

Christine M. Baker

CONTACT INFORMATION	Stanford University 473 Via Ortega Stanford, CA 94305	+1-650-723-3074 bakercm@stanford.edu she/her/hers
	CV Last Updated	March 3, 2024
EDUCATION	Ph.D. Civil & Environmental Engineering, University of Washington, Advisor: Dr. Melissa Moulton Dissertation: <i>Surfzone vorticity dynamics in a directional wave basin</i>	Mar. 2023
	M.Sc. Civil & Environmental Engineering, University of Washington, Advisors: Drs. Nirnimesh Kumar & Melissa Moulton Thesis: <i>Three-Dimensional Nearshore Currents and Eddies on an Alongshore-Variable Barred Beach</i>	Dec. 2019
	B.Sc. Civil Engineering, Oregon State University, Advisors: Drs. Judy Liu, Harry Yeh, & Christopher Higgins Focus: <i>Tsunami Wave Impact on Metal Building Cladding</i>	Jun. 2017
PROFESSIONAL EXPERIENCE	Assistant Professor Dept. of Civil & Environmental Engineering School of Engineering & Doerr School of Sustainability, Stanford University, Palo Alto, CA	Jul. 2024
	Acting Assistant Professor Dept. of Civil & Environmental Engineering Stanford University, Palo Alto, CA	Apr. 2023 – Jun. 2024
	Postdoctoral Research Fellow <i>Coastal Hazards Lab</i> Dept. of Civil, Construction, & Environmental Engineering North Carolina State University, Raleigh, NC	Apr. 2023 – May 2024
	Graduate Research & Teaching Assistant <i>Environmental Fluid Mechanics Group</i> Dept. of Civil & Environmental Engineering University of Washington, Seattle, WA	Sep. 2017 – Mar. 2023
	Visiting Graduate Research Fellow <i>Remote Sensing Team, Field Research Facility</i> U.S. Army Engineer Research & Development Center, Duck, NC	Sep. 2021 – Dec. 2021
	Naval Research Laboratory Intern <i>Ocean Science Division, Naval Research Laboratory</i> NASA's Stennis Space Center, MS	Jun. 2019 – Aug. 2019
	Undergraduate Research Assistant <i>Innovative Concrete Materials Lab</i> <i>Fluid-Structure Interactions Team</i>	Oct. 2014 – Dec. 2015 Jan. 2016 – Jun. 2017

Dept. of Civil & Construction Engineering
Oregon State University, Corvallis, OR

JOURNAL
PUBLICATIONS

Peer-Reviewed Journal Articles (Published & Accepted)

5. van Wiechen, P., Rutten, J., de Vries, S., Tissier, M., Mieras, R., Anarde, K., **Baker, C.M.**, Reniers, A., Mol, J.W. (Accepted). Measurements of dune erosion processes during the RealDune/REFLEX experiments. *Scientific Data*.
4. **Baker, C.M.**, Moulton, M., Chickadel, C.C., Nuss, E.S., Palmsten, M., & Brodie, K. (2023), Two-dimensional inverse energy cascade in a laboratory surf zone for varying wave directional spread. *Physics of Fluids*, 35 (12): 125140. <https://doi.org/10.1063/5.0169895>
3. **Baker, C.M.**, Moulton, M., Palmsten, M., Brodie, K., Nuss, E.S. & Chickadel, C. C. (2023), Remotely sensed short-crested breaking waves in a laboratory directional wave basin. *Coastal Engineering*, 183, 104327. <https://doi.org/10.1016/j.coastaleng.2023.104327>
2. **Baker, C.M.**, Moulton, M., Elgar, S., Raubenheimer, B., & Kumar, N. (2021), Modeled Three-Dimensional Nearshore Currents and Eddies on an Alongshore-Variable Barred Beach. *Journal of Geophysical Research: Oceans*, 126, e2020JC016899. <https://doi.org/10.1029/2020JC016899>
1. **Baker, C.M.**, Higgins, C., Liu, J., & Yeh, H. (2020), Response of Metal Building Cladding to Tsunami Wave Impact Loads. *Journal of Structural Engineering*, 46(11), 04020236. [https://doi.org/10.1061/\(ASCE\)ST.1943-541X.0002800](https://doi.org/10.1061/(ASCE)ST.1943-541X.0002800)

