Elora Hayter López-Nandam

Current Position

2021- Postdoctoral Researcher. California Academy of Sciences, Hope for Reefs Initiative

Education

2021 Ph.D. Stanford University, Biology (Hopkins Marine Station)

2015 B.A. Columbia University, Environmental Biology (Ecology and Evolution track)

Fellowships

2015	NSF Graduate Research Fellowship
2015	Morgridge Family Fellowship (Stanford Graduate Fellowship in Science and Engineering)
2015	Ford Foundation Predoctoral Fellowship (declined)
2013	NSF Biology REU at the American Museum of Natural History

Grants and Awards

Walter M. Fitch Award Finalist, Society for Molecular Biology and Evolution
National Geographic Early Career Explorer Grant
The Explorers Club Rolex Explorer Grant
Society for Molecular Biology and Evolution Young Investigator Travel Award (2x)
Stanford Office of Graduate Education Travel Grant Award (2x)
Dept. of Ecology, Evolution and Environmental Biology (E3B) Thesis Research Award
The Explorers Club Youth Activity Fund
Columbia Undergraduate Scholars Program (CUSP) Summer Enhancement Fellowship
Columbia College Class of 1939 Summer Research Fellowship
Columbia University Earth Institute Student Travel Grant
NSF Biology REU Mentor-Student Travel Scholarship (with Dr. Mary Blair)
John W. Kluge Scholar, Columbia Undergraduate Scholars Program (CUSP)

Publications

López EH & Palumbi SR (2020). Somatic mutations and genome stability maintenance in clonal coral colonies. *Molecular Biology and Evolution* 37:828-838 DOI: 10.1093/molbev/msz270

Thomas L*, **López EH***, Morikawa MK, Palumbi SR (2019). Transcriptomic resilience, symbiont shuffling, and vulnerability to recurrent bleaching in reef-building corals. *Molecular Ecology* 28:3371-3382 DOI: 10.1111/mec.15143

*equal contributors

Thomas L, Rose NH, Bay RA, **López EH**, Morikawa MK, Ruiz-Jones LJ, Palumbi SR (2018). Mechanisms of thermal tolerance in reef-building corals across a fine-grained environmental mosaic: lessons from Ofu, American Samoa. *Frontiers in Marine Science* 4:434. DOI: 10.3389/fmars.2017.00434

Drew J, **López EH**, Gill L, McKeon M, Miller N, Steinberg M, Shen C, McClenachan L (2016). Collateral damage to marine and terrestrial ecosystems from Yankee whaling in the 19th century. *Ecology and Evolution*. 6:8181-8192. DOI: <u>10.1002/ece3.2542</u>

Eastwood EK*, **López EH***, Drew JA (2016). Population connectivity measures of fishery-targeted coral reef species to inform marine reserve network design in Fiji. *Scientific Reports* 6:19318. DOI: <u>10.1038/srep19318</u>***equal contributors**

Reports

López EH, Eastwood E, Drew J (2017). Genetic connectivity among populations of lollyfish (*Holothuria atra*). In S. Mangubhai, W. Lalavanua and S.W. Purcell (eds.). Fiji's Sea Cucumber Fishery: Advances in Science for Improved Management. Wildlife Conservation Society. Report No. 01/17. Suva, Fiji. pp. 62–70.

Selected Presentations

López EH, Albright R, Palumbi SR. Asexual and sexual mutation inheritance in clonal coral colonies. Oral presentation online for the SMBE Fitch Symposium. <u>View on YouTube.</u> June 30, 2020.

López EH, Albright R, Palumbi SR. Genome integrity and the heritability of somatic mutation in clonal, colonial corals. Poster presentation online for The Allied Genetics Conference. <u>View on FigShare</u>. April 2020.

López EH & Palumbi SR. Somatic mutations and genome stability maintenance in clonal coral colonies. Poster presentation at the Society for Molecular Biology and Evolution in Manchester, England. July 22, 2019.

López EH & Palumbi SR. Patterns and frequency of variation among asexual clones in a long-lived coral species. Oral presentation at the American Genetics Association Presidential Symposium in Portland, OR. June 3, 2019.

