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Curriculum Vitae
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EDUCATION

Ph.D., Oceanography, November 1990
Massachusetts Institute of Technology and Woods Hole Oceanographic Institution
Joint Program in Oceanography and Oceanographic Engineering
Dissertation Advisor: Professor Glenn R. Flierl
Title: *Flow over Finite Isolated Topography*
M.A., Physics, March 1986, Harvard University, Graduate School of Arts and Sciences
B.S., Physics with Highest Honors, December 1983, University of California, Davis

PROFESSIONAL EXPERIENCE

Professor, School of Oceanography, University of Washington, September 2010 to present
Director, University of Washington, Program on Climate Change, September 2011 to August 2017
Affiliate Faculty, e-Science Institute, University of Washington, 2011 to present
Adjunct Professor, Physics, September 2010 to present
Adjunct Professor, Department of Atmospheric Sciences, University of Washington, September 2010 to present
Adjunct Associate Professor, Department of Atmospheric Sciences, University of Washington, September 2007 to 2010
Adjunct Associate Professor, Department of Physics, University of Washington, September 2009 to 2010
Associate Professor, School of Oceanography, University of Washington, September 2000 to 2010
Acting Director, Program on Climate Change, August 2007 to August 2008
Assistant Professor, School of Oceanography, University of Washington, September 1993 August, 2000.
Research Assistant Professor, School of Oceanography, University of Washington, June 1993 to August 1993
Acting-Research Assistant Professor, School of Oceanography, University of Washington, January 1993 to May 1993
Post-Doctoral Fellow, School of Oceanography, University of Washington, December 1990 to December 1992
Graduate Research Assistant, Department of Earth, Atmospheric and Planetary Sciences, Massachusetts Institute of Technology January 1986 to November 1990

Summer Fellow, Geophysical Fluid Dynamics Summer School, Woods Hole Oceanographic Institution, Summer 1989
Teaching Fellow, Department of Physics, Harvard University, September 1984 to December 1985
Summer Student Fellow, Department of Physical Oceanography, Woods Hole Oceanographic Institution, Summer 1985
Research and Development Electrical Engineer, Gyro-amplifier Division, Varian Associates, January to September 1984

HONORS AND AWARDS

Cooperative Institute for Climate, Ocean, & Ecosystem Studies, Senior Fellow, 2021-
Steinbeck Scholar invitation, Summer 2020, Woods Hole Oceanographic Institution (postponed)
Advanced Study Program Faculty Fellow, University Corporation for Atmospheric Research, April-May 2018
Walters Professor of Oceanography, Fall 2016-
UW Leadership Excellence Project, Fall 2016-Spring 2017
Fellow of the American Meteorological Society, February 2014.
Fellow in the Joint Department of Global Health and College of the Environment focus on Climate Change and Global Health: Adaptive solutions for Human Health and the Environment, June 2010-2014
Joint Institute for the study of the Atmosphere and Ocean, Senior Fellow, 2005-2020
1995 Editors' Citation for Excellence in Refereeing for JGR-Oceans
National Science Foundation Young Investigator Award, 1994
Office of Naval Research Young Investigator Program Award, 1994.
College of Oceanography and Fisheries Sciences Postdoctoral Fellowship, 1990, University of Washington
Harvard Danforth Learning Center Certificate of Distinction in Teaching, 1985, Harvard University

PUBLISHED PAPERS

1. Clayton, S., H. Palevsky, L. Thompson, and P. Quay. Synoptic mesoscale to basin scale variability in biological productivity and chlorophyll in the Kuroshio Extension region, accepted, *JGR Oceans.*
2. Harris, L., C. Garza, M. Hatch, J. Parrish, J. Posselt, J. Alvarez, E. Davidson, G. Eckert, K. Grimes, J. Garcia, R. Haacker, M.C. Horner-Devine, A. Johnson, J. Lemus, S. Menezes, A. Prakash, L. Thompson, P. Vitousek, M.P. Martin, K. Reyes (2021). The Equitable Exchange: A new framework for diversity and inclusion in the geosciences, *AGU Advances*, (2)2, https://doi.org/10.1029/2020AV000359
3. Abdalla, S. and 390 co-authors, Altimetry for the future: Building on 25 years of Progress, International Altimetry Team, *Advances in Space Research*, Volume 68, Issue 2, 15 July 2021, Pages 319-363
4. **Oldenberg, D.,** R. Wills, K. Armour, and L. Thompson, Mechanisms of low-frequency variability in North Atlantic Overturning*, J. Climate*, 2021, 32(12), 4733-4755.
5. Deppenmeier, A.-L., F. O. Bryan, W. Kessler, and L. Thompson. Modulation of Cross-isothermal velocity with ENSO in the tropical Pacific cold tongue, 2021, *J. Physical Oceanography, 51(5), 1559-1574* .