Peer-Reviewed Journal Articles (Under Review & In Preparation)

4. Casper, A., Nuss, E.S., **Baker, C.M.**, Moulton, M., & Dusek, G. (In Review). Assessing NOAA Rip-Current Hazard Likelihood Predictions: Comparison of an Operational Model with Lifeguard Observations in the Context of Rip-Current Types.
3. Nuss, E.S., Moulton, M., Suanda, S., & **Baker, C.M.** (In Review). Modeled surf-zone eddies on a laboratory scale barred beach with varying wave conditions.
2. Treillou, S., Marchesiello, P., & **Baker, C.M.** (In Review), Correction of coherent interferences in wave-resolving nearshore models and validation with experimental data.
1. **Baker, C.M.**, Moulton, M., Chickadel, C.C., Palmsten, M., Nuss, E.S., & Brodie, K. (In Prep), Linking directionally spread wavefields, short-crested wave breaking, and surfzone eddy processes in a laboratory basin.

Other Publications

3. **Baker, C.M.** (2023), Surfzone vorticity dynamics in a directional wave basin (Doctoral Dissertation), University of Washington, Seattle, WA, USA. <http://hdl.handle.net/1773/49872>
2. McLachlan, R., Bolden, I., Boysen, A., & **Baker, C.** (2020), Harmful Algae Blooms. In: *Climate Science for the Classroom*. M. Bertram & S. Biyani (Eds). <https://uw.pressbooks.pub/climate/>
1. **Baker, C.M.** (2019), Three-Dimensional Nearshore Currents and Eddies on an Alongshore-Variable Barred Beach (Masters thesis), University of Washington, Seattle, WA, USA. <http://hdl.handle.net/1773/45155>

ARCHIVED
SOFTWARE &
DATASETS

2. **Baker, C.M.**, Melissa, M., Palmsten, M., & Nuss, E.S. (2023), Experimental investigation of short-crested wave breaking in a laboratory directional wave basin. *Designsafe-CI*. <https://doi.org/10.17603/ds2-qgd5-jk92>.

1. **Baker, C.M.**, Moulton, M., Elgar, S., Raubenheimer, B., & Kumar, N. (2021), SWASH Model Files from “Modeled Three-Dimensional Currents and Eddies on an Alongshore-Variable Barred Beach.” *Zenodo*, <https://doi.org/10.5281/zenodo.4141219>.

HONORS &
AWARDS

<i>Burges Presidential Graduate Fellow</i>	Fall 2022 – Winter 2023
Civil and Environmental Engineering, University of Washington	
<i>Ronald & Mary Nece Endowed Fellowship in Water Engineering</i>	Jul. 2022
Civil and Environmental Engineering, University of Washington	
<i>Best Oral Presentation, Top 3 Nominee,</i> Coastal Dynamics Conference	Jun. 2021
<i>Naval Research Enterprise Internship Program Scholarship,</i> (NREIP), Stennis, MS	Jun.-Aug. 2019
<i>Best Oral Presentation for Young Coastal Scientist</i> and Engineering Conference, Merida, Yuc., Mexico.	Nov. 2018
<i>Rossano’s Family Endowment Travel Award,</i> College of Engineering, University of Washington	Nov. 2018
<i>Top Scholar Award,</i> Graduate Student Fund, University of Washington	Sep. 2017
<i>Magna Cum Laude,</i> Bachelors of Science, Oregon State University	Jun. 2017
<i>Fred Madigan Scholarship,</i> Civil Engineering, Oregon State University	Sep. 2016
<i>Katherine & Arthur Chiu Outstanding Student Scholarship,</i> Civil Engineering, Oregon State University	Sep. 2016
<i>Women in Engineering Undergraduate Research Grant</i> College of Engineering, Oregon State University	2016 – 2017
<i>Kelley Undergraduate Research Grant</i> College of Engineering, Oregon State University	2014 – 2016
<i>We are Women in Engineering Research Symposium Stipend Award</i> College of Engineering, North Carolina State	Feb. 2017
<i>Provost Scholarship,</i> Undergraduate Academic Scholarship, Oregon State University	2013 – 2017

