

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
- Committee:

Master of Environmental Science and Management (2014) Bren School of Environmental Science & Management *University of California, Santa Barbara*

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

Summer 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

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>

Honors

Science Communications Honors

“Where the Wonder Went,” Santa Barbara International Film Festival (January 2014) Santa Barbara, CA

Education Liaison (November 2009 - December 2009) Amundsen-Scott South Pole Station, Antarctica

Science Education Leadership and Honors

Knowles Science Teaching Foundation (2004 - present) - 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

Relevant Technical Skills

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