6. Barber, P. H., T. B. Hayes, T. L. Johnson, L Marquezz-Magana, 10,234 signatories, 2020, Systemic racism in higher education, Science, 369:6510, 1440-1441. DOI: 10.1126/science.abd7140
7. **Scannell, H.A**., G. C. Johnson, L. Thompson, J. M. Lyman, S. C. Riser, Subsurface Evolution and Persistence of Marine Heatwaves in the Northeast Pacific, 2020, *Geophysical Research Letters*, 47, https://doi.org/10.1029/2020GL090548
8. **Geiss, A.**, R. Marchand, and L. Thompson, The Influence of Sea Surface Temperature Reemergence on Marine Stratiform Cloud, 2020, *Geophysical Research Letters*, 47, e2020GL086957
9. Hirschi, J., B., Barnier, C. Boning, A. Biastoch, A. T. Baker, A. Coward, S. Danilove, S. Drifhout, K. Getzlaff, S. M. Griffies, H. Hasumi, H. Hewitt, D. Iiovino, T. Kwasaki, A. E. Kiss, Al Marzocchi, B. Moat, J-M. Molines, P. G. Myers, T. Penduff, M. Roberst, A.-M. Treguier, D. V. Sein, D. Sidorenko, J. Small, P. Spence, L. Thompson, W. Wieijer, X. Xu, The Atlantic Meridional Overturning Circulation in High-Resolution Models, 2020, *Journal of Geophysical Research: Oceans. 125,* e2019JC015522, https://doi.org/10.1029/2019JC015522
10. **Old, P.**, S. Hautala and L. Thompson, 2019, Differences in eastern North Pacific stratification and their potential impact on the depth of winter mixing in CMIP5 models, *Geophysical Research Letters,* 46(21):12136-45.
11. Todd, R. E., F. P. Chavez, S. Clayton, S. E. Cravatte, M. Goes, M. I. Graco, X. Lin, J. Sprintall, N. V. Zilberman, M. Archer, J. Arístegui, M. A. Balmaseda, J. M. Bane, M. O. Baringer, J. A. Barth, L. M. Beal, P. B., P.H.R. Calil, E. Campos, L. R Centurioni, M. P. Chidichimo, M. Cirano, M. F. Cronin, E. N. Curchitser, R. E. Davis, M. Dengler, B. DeYoung, S. Dong, R. Escribano, A. J. Fassbender, S. E. Fawcett, M. Feng, G. J. Goni, A. R. Gray, D. Gutiérrez, D. Hebert, R. Hummels, S-I Ito, M. Krug, F. Lacan, Lucas Laurindo, A. Lazar, C. M. Lee, M. Lengaigne, N. Levine, J. Middleton, I. Montes, M. Muglia, T. Nagai, H. I. Palevsky, J. B. Palter, H. E. Phillips, A. R. Piola, A. J Plueddemann, B. Qiu, R. R. Rodrigues, T. Rossby, M. Roughan, D. L. Rudnick, Ryan R. Rykaczewski, M. Seraceno, H. Seim, A. Sen Gupta, L. Shannon, B. M. Sloyan, Adrienne J Sutton, L. Thompson, A. K. van der Plas, D. Volkov, J. Wilkin, D. Zhang, and L. Zhang (2019) Global perspectives on Observing Ocean Boundary Current, *Front. Mar. Sci*., 6, p.423.
12. **Leung, S**., L. Thompson, M. McPhaden, and K. A. S. Mislan, 2019: ENSO drives near-surface O2 variability and vertical habitat space in the tropical Pacific, 14(6), *Environmental Research Letters. June*
13. Wills, R.C.J., D.S. Battisti, C. Proistosescu, L. Thompson, D.L. Hartmann, and K.C. Armour, 2019: Ocean circulation signatures of North Pacific decadal variability, *Geophysical Research Letters*, https://doi.org/10.1029/2018gl080716.