GRANTS

2. Derakhti, M., Hegermiller, C.A., Wilson, G., **Baker, C.M.**, Moulton, M., Chickadel, C.C. *Sediment Transport Over the Nearshore Environment (STONE): Linking nonlinear wave effects across the shoaling and breaking zone.* U.S. Coastal Research Program, 2023 RFP. (2023 – 2027)

1. **Baker, C.M.**, National Defense Engineering and Science Graduate Fellowship (NDSEG), Department of Defense. (2019 – 2022)

PRESENTATIONS *Invited Lectures & Research Seminars*

17. Invited Seminar: University of New Hampshire, Ocean Seminar. *Surf-Zone Eddy Dynamics in Directional Wave Basin Experiments.* Feb. 9, 2024.

16. Invited Seminar: Yale Atmosphere, Ocean, Climate Dynamics. *Eddy Processes Driven by Breaking Waves in a Directional Wave Basin.* Nov. 9, 2023.

15. Invited Seminar: University of Connecticut, Department of Marine Sciences. *Breaking waves, surf-zone eddies, and rip currents: Insights from wave basin experiments*. Oct. 20, 2023.
14. Invited Seminar: Woods Hole Oceanographic Institute, Applied Ocean Physics & Engineering. *Breaking waves, surf-zone eddies, and rip currents: Insights from wave basin experiments*. Oct. 11, 2023.
13. Invited Seminar: University of North Carolina Chapel Hill, Institute of Marine Science. *Wave Breaking, Eddies, and Transient Rip Current Dynamics: Insights from Large-Scale Laboratory Experiments*. Sep. 14, 2023.
12. Invited Seminar: Coastal Imaging Research Network Seminar. *Remote sensing applications in large-scale laboratory experiments: Eddy generation by individual breaking waves*. Jun. 14, 2023. (Virtual)
11. Seminar: Woods Hole Institute of Oceanography, Coastal Ocean Fluid Dynamics Lab, Woods Hole, MA. *2D Turbulence in the surfzone: lab and field*. May 19, 2023. (Presented with Elgar, S.)
10. Invited Seminar: Stanford University, Fluid Mechanics Seminar, Palo Alto, CA. *Surfzone eddy generation and evolution in a directional wave basin*. Mar. 14, 2023.
9. Seminar: Delft University of Technology, 87th Hydraulic Engineering Colloquium, Delft, Netherlands. *Surfzone eddy formation and evolution in a directional wave basin*. Jun. 7, 2022 (Virtual)
8. Seminar: Deltares, Coastal Hazards Group, Delft, Netherlands. *Surfzone eddy formation and evolution in a directional wave basin*. Jun. 7, 2022 (Virtual)
7. Seminar: Physical Oceanography Seminar, University of British Columbia, Vancouver, BC. *Remotely sensed short-crested breaking waves and transient rip currents in a laboratory wave basin*. Feb. 3, 2022 (Virtual)
6. Invited Seminar: Field Research Facility Seminar, U.S. Army Engineer Research & Development Center, Duck, NC. *Short-crested wave breaking and transient rip currents in a laboratory wave basin*. Dec. 8, 2021
5. Invited Seminar: National Oceanic and Atmospheric Administration (NOAA), NOAA Coastal Ocean Modeling Seminars, Silver Spring, MD. *Surfzone currents and eddies: Three-dimensional phase-resolved simulations*. Sep. 7, 2021 (Virtual)
4. Seminar: Environmental Fluid Mechanics Group, University of Washington, Seattle, WA. *Quantifying the short-crested wave field*. Mar. 11, 2021. (Virtual)
3. Seminar: Department of Civil & Environmental Engineering, Louisiana State University, Baton Rouge, LA. *Remote sensing of rip currents and surface waves in a laboratory wave basin*. Aug. 16, 2019.
2. Seminar: U.S. Naval Research Laboratory, Ocean Sciences Division, Stennis Space Center, MS. *Remote sensing of rip currents and surface waves in a laboratory wave basin*. Aug. 21, 2019.
1. Seminar: Environmental Fluid Mechanics Group, University of Washington, Seattle, WA. *Radiation stress*. Feb. 7, 2019.

