

# Casey O'Hara

## Curriculum Vitae

### Education and Experience

#### Education

**PhD Environmental Science and Management (2022 expected)** Bren School of Environmental Science & Management, University of California, Santa Barbara *Advisor: Dr. Benjamin Halpern*

**Master of Environmental Science and Management (2014)** Bren School of Environmental Science & Management, University of California, Santa Barbara *UCSB University Award of Distinction; Bren School Academic Achievement Award*

**Single Subject Teaching Credential in Science, Physics (2004)** Graduate School of Education, San Francisco State University

**Master of Science in Mechanical Engineering Design (1994)** Department of Mechanical Engineering, Design Division, Stanford University

**Bachelor of Science in Mechanical Engineering (1993)** Department of Mechanical Engineering, Stanford University

#### Experience

**Project scientist, Ocean Health Index** (January 2015 – present) National Center for Ecological Analysis and Synthesis - Santa Barbara, CA

**AAAS Mass Media Science Fellowship** (June 2014 - August 2014) *The Oregonian* - Portland, OR

**Program Consultant** (June 2013 - August 2013) The School for Examining Essential Questions of Sustainability (SEEQS) Charter School - Honolulu, HI

**Masters Thesis Group Project** (April 2013 - June 2014) UCSB Bren School - Santa Barbara, CA  
“Offshore wind energy in the context of multiple ocean uses on the Bermuda platform.” Client: Department of Environmental Protection, Bermuda

See also *STEM Education and Engineering*

#### Relevant Technical Skills

- R/R Studio including spatial analysis, data visualization, package development, ShinyApps
- Git/GitHub
- MATLAB, Stata, C/C++, HTML, JavaScript, LaTeX
- ArcGIS, QGIS

#### Publications

- Burgass, M. J., Milner-Gulland, E. J., Stewart Lowndes, J. S., **O'Hara, C.**, Afflerbach, J. C., & Halpern, B. S. (2018). A pan-Arctic assessment of the status of marine social-ecological systems. *Regional Environmental Change*. <https://doi.org/10.1007/s10113-018-1395-6>
- Halpern, B. S., Frazier, M., Afflerbach, J., **O'Hara, C.**, Katona, S., ... & Polsenberg, J. (2017). Drivers and implications of change in global ocean health over the past five years. *PloS one*, 12(7), e0178267. <http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0178267>

- Lowndes, J. S. S., Best, B. D., Scarborough, C., Afflerbach, J. C., Frazier, M. R., **O'Hara, C. C.**, Ning Jiang, & Halpern, B. S. (2017). Our path to better science in less time using open data science tools. *Nature ecology & evolution*, 1(6), 0160. <https://www.nature.com/articles/s41559-017-0160>
- **O'Hara, C. C.**, Afflerbach, J. C., Scarborough, C., Kaschner, K., & Halpern, B. S. (2017). Aligning marine species range data to better serve science and conservation. *PloS one*, 12(5), e0175739. <http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0175739>

## **STEM Education and Engineering**

### **Science Education Experience**

- Program Consultant (June 2013 - August 2013) The School for Examining Essential Questions of Sustainability (SEEQS) Charter School - Honolulu, HI
- Science Teacher: Physics, Integrated Science, Engineering & Green Tech (August 2004 - June 2012) Carlmont High School - Belmont, CA
- Education Liaison (November 2009 - December 2009) Amundsen-Scott South Pole Station, Antarctica

### **Science Education Leadership and Honors**

- "Where the Wonder Went" documentary short film, Santa Barbara International Film Festival (January 2014) Santa Barbara, CA
- Senior Fellow, Knowles Science Teaching Foundation (2009 - present) - Moorestown, NJ
- Teaching Fellow, Knowles Science Teaching Foundation (2004 - 2009) - Moorestown, NJ
- Exploratorium Teacher Institute (2004 - 2013) - San Francisco, CA
- Innovative Teacher of the Year (2011) Carlmont High School - Belmont, CA
- Amgen Award for Science Teaching Excellence (2011) Amgen Corporation
- National Board Certification (Science - Adolescent/Young Adult) (2009) National Board for Professional Teaching Standards

### **Engineering Experience**

- Mechanical Engineer (May 2000 - December 2003) St. Jude Medical, Inc. - Sunnyvale, CA
- Mechanical Engineer (May 1997 - May 2000) Asyst Technologies (Hine Design) - Sunnyvale, CA
- Mechanical Engineer (August 1995 - April 1997) Applied Materials, Inc. - Santa Clara, CA
- Maintenance Engineer (August 1994 - August 1995) ATMEL Inc. - San Jose, CA