14. Meehl, G. A., J. M. Arblaster, C. T. Y. Chung, M. H. Holland, A. DuVivier, L. Thompson, D. Yang, and C. M. Bitz, 2019, Sustained ocean changes contributed to sudden Antarctic Sea ice retreat in late 2016, *Nature Communications 10.*
15. Bertram, M, L. Thompson, C. Bretherton, J. W. Murray, and C. Bitz; 2019 Preparing Graduate Students for 21st Century Climate Conversations, *Eos, 100,* https://doi.org/10.1029/2019EO115265. Published on 07 February 2019.
16. **Jimenez-Urias**, M. A., and L. Thompson, 2018, Idealized Study on the Impacts of Bottom Topography on the Seasonality of the Stability of the Iceland-Færæ Front. *Journal of Physical Oceanography,* 48, 2089-3008.
17. **Oldenburg**, D., K. C. Armour, L. Thompson, and C. M. Bitz, 2018. Distinct mechanisms of ocean heat transport into the Arctic under internal variability and climate change, *Geophysical Research Letters*, 45.
18. Fussell, E., S. Curran, M. Dunbar, M. Babb and L. Thompson, Weather-related hazards and population change in the U.S., 1980-2010. 2017, *Annals of the American Academy of Political and Social Science, 669, 146-167*.
19. Spencer, B, J. Lawler, C. Lowe, L Thompson, T. Hinckley, S-H Kim, S Bolton, S. Meschke, J. D. Olden, J. Voss, 2016, Case Studies in co-benefits approaches to climate change mitigation and adaptation. *Journal of Environmental Planning and Management*. 60 (4)
20. Kelly, K. A., and L. Thompson, 2016, An unexpected ocean model fix, News and Views, 535, 497-498, *Nature Geoscience* http://rdcu.be/jt65
21. Kelly, K. A., K. Drushka, L. Thompson, D. Le Bars, and E. L. McDonagh, 2016. Impact of slowdown of Atlantic overturning circulation on heat and freshwater transports, Geophys. Res. Lett., 43, 7625- 7631.
22. **Shao**, A., S. Mecking, L. Thompson and R. Sonnerup, 2016. Evaluating the use of 1-D transit time distributions to infer the mean state and variability of oceanic ventilation, J. Geophys. Res. Oceans, 121, 6650–6670.
23. **Zhang, J.,** K. A. Kelly, and L. Thompson, 2016, The Role of Heating, Winds and Topography on Sea Level Changes in the North Atlantic, *Journal of Geophysical Research-Oceans, 212, 2887-2900.*
24. **Shao, A. E**., Gille, S. T., Mecking, S., & Thompson, L. (2015). Properties of the Subantarctic Front and Polar Front from the skewness of sea level anomaly. *Journal of Geophysical Research-Oceans*, *120*(7), 5179–5193. http://doi.org/10.1002/2015JC010723
25. Kappel, E. S., and L. Thompson, 2015, Invited Scientific Papers and Speakers and Fellow Awardees: Little Progress for Women Oceanographers in the Last Decade 2014, *Oceanography* 27(4) supplement: 24–28, http://dx.doi.org/10.5670/oceanog.2014.110
26. **Umbert, M.,** S. Guimbard, G. Lagerloef, L. Thompson, M. Portabella, J. Ballabrera-Poy, and A. Turiel (2015), Detecting the surface salinity signature of Gulf Stream cold-core rings in Aquarius synergistic products, J. Geophys. Res. Oceans, 120, 859–874, doi:10.1002/2014JC010466.
27. **Zhang, Y.,** L. Jaeglé, L. A. Thompson, and D. G. Streets (2015), Six centuries of changing oceanic mercury, Global Biogeochem. Cycles, 28, 1251-1261,doi:10.1002/2014GB004939. Cover figure of January 2015 issues of GBC.
28. **Zhang, Y**., L. Jaeglé, and L. A. Thompson (2014), Natural biogeochemical cycle of

mercury in a global three-dimensional ocean tracer model, Global Biogeochem. Cycles, 28, 553–570, doi:10.1002/2014GB004814. Highlighted in EOS. https://eos.org/research-spotlights/humans-greatly-increase-mercury-levels-in-the-ocean, Palus, S. (2015), Humans greatly increase mercury levels in the ocean, *Eos, 96,* doi:10.1029/2015EO028539. Published on 22 April 2015.

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33. **Holmes, R. H.,** L. Thomas, L. Thompson, and D. Darr, 2014 Potential Vorticity Dynamics of Tropical Instability Vortices, Journal of Physical Oceanography, 44, 995-1011.
34. **Shao, A. E**., S. Mecking, L. Thompson, R. E. Sonnerup, 2013, Mixed layer saturations of CFC-11, CFC-12 and SF6 in a global isopycnal model, *J. Geophys. Res. Oceans*, 118, doi:10.1002/jgrc.20370.
35. **Booth, J.,** L. Thompson, J. Patoux, K. A. Kelly, 2012, Sensitivity of Midlatitude Storm Intensification to Perturbations in the Sea Surface Temperature Near the Gulf Stream Using the NCAR WRF Model, *Mon. Weather Rev*., **140**, 1241-1256.
36. **Trossman,** D. S., L. Thompson, S. Mecking, M. J. Warner, 2012: On the Formation, Ventilation, and Erosion of Mode Waters in the North Atlantic and Southern Oceans. *Journal of Geophysical Research-Oceans*, **117**, C09026, doi:10.1029/2012JC008090.
37. **Armour K.C.**, CM Bitz, L. Thompson and E.C. Hunke, 2011, Controls on Arctic sea ice from first-year and multi-year ice survivability, to appear in *Journal of Climate*, **24**, 2378–2390. doi: 10.1175/2010JCLI3823.1
38. **Trossman, D. S**., L. Thompson, and S. Hautala, 2011, Application of thin-plate splines in two-dimension to oceanographic tracer data, *J. Atmos. Ocean. Tech.*, **28**(11), 1522-1538.
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42. **Booth, J. F**., L. Thompson, J. Patoux, and K. A. Kelly, 2010. The Signature of the Midlatitude Tropospheric Stormtracks in the Surface Winds, *J. Climate*, **23**, 1160-1174. Highlighted in Nature Geosciences, *Nature Geoscience* 3, 4 (2010) doi:10.1038/ngeo742