Conference Oral Presentations

16. **Baker, C.M.**, Moulton, M., Chickadel, C.C., Nuss, E.S., Palmsten M., & Brodie K. (2024). Wave breaking, eddies, and transient rip current dynamics in large-scale wave basin experiments. *COASTLAB24*, May 13–16.

15. **Baker, C.M.**, Anarde, K., Tissier, M., Rutten, J., van Wiechen, P., Mieras, R., & de Vries, S. (2024). Infragravity wave dynamics during dune collision. *Ocean Sciences Meeting*, Feb. 18 – 23.
14. Nuss, E.S., Moulton, M., Suanda, S., & **Baker, C.M.** (2024). Modeled surf-zone eddies on a laboratory scale barred beach with varying wave period and directional spread. *Ocean Sciences Meeting*, Feb. 18 – 23.
13. Nuss, E.S., Moulton, M., Suanda, S., **Baker, C.M.**, Brodie, K., & Palmsten, M. (2023). How does surfzone eddy activity vary with wave conditions on a laboratory scale barred beach? *Gordon Research Seminar/Conference: Coastal Ocean Dynamics*, Jun. 18–23.
12. **Baker, C.M.**, Moulton, M., Chickadel, C.C., Nuss, E.S., Palmsten M., & Brodie K. (2023). Remote sensing applications in large-scale laboratory experiments: Eddy generation by individual breaking waves. *Coastal Imaging Research Network Workshop*, May 10–12.
11. Casper, A., Moulton, M., Dusek, G., **Baker, C.M.**, & Nuss, E.S. (2023). Assessing NOAA hazardous rip-current predictions with lifeguard observations in the context of different rip-current types. *American Meteorological Society (AMS) Meeting*, Jan. 8–12.
10. Nuss, E.S., Moulton, M., Suanda, A., **Baker, C.M.**, Brodie, K., & Palmsten M. (2022). Breaking-wave crest lengths and associated vorticity input under varying directional spread. *American Geophysical Union (AGU) Fall Meeting*, Dec. 12–16.
9. **Baker, C.M.**, Moulton, M., Palmsten M., Brodie K., & Nuss, E.S. (2022). Deciphering determinants of breaking wave crest length in the surf zone by remotely sensing directional wave fields in the laboratory. *Wind waves In the Earth System (WISE) Meeting*, May 30 – Jun. 2.
8. **Baker, C.M.**, Moulton, M., Palmsten M., Brodie K., & Nuss, E.S. (2022). Vorticity injection at crest ends, eddy evolution, and transient rip current formation in a laboratory surf zone. *Ocean Sciences Meeting*, Feb. 28 – Mar. 4.
7. Bruder, B., Spore, N., Brodie, K., & **Baker, C.M.**, (2022). Measuring Alongshore Variations in Swash Flows Using Stereophotogrammetry. *Ocean Sciences Meeting*, Feb. 28 – Mar. 4.
6. Nuss, E.S., Moulton, M., Suanda, A., **Baker, C.M.**, Brodie, K., & Palmsten M. (2021). Phase-Resolved Modeling and Laboratory Investigation of Surfzone Eddies and Transient Rip Currents. *Young Coastal Scientist and Engineers Conference - America*, Nov. 1–11.
5. Nuss, E.S., Moulton, M., Suanda, A., **Baker, C.M.**, Palmsten M., & Brodie, K. (2021). Phase-Resolved Modeling and Laboratory Investigation of Surfzone Eddies and Transient Rip Currents. *Coastal and Estuarine Research Federation Conference*, Nov. 1–11.
4. **Baker, C.M.**, Nuss, E.S., Brodie K., Palmsten M., & Moulton, M. (2021). Short-Crested Wave Breaking, Eddies, and Transient Rip Currents in a Laboratory Wave Basin. *Coastal Dynamics Conference*, Delft, Netherlands, Jun. 28 – Jul. 2.
3. **Baker, C.M.**, Moulton, M., Palmsten M., Brodie K. & Kumar, N. (2020). Remote sensing of rip currents and surface waves in a laboratory wave basin. *Ocean Sciences Meeting*, San Diego, CA, Feb. 16 – 21, Abstract ID: CP42A-04.