López EH & Palumbi SR. Considering somatic mutations and genome maintenance capacity in colonial cnidarians. Poster presentation at the Society for Molecular Biology and Evolution in Yokohama, Japan. July 9, 2018.

López EH & Palumbi SR. Uncovering within-colony coral diversity using high-throughput sequencing data. Oral presentation at the International Coral Reef Symposium in Honolulu, HI. June 20, 2016.

López EH, Le MD, Nguyễn TV, Dương HT, Cao GTH, Sterling EJ, Blair ME. Inferring molecular phylogenetic relationships among slow lorises (genus *Nycticebus*) with mitochondrial DNA sequence data. Poster presentation at the XXV International Primatological Congress in Hanoi, Vietnam. August 15, 2014.

López EH & Drew JA. Comparative phylogeography of Indo-Pacific marine taxa presents idiosyncratic genetic connectivity patterns. Oral presentation at the Society for Conservation Biology Oceania Section Meetings in Suva, Fiji. July 9, 2014.

Invited Talks and Panels

"Why mutations matter for corals." Invited talk at California Academy of Sciences' Institute for Biodiversity Science and Sustainability Seminar Series online. September 24, 2020.

"Asexual and sexual somatic mutation inheritance in a colonial coral." Cnidarian Zoom Seminar. May 20, 2020.

"Paradise irradiated: The Marshall Islands 60 years after nuclear testing." Invited talk at The Explorers Club headquarters. New York, NY. March 17, 2019.

"From climate change to nuclear bombs: using genomics to understand wildlife responses to environmental change." Invited talk at The Explorers Club Northern California Chapter meeting. San Francisco, CA. May 25, 2018.

Moderator and organizer of the panel "Looking Forward: Marine Science & Policy in the New Administration." Hopkins Marine Station of Stanford University. March 1, 2017.

"Marine conservation and genetic connectivity of marine taxa in Fiji." Invited talk at the Global Vision International (GVI) Tovuto base on Nanuya Lai Lai, Fiji. August 5, 2014.

Selected Media

2020	Meet Elora López-Nandam, profile in STANFORD Magazine
2019	Twitter thread on our coral bleaching paper in Molecular Ecology
2018	High Tidings blog post on Bikini Atoll research
2017	Appearance in Bikini Atoll segment of episode 2 of PBS' Big Pacific
2017	Quoted in USA Today about Bikini Atoll research
2016	Article in The Atlantic about Yankee whaling research
2016	Quoted in Columbia Magazine about Yankee whaling research
2014	I wrote a story about my undergraduate thesis research in Fiji for Columbia's website

Teaching Experience

2019-2020	Polygence Mentor
	Mentored two high school students in Shanghai to design a research project in the Galápagos
Fall 2018	T.A. for Ecology of the Hawaiian Islands (BIO 116). Stanford Wrigley Field Program in Hawaii Taught and supervised marine fieldwork techniques, gave three lectures

Spring 2018	T.A. for Evolution (BIOHOPK 85). Hopkins Marine Station of Stanford University Led interactive discussion sections and molecular labs, gave one lecture
May 2016	Instructor for Stanford Science Circle Middle School Program Gave two lectures: conservation biology and coral reef ecology
Winter 2016	T.A. for Evolution (BIO 143). Stanford University

Leadership and Service

2019	Mentor, EEB Mentor Match Program
2018-2019	President, Hopkins Marine Station Graduate Student Organization (HMSGSO)
2017-2019	Mentor, Salinas High School Marine Biology Internships at Hopkins Marine Station
2016-2018	Student Liaison, Monterey Area Research Institutions Network for Education (MARINE)
2016-2018	Secretary, Hopkins Marine Station Graduate Student Organization (HMSGSO)
2015-2019	NSF GRFP Mentor, Stanford University
2015-2016	Biology Eco-Evo Graduate Student Seminar Speaker Committee, Stanford University

Certifications

AAUS Scientific Diver

Wilderness First Aid

CPR/First Aid