# Casey O'Hara

#### Curriculum Vitae

## 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) NCEAS 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) 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 Science Education, Engineering sections

## Publications

- Halpern, B. S., Frazier, M., Afflerbach, J., **O'Hara, C.**, Katona, S., Lowndes, J. S. 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.**, . . . & 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

## 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

#### Science Education

- 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

- 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