2. **Baker, C.M.**, Moulton, M., Raubenheimer, B., Elgar, S., & Kumar, N. (2018), Three-dimensional modeling of transient rip currents: implications for cross-shore exchange. *Young Coastal Scientists and Engineers Conference - Americas*, Merida, Yuc., Mexico, Nov. 9 – 11.
1. **Baker, C.M.**, Moulton, M., Palmsten M., & Kumar, N. (2018), Remote sensing of rip currents and surface waves in a laboratory wave basin. *Coastal Image Research Network Workshop*, St. Petersburg, FL, Jun. 4 – 8.

Conference Poster Presentations

10. Mieras, R., van Weichen, P., de Vries, S., Tissier, M., Rutten, J., Anarde, K., & **Baker, C.M.** (2024). Continuous measurements of dune scarp erosion during storm impact using a line-scanning, low-cost (LLC) LiDAR. *Ocean Sciences Meeting*, Feb. 18–23.
9. **Baker, C.M.**, Moulton, M., Chickadel, C.C., Nuss, E.S., Palmsten M., & Brodie K. (2023). Surfzone vorticity dynamics in a directional wave basin. *Gordon Research Conference: Coastal Ocean Dynamics*, Jun. 18 – 23.
8. Nuss, E.S., Moulton, M., Suanda, A., Kutz, N., & **Baker, C.M.** (2023). Using machine learning to predict wave-breaking induced eddy generation in the surf zone. *American Meteorological Society (AMS) Meeting*, Jan. 8 – 12.
7. **Baker, C.M.**, Moulton, M., Palmsten M., Brodie K., Nuss, E.S., & Chickadel, C.C. (2022). Surfzone Eddy Processes Consistent with an Inverse Energy Cascade: Laboratory Experiments in a Directional Wave Basin. *American Geophysical Union (AGU) Fall Meeting*, Dec. 12 – 16.
6. Nuss, E.S., **Baker, C.M.**, Moulton, M., & Kumar, N. (2020). Phase-Resolved Modeling and Laboratory Investigation of Surfzone Eddies and Transient Rip Currents. *American Geophysical Union*, San Francisco, CA, Dec. 7 – 11, Abstract ID: 739635.
5. Boysen, A., **Baker, C.M.**, Bolden, I., McLachlan, R. (2019). A phenomenon based climate science curriculum for middle-school classrooms: Harmful Algal Blooms, Society, and Climate Change. *Earth Educators' Rendezvous*, Nashville, TN, Jul. 15 – 19.
4. **Baker, C.M.**, Higgins, C., Liu, J., & Yeh, H. (2019). Predicting Tsunami Wave Impact Loads on Building Cladding. *Structures Congress*, Orlando, FL, OR, Apr. 24 – 27. Abstract ID: 505369-4.
3. **Baker, C.M.**, Moulton, M., & Kumar, N. (2018), Rip-current driven cross-shore exchange: Observations and Model Simulations. *Eastern Pacific Oceanography Conference*, Mt. Hood, OR, Sep. 12 – 15.
2. **Baker, C.M.**, Moulton, M., Elgar, S., Raubenheimer, B., & Kumar, N. (2018), Rip-current driven cross-shore exchange dynamics on a natural barred beach, CD14B-0042. *Ocean Sciences Meeting*, Portland, OR, Feb. 12 – 16. Abstract ID: EC24B-1103
1. **Baker, C.M.**, Higgins, C., Liu, J., & Yeh, H. (2017). Tsunami Impact Loads on Building Cladding. *Undergraduate Research Symposium*, Oregon State University, OR, May 19.

