E. Moberg, S.-M. Nelson, N. Pletcher, and R.L. Tanner. 2021. Empowering hope-based climate change communication techniques for the Gulf of Maine. *Elementa: Science of the Anthropocene* 9 (1): 00051.

<https://doi.org/10.1525/elementa.2020.00051>

Clark, R.D., M.L. Aardema, P. Andolfatto, P.H. Barber, A. Hattori, **J.A. Hoey**, H.R. Montes Jr., and M.L. Pinsky. 2021. Genomic signatures of spatially divergent selection at clownfish range margins. *Proceedings of the Royal Society B: Biological Sciences* 288: 20210407.

<https://doi.org/10.1098/rspb.2021.0407>

Hoey, J.A., F.J. Fodrie, Q.A. Walker, E.J. Hilton, G.T. Kellison, T.E. Targett, J.C. Taylor, K.W. Able, and M.L. Pinsky. 2020. Using multiple natural tags provides evidence for extensive larval dispersal

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across space and through time in summer flounder. *Molecular Ecology* 29: 1421-1435.
<https://doi.org/10.1111/mec.15414>

Hoey, J.A. and M.L. Pinsky. 2018. Genomic signatures of environmental selection despite near panmixia in summer flounder. *Evolutionary Applications* 11(9): 1732-1747. <https://doi.org/10.1111/eva.12676>

Hettinger, A., E. Sanford, T.M. Hill, A.D. Russell, K.N.S. Sato, **J. Hoey**, M. Forsch, H.N. Page, and B. Gaylord. 2012. Persistent carry-over effects of planktonic exposure to ocean acidification in the Olympia oyster. *Ecology* 93(12): 2758-2768. <https://doi.org/10.1890/12-0567.1>

PRESENTATIONS:

Hoey, J.A., P.R. Frade, and P. Bongaerts. 2024. Cryptic speciation & habitat differentiation in the *Madracis* species complex. *European Coral Reef Symposium*. Naples, Italy.

Batista, Nelly* & **J.A. Hoey**. 2024. A non-invasive micro-morphological approach for quantifying diversity of scleractinian *Madracis* corals in Curaçao. *3rd Joint Congress on Evolutionary Biology Meeting*. Montreal, QC, Canada. Poster.
* indicates undergraduate presenter

Batista, Nelly* & **J.A. Hoey**. 2023. A non-invasive micro-morphological approach for quantifying diversity of scleractinian *Madracis* corals in Curaçao. *SACNAS NDISTEM Conference*. Portland, OR. Poster.
* indicates undergraduate presenter

Hoey, J.A., A.N. Cramer, T.E. Dolan, R. Gatins, J.A. Toy, J.L. Chancellor, E.P. Palkovacs, J.C. Garza and R.S. Beltran. August 2022. RCN working group: Do spatial and genomic estimates of connectivity agree? Evolving Seas Training and Integration Workshop. Appledore Island, ME.

Hoey, J., F.J. Fodrie, Q.A. Walker, K.W. Able and M.L. Pinsky. August 2019. Extensive larval dispersal in summer flounder across space and through time using multiple natural tags. *Ecological Society of America (ESA) Annual Meeting*. Louisville, KY.

Hoey, J., F.J. Fodrie, Q.A. Walker, K.W. Able and M.L. Pinsky. July 2019. Extensive larval dispersal in summer flounder (*Paralichthys dentatus*) across space and through time using multiple natural tags. *Gordon Research Conference: Ecological and Evolutionary Genomics*. Hooksett, NH. Poster.

Hoey, J. 2019. A Framework for Talking About Climate Change. *Marine Extension Program Seminar Series*. Toms River, NJ.

Hoey, J. & M.L. Pinsky. 2018. Genomic signatures of environmental selection despite near-panmixia in summer flounder. *Flatfish Biology Conference*. Westbrook, CT.

DiLorenzo, M.*, **J. Hoey**, M.L. Pinsky, K.W. Able and F.J. Fodrie. 2018. The effects of temperature on size and development of larval summer flounder. *American Fisheries Society Meeting*. Atlantic City, NJ. Poster.
* indicates undergraduate presenter

Hoey, J.A. and M.L. Pinsky. 2018. Genomic signatures of environmental selection despite near panmixia in summer flounder. *2nd Joint Congress on Evolutionary Biology Meeting*. Montpellier, France. Poster.

Roble, C, **J. Hoey**, and R Castro-Diephouse. 2018. Strategic Framing for Climate Change Communicators. *Philadelphia Climate Urban Systems Partnerships Workshop*. Philadelphia, PA.