43. Thompson, L. and Y-O Kwon, 2010 An Enhancement of a Coupled Mode of Variability in CCSM3 in the North Pacific Owing to Ocean Model Biases, *J. Climate,* **23**, 6221–6233.
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45. Cronin, M. F., N. Bond, J. Booth, H. Ichikawa, T. M. Joyce, K. Kelly, M. Kubota, B. Qiu, C. Reason, M. Rouault, C. Sabine, T. Saino, J. Small, T. Suga, L. D. Talley, L. Thompson, R. A. Weller, 2010, "Monitoring ocean-atmosphere interactions in western boundary current extensions", in Proceedings of the "OceanObs'09: Sustained Ocean Observations and Information for Society" Conference (Vol. 2), Venice, Italy, 21-25 September 2009, Hall, J., Harrison D.E. and Stammer, D., Eds, ESA Publication WPP-306.
46. **Trossman, D.**, L. Thompson, K. A. Kelly, and Y. O. Kwon, 2009, Estimates of North Atlantic Ventilation and Mode Water Formation for Winter 2002-2006. *J. Phys. Oceanogr*. 39, 2600-2617.
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49. **Jiang, C,** L. Thompson and K. A. Kelly, 2008, Equatorial Influence of QuikSCAT winds in an isopycnal ocean model compared to NCEP2 winds, *Ocean Modeling,* **24***,* 65-71.
50. Thompson, L, and **J. T. Dawe**, 2007, Propagation of wind and buoyancy forced density anomalies in the North Pacific: dependence on ocean model resolution. *Ocean Modeling*. **16**, 277-284.
51. **Dawe, J. T**. and L. Thompson, 2007, PDO-related heat and temperature budget changes in a model of the North Pacific. *J. Climate*, 20, 2092-2108.
52. Kelly, K. A., L. Thompson, W. Cheng, and E. J. Metzger, 2007, Evaluation of HYCOM in the Kuroshio Extension region using new metrics, *J. Geophys. Res*., 112, C01004, doi:10.1029/2006JC003614.
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56. Deutsch, C. ; Emerson, S,; Thompson, L., 2005, Fingerprints of climate change in North Pacific oxygen *Geophys. Res. Let*., Vol. 32, No. 16, L16604 doi:10.1029/2005GL023190.
57. **Dawe, J.** T. and L. Thompson, 2005, Viscosity-dependent internal variability in a model of the North Pacific, Journal of Physical Oceanography, 35, 747-756.

58. Thompson, L, and **C. Ladd,** 2004. The Response of the North Pacific Ocean to Decadal Variability in Atmospheric Forcing: Wind Versus Buoyancy Forcing, **34**, *J. Phys. Oceanogr*. 1373-1389.
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65. **Ladd, C.** and L. Thompson. 2000. Formation mechanisms for North Pacific Central and Eastern Subtropical mode waters. *J. of Physical Oceanography* **30**, 868-887.
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71. **Boss, E.** and L. Thompson, 1999. Mean flow Evolution of a Baroclinically Unstable Potential Vorticity Front, *Journal of Physical Oceanography,* **29**, 273-287.
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73. **Boss, E.,** N. Paldor and L. Thompson, 1996. Stability of a potential vorticity front: from quasi-geostrophy to shallow-water. *Journal of Fluid Mechanics,* **315**, 65-84.
74. Thompson, L. 1995. The effect of continental rises on the wind-driven ocean. *Journal of Physical Oceanography*, **25**, 1296-1316.
75. **Boss, E.** and L. Thompson. 1995. Energetics of nonlinear geostrophic adjustment. *Journal of Physical Oceanography*, **25**, 1521-1529.
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77. Thompson, L. 1993. Two-layer quasi-geostrophic flow over finite isolated topography. *Journal of Physical Oceanography*, **23**, 1297-1314.

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80. Cessi, P. and L. Thompson. 1990. Geometrical control of the inertial recirculation. *Journal of Physical Oceanography*, **20**, 1867-1875.
81. Thompson, L. and W.R. Young. 1989. An upper bound on the size of sub-mesoscale coherent vortices. *Journal of Physical Oceanography*, **19**, 233-237.

SUBMITTED PAPERS

Bishop, S. P., R. J. Small, F. O. Bryan, R. A Tomas, L. Thompson, Corrigendum to "Scale dependence of midlatitude air-sea interaction", submitted to *J. Climate*.

Ragen, S., K.C. Armour, L. Thompson, A. Shao and D. Darr, The role of ocean basin geometry in Atlantic Meridional Overturning Circulation, under review *J. Physical Oceanography*

Guo, Y., S. Zhang, L. Wu, P. Chang, W. Cai, J. Zscheischler, L. R. Leung, J. Small, G. Danabasoglu, L. Thompson, H. Gao, Persistent threat to coastal ecosystems from marine heat waves despite adaptation, submitted to *Nature*.

Oldenburg, D., R. Wills, K. C. Armour and L. Thompson, AMOC and water mass transformation in low- and high-resolution coupled and reanalysis-forced ocean model simulations. Submitted to *J. Geophys. Res.*

PAPERS IN PREPARATION

Amrhein, D., and L. Thompson, Online methods for accelerating and extrapolating tracer equilibration in numerical ocean models, to be submitted to *Journal of Advances in Modeling Earth Systems (JAMES)*

Scannell, H., L. Thompson, D. Whitt, and D. J. Gagne, Tracking the Spatiotemporal Evolution of Marine Heatwaves Globally, to be submitted to *Journal of Geophysical Research: Oceans.*

Larindo, L.C., R. J. Small, L. Thompson, L Siquera, F. O. Bryan, P. Chang, G. Danabasoglu, I. V. Kamenkovich, B. P. Kirtman, H. Wang, and S. Zhang, Role of ocean and atmosphere variability in scale-dependent thermodynamic air-sea interactions. To be submitted to *JGR Oceans*.