TEACHING &
MENTORSHIP

Guest Lecturer/Discussion Lead

Engineering Aspects of Coastal Processes & Geomorphology,
North Carolina State University

Sept. 2023

Coastal Circulation, Naval Postgraduate School

Nov. 2022

Hydrodynamics, University of Washington

Feb. 2022

	<i>Undergraduate Education Committee</i>	
	<i>Civil & Environmental Engineering Faculty Subcommittee</i>	Nov. 2021 – Dec. 2022
	Graduate Student Representative, University of Washington	
	<i>Teaching Assistant</i>	
	<i>Hydrology & Env. Fluid Mechanics</i> , University of Washington	Spring 2021
	<i>Numerical Modeling of Hydrodynamics</i> , University of Washington	Spring 2020
	<i>Introduction to Fluid Mechanics</i> , University of Washington	Winter 2019
	<i>Climate Science Curriculum Development</i>	
	<i>Harmful Algae Blooms Course for Middle School Students</i> , University of Washington	Spring 2018
	<i>Mentor</i>	
	Cooperative Institute for Climate, Ocean, and Ecosystem Studies, Undergraduate Research Intern Mentor	Jun.-Aug. 2022
	Society of Women in Engineering Mentor University of Washington	2020 – 2021
	Oregon State University	2016 – 2017
	Leadership Academy Mentor, Oregon State University	2015 – 2016
PROFESSIONAL DEVELOPMENT WORKSHOPS	Mentoring Physical Oceanography Women to Increase Retention (MPOWIR), Pattullo Conference, Warrenton, VA	Sep. 2023
	FUNWAVE-TVD Workshop, Boston, MA	Jul. 2023
	Coastal Imaging Research Network Workshop, Duck, NC	May 2023
	Coastal Imaging Research Network Workshop, St. Petersburg, FL	Jun. 2018
PROFESSIONAL SERVICE	<i>Reviewer</i>	
	American Shore & Beach Preservation Association: Shore & Beach (1)	
	Journal of Atmospheric and Oceanic Technology (1)	
	Journal of Coastal Research (1)	
	Journal of Geophysical Research: Oceans (2)	
	Physics of Fluids (1)	
	<i>Representative</i>	
	Women in Coastal Geoscience and Engineering	2024 – Present
	Steering Committee: Western Coastal Collaboratorium	2021 – 2022
	Seattle Steering Committee: Society of Women in Marine Science	2019 – 2021
	Graduate Representative: Hydrology & Hydrodynamics DEI Committee	2020
	Graduate Student Steering Committee: Program on Climate Change	2018 – 2020
	<i>Convener</i>	
	American Geophysical Union 2022 Fall Meeting Session Chair Nearshore Processes	Dec. 2022
	ASLO 2022 Ocean Sciences Meeting Session Co-Chair Remote Sensing of Nearshore Processes & Coastal Morphology	Feb.–Mar. 2022
	Program on Climate Change: Spring Symposium	Spring 2020
OUTREACH & ENGAGEMENT	Article in <i>The Conversation US, Inc.</i> : Rip currents are dangerous for swimmers but also ecologically important – here’s how scientists are working to understand these ‘rivers of the sea’. by Nuss, E.S., Casper, A., Baker, C.M. , Moulton, M., Torres, W.	Jul. 2023
	Interview in Scientific American (327, 2, 20-21): Science in Images: See Delicate Rib Vortices Encircle Breaking Ocean Waves by Thomson, J.	Aug. 2022