- Hoey, J.** 2018. Understanding the impacts of climate change on the distribution, population connectivity, and fisheries for summer flounder (*Paralichthys dentatus*) in the Mid-Atlantic. *New Jersey Sea Grant Consortium Quarterly Extension Meeting*. Sandy Hook, NJ.
- Hoey, J. & M.L. Pinsky.** 2018. Genomic signatures of environmental selection despite near-panmixia in summer flounder. *New York Area Population Genomics Workshop*. Cold Spring Harbor, NY.
- Hoey, J. M.L. Pinsky, K.W. Able, F.J. Fodrie.** 2017. Natural history collections and genomics reveal cryptic northward movement of a marine fish. *Ecological Society of America (ESA) Annual Meeting*. Portland, OR.
- DiLorenzo, M.*, **J. Hoey**, M.L. Pinsky, K.W. Able and F.J. Fodrie. 2017. Using natural history collections to understand climate impacts on a widespread marine fish. *Rutgers University Aresty Undergraduate Research Symposium*. Piscataway, NJ. Poster.
* indicates undergraduate presenter
- Hoey, J.** and M.L. Pinsky. 2016. Candidate loci under selection in a panmictic marine population. *The American Genetic Association President's Symposium - "Local adaptation: from phenotype to genotype to fitness."* Pacific Grove, CA. Poster.
- Hoey, J., M.L. Pinsky, K.W. Able and F.J. Fodrie.** 2015. Understanding the impacts of climate change on population connectivity. *Student Conference on Conservation Science Meeting*. New York, NY. Speed Talk.
- Hoey, J., M.L. Pinsky, K.W. Able and F.J. Fodrie.** 2015. Understanding the impacts of climate change on population connectivity. *Ecological Society of America (ESA) Annual Meeting*. Baltimore, MD. Poster.

WORKING GROUPS:

NSF RCN for Evolution in Changing Seas

January 2021-June 2023

TEACHING EXPERIENCE:

Teaching Assistant

September 2018-May 2019

Rutgers University, New Brunswick, NJ

- Principles of Biology 01:119:103
- Biology Research Laboratory 01:119:117

Restoration Technician

August 2013-June 2014

Acterra: Action for a Healthy Planet (currently Grassroots Ecology), Palo Alto, CA

- Developed and executed citizen-science-based water quality monitoring programs in local creeks
- Led and managed volunteers assisting with restoration efforts along neighborhood creeks
- Guided volunteers assisting with tasks at a native plant nursery

AmeriCorps Volunteer

October 2012-August 2013

Farallones Marine Sanctuary Association & Watershed Stewards Project, San Francisco, CA

- Led, coordinated and educated students assisting with hands-on watershed restoration projects
- Developed and implemented classroom watershed education for low-income students

AmeriCorps Volunteer

September 2010-August 2011

University of California Cooperative Extension – Sonoma County & Conservation Corps North Bay, Santa Rosa, CA

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- Developed and presented lessons about salmonid lifecycles, habitat requirements and anthropogenic impacts to 3rd graders

Sea Education Association Housing Leader

August 2010

Science at Sea Summer Program for High School Students, Sea Education Association, Woods Hole, MA

- Designed and conducted an ocean acidification workshop
- Tutored students in oceanography and maritime studies

Undergraduate Student Presenter

January 2010-May 2010

Communicating Ocean Science to Informal Audiences, University of California Berkeley Lawrence Hall of Science

- Designed and presented climate change activities on the museum floor

EXTRACURRICULARS & PROFESSIONAL ACTIVITIES:

2021 - 2023	AGU LANDInG Postdoctoral Research Fellow
2018 - 2022	Science Partnership Committee, NNOCCI
2017, 2019	Meeting Mentor, ESA SEEDS
2017	Marine Science Mentor, GOALS for Girls Summer Intensive Program
2017	Science Fellow, National Network for Ocean and Climate Change Interpretation (NNOCCI)
2017	Organizing Committee, Rutgers Ecology & Evolution Prospective Student Visit
2016 - 2018	Vice President, Rutgers University Ecology & Evolution Graduate Student Association
2015 - 2017	Member, Ecological Society of America
2015 - 2018	Member, Rutgers University Ecology & Evolution Diversity Focus Group
2015	Member, Rutgers University Ecology & Evolution Graduate Student Association Fundraising Committee
2015	Participant, Cluster of Excellence COTE Summer School - Ecology and society: Biodiversity and global change, Bordeaux, France
2015 - 2019	Volunteer, Regional Shore Bowl at Rutgers University, New Brunswick, NJ
2013 - 2014	Volunteer Diver, California Academy of Sciences, San Francisco, CA

FELLOWSHIPS & AWARDS:

2023	American Genetic Association EECG Research Award
2021-2023	NSF-OCE Postdoctoral Fellowship
2019	Rutgers EcoGSA Outreach Award
2018	Rutgers School of Graduate Studies Conference Travel Award
2016	Manasquan River Marlin & Tuna Club Burlew Scholarship
2016	Rutgers Graduate School New Brunswick Conference Travel Award
2016	Rutgers Climate Institute Student Support Fund
2015	Rutgers TA/GA Professional Development Fund
2015 - 2018	NSF Graduate Research Fellowship
2014	GAANN Fellowship (offered but declined)
2008 - 2010	NOAA Hollings Undergraduate Scholar