Jimenez-Urias, M. A., and L. Thompson, On the Asymmetry of Rotating Stratified Throughflows Across Finite Amplitude Topography. Part I: Injection of Boundary Layer PV, to be submitted to *J. Fluid Dynamics*

Deppenmeier, A-L., F. O. Bryan, W. S. Kessler, and L. Thompson, Seasonal and sub-seasonal variability of diabatic upwelling the tropical Pacific cold tongue. To be submitted to *J. Climate.*

Cronin, M.F., D. Zhang, J. Reeves Eyre, S. Wills and L. Thompson, Diurnal Cycle of Sea Surface Temperature in Frontal Regions, to be submitted to *J. Climate.*

BOOK CHAPTERS

Flowers, N., Thompson, L., and Po-Chedley, 2020, ENSO (El Nino-Southern Oscillation) Investigation, Climate Science for the Classroom, Editors: M. Bertram and S. Biyani, University of Washington Press, https://uw.pressbooks.pub/climate/chapter/enso-

investigation/

Kelly, K. A, J. K. Willis, G. Reverdin, S. Dong, and L. Thompson, 2017, Monitoring and interpreting mid-latitude oceans by satellite altimetry, Chapter 6, Satellite Altimetry Over Oceans and Land Surfaces. Editors: Stammer, D., and A. Cazenave, *CRC* Taylor and Francis Group, ISBN 9781498743457

Lawler, J. J., B. Spencer, J. D. Olden, S.-H. Kim, C. Lowe, S. Bolton, B. M. Beamon, L. Thompson, and J. G. Voss. 2013, Mitigation and Adaptation Strategies, Pages 315-335. R. Pielke, Sr., K. Suding, and T. Seastedt (eds.). *Climate Vulnerability: Understanding and Addressing Threats to Essential Resources, Volume 5, Ecosystem Function,* Elsevier, Inc., Academic Press. ISBN 9780123847034

OTHER PUBLICATIONS

Thompson, L. Co-Editor for special issue on Women in Oceanography: A Decade later in *Oceanography 27(4)*, 2015. With Ellen Kappel, Susan Lozier, Sonya Legg, Sarah Clem, Amelia Shevenell, Kristin Buck, Peggy Delaney, and Robin Bell http://www.tos.org/oceanography/archive/27-4_supplement.html

REPORTS

Pendergrass, A., Zelikova, J., Arnott, J., H. Bain, R. Barnes, J. Baron, K. Dutt, M. Gay-Antaki, R. Haacker, A. J. Laure, A. Morris, D. Morrison, A.-M. Nunez, , H. Steltzer., L. Thompson, 2019. *Inclusive scientific meetings: Where to start.* https://500womenscientists.org/inclusive-scientific-meetings https://www.nature.com/articles/d41586-019-01022-y

Thompson, L. and T. Penduff, 2018, Science (Part II): Large Scale Ocean Circulation Variability and Change in *Report of the 2017 Ocean Surface Topography Science Team (OSTST) Meeting*, Edited by J. Willis, page 75, https://www.aviso.altimetry.fr/en/user-corner/science-teams/ostst-swt-science-team/ostst-2017-miami.html

Subramanian, A., A. Giannini, M. Holland, S. Legg, A. Mahadevan, J. Teixeira, C. Ummenhofer, D. Perovich, J. Small, and L. Thompson, 2016, Translating Process Understanding to Improve Climate Models, US Climate and Ocean Variability and Change Program (CLIVAR) White Paper, 52 pp.

Danabasoglu, G., R. Curry, A. Karspeck, C. Meinen, R. Msadek, M. Patterson, R. Perez, A. Schmittner, L. Thompson, and S. Yeager, 2015: 2014 US Atlantic Meridional Overturing Circulation Science Team Annual Report on Progress and Priorities. Report 2015-1, US CLIVAR Program Project Office, 165 pp.

Danabasoglu, G., R. Curry, P. Heimbach, Y. Kushnir, C. Meinen, R. Msadek, M. Patterson, L. Thompson, S. Yeager, and R. Zhang, 2014: 2013 US Atlantic Meridional Overturning Circulation Science Team Annual Report on Progress and Priorities. Report 2014-4, US Climate and Ocean Variability and Change Program Project Office, 162 pp.

Thompson, L., J. McClean, G. Jacobs, W. Large and S. Gille, 2007, Ocean Model Metrics: What we currently use and how we can advance these methodologies, Report on a workshop held at IPRC, Honolulu, Hawaii, 25 February 2006, 8 pp.

Lozier, M. S., A. Adcroft, L. Beal, A. Bower, D. Byrne, A Capotondi, V. Coles, K. Lavender, C. M. Lee, J. MacKinnon, K. Shearman, L. St. Laurent, L. Thompson, and D. Witter. 2006. *MPOWIR: Mentoring physical oceanography to increase retention. Report of a workshop held October 9-12, 2005*. 32 pp. (Online available at: http://www.mpowir.org.)

Bryan, F., R. Cohen, I. Fung, T. Gambosi, J. Kinter, B. Smyth, L Thompson, and J. Tromp (2005). *"Establishing a Petascale Collaboratory for the Geosciences"*. A report to the Geosciences Community, 80 pages.