	Diversity, Equity, and Inclusion Natural Hazards Workshop NHRI Workshop Leader	Jul. 2022
	UW Engage Program: Town Hall Research Talk	Apr. 2021
	Climate Science on Tap: Schooner Series	2018 – 2020
	Engineering Discovery Days: EFM Lab Group Coordinator	2018, 2019
	STEM Lego Robotics Mentor, Elementary STEM Outreach	2013 – 2017
	American Society of Civil Engineering: Mentor/Outreach Officer	2015 – 2016
MEMBER	Natural Hazards Engineering Research Infrastructure Graduate Student Council	2021 – 2023
	Unlearning Racism in GEosciences (URGE): Cascadia Pod	2021
	Civil and Environmental Engineering DEI Action Planning	2020 – 2021
	Society of Women in Marine Science	2019 – Present
	Society of Women Engineers	2014 – Present
	Program on Climate Change, University of Washington	2017 – 2023
SKILLS	<i>Numerical Models</i> Simulating WAVes till SHore (SWASH), Simulating WAVes Nearshore (SWAN), FUNWAVE-TVD	
	<i>Programming</i> MATLAB, Unix, Python	
	<i>Other Programs</i> Metashape Agisoft, AutoCAD, ArcGIS	
FIELD & LAB EXPERIENCE	<i>Masonboro Island Beach Evolution Assessment with Stereo Techniques,</i> North Carolina National Estuarine Research Reserve, Wilmington, NC Deployed two cameras to create elevation maps of the beach over a year.	Fall 2023
	<i>DURING Nearshore Event eXperiment (DUNEX),</i> ACE Field Research Facility, Duck, NC Remote sensing swashzone observations & drifter deployments during storms.	Fall 2021
	<i>Ocean Wave Dissipation: Breaking and Bubble Generation,</i> Gulf of Alaska, Research cruise measuring wave breaking in the open ocean with freely drifting buoys.	Dec. 2-23, 2019
	<i>Transient Rip Current Laboratory Experiments,</i> O. H. Hinsdale Wave Laboratory, Oregon State University, OR Directional Wave Basin testing using remote sensing & in situ sensors.	Apr. & Aug.-Sep. 2018
	<i>ONR Innershelf DRI,</i> Point Sal, CA, Ocean sampling cruises and remote sensing.	Oct. 4-12, 2017
	<i>Munitions Mobility Study,</i> Wallops Island, VA, Swash zone observations of unexploded ordnance.	Mar. 4-11, 2017
	<i>Tsunami Wave Impact on Cladding Structures,</i> O.H. Hinsdale Research Laboratory, Oregon State University, OR Design cladding structure for Large Wave Flume Experiment.	Mar. 2016
OTHER PROFESSIONAL EXPERIENCE	Graduate Student Advisory Board <i>Civil and Environmental Engineering, University of Washington,</i> Seattle, WA	Oct. 2021 – Dec. 2022
	Engineering Ambassador <i>College of Engineering, Oregon State University, Corvallis, OR</i>	Jun. 2015 – Jun. 2017

Engineering Design Services Intern
Bureau of Environmental Service, City of Portland, OR

Apr. 2016 – Sep. 2016

Water Dept. Engineering Intern
Black & Veatch, Portland, OR

Jun. 2015 – Sep. 2015