Kessler, W. S., J. N. Moum, M. F. Cronin, P. S. Schopt, D. L. Rudnick, and L. Thompson, 2004. *Pacific Upwelling and Mixing Physics*. A report to US Climate and Ocean Variability and Change Program.

Davis, R. E., W.S Kessler, R. Lukas, R.A. Weller, D.W. Behringer, D.R. Cayan, D.B. Chelton, C. Eriksen, S. Esbensen, R.A. Fine, I. Fukumori, G. Kiladis, M.C. Gregg, E. Harrison, G.C. Johnson, T. Lee, N.J. Mantua, J.P. McCreary, M.J. McPhaden, J.C. McWilliams, A.J. Miller, H. Mitsudera, P.P. Niiler, B. Qiu, D. Raymond, D. Roemmich, D.L. Rudnick, N. Schneider, P.S. Schopf, D. Stammer, L. Thompson, W.B. White, 2000, Implementing the Pacific Basin Extended Climate Study (PBECS), US Climate and Ocean Variability and Change Program.

Barth, J, K Brink, P MacCready, A Maxworth, J. McWilliams, S. Meacham, D. Roemmich, D Rudnick, and L. Thompson, 1999, Physical Oceanography, Past and Future, Interfaces with other Disciplines, in *The Future of Physical Oceanography,* compiled by T. Royer and W. Young, 13-14.

Thompson, L. 1991. Flow over finite isolated topography. Ph.D. Thesis. MIT/WHOI, WHOI-91-05.

Thompson, L. 1989. Can Potential Vorticity Homogenize in Closed Gyres? Proceedings, Geophysical Fluid Dynamics Summer Program, Woods Hole Oceanographic Institution Technical Report WHOI-89-54, 448-469.

Thompson, L. and E. Brady. 1989. The pilot moorings of the Gibraltar Experiment: flow over the Camarinal Sill. In *Seminario Sobre la Oceanografia Fisca Estrecho de Gibraltar*, edited by J.L. Almazan, H. Bryden, T. Kinder, and G. Parrilla, SECEG, Spain, 151-165.

Stone, D. S., R. E. Bier, M. Caplan, H. E. Huey, D. R. Pirkle, J. D. Robinson, and L. Thompson, 1984, Feasibility Study for a 34 GHz (Ka Band) Gyroamplifier, Prepared for the California Institute of Technology Jet Propulsion Laboratory, 117 pgs.

BOOK REVIEWS

Ocean Circulation (second edition), Open University. Bulletin of the American Meteorological Society, **84** (2).

Physical Oceanography and Climate, First Edition, by Kris Karnaskus, Cambridge University Press, ISBN 978–1–108–42386–1 (Hardback), ISBN 978–1–108–52959–4, 2020

ESSAYS/POPULAR SCIENCE

Thompson, L. 2017, Things I learned by leading the PCC, https://pcc.uw.edu/blog/2017/10/05/things-i-learned-from-leading-the-pcc/

Thompson, L, 2016, Blog post on the PCC Blog, On being a climate scientist: https://pcc.uw.edu/blog/2016/11/17/on-being-a-climate-scientist/ And subsequent interview on KUOW http://kuow.org/post/climate-scientist-recommendation-her-own-kind-be-little-bit-braver

Thompson, L, 2009. Reviewing Proposals and Papers, a guest post on the MPOWIR Blog, August 12, 2009.http://mpowir.typepad.com/mpowir_mentoring_physical/2009/08/guest-blog-reviewing-proposals-and-papers.html

Thompson, L., 2008, Oceans and Climate Change, two page special topics box to an *Introduction to the World's Oceans* by Sverdrup and Armbrust, for the 6th edition.

Thompson, L., 2008. Do we have to worry about a shut down of the Gulf Stream? Or an update on the Atlantic Meridional Overturning Circulation and the role of the oceans in climate change. February 2008, Program on Climate Change Web Site.

Thompson, L., 2008. Can Changes in Ocean Circulation Modify the Climate? or Questions and Conclusions of the 2008 PCC Summer Institute**,** Program on Climate Change Web site**.**

SUPPORT: **CURRENT**

NASA Ocean Surface Topography Science Team. Mining seas surface height to improve understanding and predictability of mid-latitude air-sea interaction (With Kyla Drushka, UW/APL), $861,691, 4/1/2017-03/31/2022, NNX17AH56G

NASA Physical Oceanography. Sensitivities and Predictability of the North Atlantic Subpolar Gyre to Atmospheric variability using ECCO, Its adjoint, and observations, (with Daniel Amrhein, National Center for Atmospheric Research), $486,242.00, 4/01/2020-12/31/2023, 80NSSC20K0787

NSF Physical Oceanography: Collaborative Proposal: Midlatitude Marine Heatwaves in a Changing Climate: Variability, Predictability and Projections, (with Dan Whitt, National Center for Atmospheric Research, and Elizabeth Maroon, University of Wisconsin), $480,942, 9/1/2020-8/31/2023

NSF IUSE Geopaths-IN: A Bridge to Geoscience: An Issue-Relevant Learning Community for College Transfer Students, Kerry Naisch (SAFS), Jose Guzman (Marine Biology), Mikelle Newar, $314,148, 8/15/2021-8/14/2024

SUPPORT: **PENDING**

NSF Physical Oceanography: A Water Mass Transformation Analysis of Atlantic Meridional Overturning Circulation Decline, (with Kyle Armour, UW), $558,407, 4/1/2022-3/31/2025

NASA Ocean Surface Salinity Science Team. Scale-dependent analysis of the drivers of the upper-ocean salinity variability (With Justin Small and Lucas Laurindo, NCAR,), $126,322, 3/22/2022-03/21/2026 NNH21ZDA001N-OSST

NOAA-Ocean Atmosphere Research. Developing a framework for a field campaign in the cold tongue: Analysis of Pacific Upwelling and Mixing Physics from models and observations. (with Anna Deppenmeier, NCAR; Deepak Cherian, NCAR; Frank Bryan, NCAR, Williams Kessler, NOAA-PMEL; Daniel Whitt, NASA-ARC). $67,222 9/1/2022-8/31/2025

SUPPORT: PAST

NOAA-Climate Variability and Predictability. A pre-field modeling study of scales, variability and processes in the near surface eastern equatorial Pacific ocean in support of TPOS. (With Frank Bryan, National Center for Atmospheric Research, and Williams Kessler NOAA/PMEL) $547,136, 9/1/2018 –8/31/2020

Leanardo DiCaprio Foundation: AI for Earth. Following the heat towards large marine ecosystems: AI tools for tracking dangerous marine heatwaves, $99,889, 1/1/2020-12/31/2020.

NASA Ocean Surface Sciences Topography Team: Sources of Variability of the Meridional Property Transports in the Atlantic Ocean (with Kathryn Kelly), $1,005,005. 1-January-2013 to 31 December-2017.

NASA Physical Oceanography. Satellite data for evaluation of air-sea interaction in climate models with focus on the Kuroshio, Gulf Stream and Antarctic Circumpolar Current, $597,358.00, 10-January-2013 to 9-January-2016.

UW Strategic International Partnership Travel Award. Climate, Health & Population: Emerging Collaborations in Bangladesh. Judd Walson (PI), Kris Ebi, Judith Wasserheit , Patrician Pavlinac, Rachel Katzenellenbogen (Global health), $31,710, February 1, 2015-April 1, 2015.

Bill and Melinda Gates Foundation: Grand Challenges: One Health. One Metric for One Health: A new Approach to Measure and Evaluate the Nexus of Animal and Human Health, with Ali Mokdad (Institute for Health Metrics and Evaluation), Judith Wasserheit (Global Health), Judd Walson (Global Health), Guy Palmer (WSU), Rachel Nugent (Global Health) and others. $100,000, 1-March-2014 to 28-February,2015

NASA: Earth Observations and the Learning of Climate Science, Math and Technology in the High Schools: Partnership of NASA Science with High School Teachers and Learners. (co-PI Thomas Ackerman, Atmospheric Sciences) $452,070. 31-September-2010-30-August-31-2014.

NSF: Ocean circulation and climate impacts of proglacial lake outbursts into the northeastern Pacific Ocean, $689, 539, 1 Jul 2007 to 30 Sept 2013 with Susan Hautala and Paul Johnson (UW Oceanography).

NOAA: CFC Mixed Layer Boundary Conditions in the North Pacific and Implications for Interpretation of Repeat Tracer Age Data and Carbon Cycling Estimates, NOAA, $69,450, 1-May-2007 to 30 June 2011, with Sabine Mecking (APL) and Mark Warner (Oceanography).

NSF: Ice-ocean interactions on the Okhotsk Sea Shelf, $442,188, 1-September-2005-30-august-2011. With Dr. Cecilia Bitz (Atmospheric Sciences)

NASA: (Ocean Vector Wind Science Team) The Impact of Ocean Current Systems on the Atmosphere: a study using Vector Winds and atmosphere-ocean modeling (PI: K. Kelly), $1,162,492, 1-January-2006-31-December-2010, with Dr. Kathie Kelly, APL

NSF: A Modeling and Data Study of Dissolved Oxygen and pCFC Age Variability in the Thermocline of the Southern Ocean, $499,428, 1-September-2005-30-August-2010. with Mark Warner.

NOAA Frontal dynamics and lateral mixing at the equator with application to the EPIC/IOP, $85,000, with Leif Thomas, WHOI, 1-April-2009-31-March-2010.

NASA (Ocean Surface Topography Science Team) Altimetric Derived Estimates of the North Atlantic Upper Ocean Heat Budget: Consequences for Climate Prediction and Ocean Modeling, $700,000, 11-November-2004-31-July-2008, with Dr. Kathie Kelly, APL

DOE Eulerian and Lagrangian Studies of Turbulent Transport in the Global Ocean, funded through Innovative and Novel Computational Impact on Theory and Experiment (INCITE) program. January 2006-January 2007. With Synte Peacock (University of Chicago), Frank Bryan (National Center for Atmospheric Research) and others. For computer time only at the National Energy Research Scientific Computing center for a century long 1/10 degree simulation. No monetary support.

ONR, Development of a strategy for supporting careers of women in Physical Oceanography, 15-May-2004-14-May-2007 $18,286, With Dr. Susan Lozier, Duke University

NSF Exploratory Research on the causes of salinity errors in the CCSM coupled climate model with focus on the subpolar North Pacific. $99,694. 1-December 2004-30 November 2006.

NASA (Ocean Vector Wind Science Team) Impact of Improved Wind Fields on Ocean Circulation, Upper Ocean Heat Budget, and Atmosphere-Ocean Fluxes in the North Pacific (co-PI with K. Kelly) 1-January-2000 – 12/31/05, $794,597.

ONR: Evaluation of the NRL High-Resolution Pacific Ocean Circulation Model, 11/1/03 – 10/31/05, $281,618, with co-PI K. Kelly.

NSF: Mechanisms Controlling the Biological Pump and CO_2 Uptake Rates in the North Pacific (with co-PIs S. Emerson and P. Quay), 4/15/01 – 3/31/04 , $450,000

NSF: Interaction of Dynamics and Thermodynamics along the Boundaries of the North Pacific Subtropical Gyre (with co-PI K. Kelly), 3/1/99 – 2/29/04 $415,815

ONR: Scattering of Baroclinic Long Waves by Complex Coastal Topography: an Application of an Isopycnal Model, $75,000, 1 October 1999 to 30 September 2001 (with Dr. Barbara Hickey)

NASA: Transport Fluctuations in the North Pacific Subtropical Gyre, January 1, 1997-December 31, 1999, $122,800 (with Dr. Kathryn Kelly, Applied Physics Laboratory, University of Washington).

ONR: Graduate student support for Stratified and Coastal Trapped Waves and Mean Flows, AASERT program, June 1, 1996-May 31, 1999, $109,524

ONR: Stratified Coastal Trapped Waves and Mean Flows, $63,514. 1 October 1995 to 30 September 1997 (with Dr. Dan Ohlsen, University of Colorado).

NSF, Young Investigator Award, $125,000, 1 September 1994 to 31 August 1999.

ONR: (Young Investigator Program): Frontal Evolution in Layered Models: Mixed Layer Dynamics and the Stability of Forced Fronts, $225,000, 1 June 1994 to 31 May 1997.

NSF: Models of Eddy and Wave Forcing of Deep Western Boundary Currents and Abyssal Recirculations, $140,000, 1 June 1993 to 30 November 1996.

PROFESSIONAL ACTIVITIES

Member, American Meteorological Society

Member, American Geophysical Union

Member, The Oceanography Society

Referee for: *Journal of Physical Oceanography, Dynamics of Atmospheres and Oceans, Geophysical and Astrophysical Fluid Dynamics, Journal of Marine Research, Journal of Geophysical Research: Oceans, Deep Sea Research, Physics of Fluids, Journal of Oceanography, Nature, Nature Communications, Progress in Oceanography, Journal of Computational Physics, Earth and Planetary Sciences Letters, Ocean Modeling, Working Group I, IPCC fourth assessment report, Quaternary Research Journal, Earth, Planets and Space, Quarterly Journal of the Royal Meteorological Society, Journal of Climate, Geophysical Research Letters, Geochemistry, Geophysics, Geosystems G3, Atmosphere-Ocean, Nonlinear Processes in Geophysics, Proceedings of the National Academy of Sciences, Science, Science Communication, Bulletin of the American Meteorological Society, PLOS One, Science Advances, Remote Sensing*

Book Reviews: Wiley Publishing, Rutgers University Press, Bulletin of the American Meteorological Society

Proposal Review Panel member, NSF (6 times), NASA (4 times), NOAA (1 time)
Proposal Reviews: Canadian Research Chair, DOE INCITE, National Oceanic and Atmospheric Administration, National Science Foundation, International Science Foundation, National Environmental Research Council (UK), Royalty Research Fund (UW), New York Sea Grant, Natural Sciences and Engineering Council of Canada, Chilean National Science and Technology Commission (CONICYT-Chile).
Script for Science on a Sphere presentation at the Polar Science Center on the role of the Oceans in climate, July 2014
Curriculum Review: Climate Literacy and Energy Awareness Network (CLEAN, cleanet.org), Greater Seattle Climate Dialog on Climate Briefing Document, Fall 2007
Climate Curriculum for *Facing the Future, www.facingthefuture.org,* Spring 2007.

TEACHING
OCEAN 569, Thompson Group meeting, Spring 2020-Spring 2021
OCEAN 569, Physical Oceanography Seminar, Spring 2020
OCEAN/ATM S/ESS 475 and 586 Climate Science Research Seminar and undergraduate climate minor capstone course, Fall 2011 (Water and Climate), 2012 (Climate variability and adaptation), 2013 (Climate and Marine Ecosystems), Fall 2014 (On the road to COP 20), Fall 2015 (Food and Climate), Fall (2016), Winter 2019 (Sea Level Rise), Winter 2020 (Arctic Change), Winter 2021 (Health and Climate Change)
OCEAN 320 Coastal Oceanography, Winter 2019, Winter 2020, Winter 2021
OCEAN 443/444/445 2016-2017, Oceanography Capstone
OCE 423 Ocean Circulation and Climate (Spring 2009, Spring 2010, Spring 2012, Spring 2013, Spring 2014, Spring 2015, Spring 2016)
OCE 558/ATM S559 Climate Modeling (Spring 2008, 2010, 2012)
OCE 500 Current Problems in Oceanography (organized Winter 2010)
OCE 600 Independent Study: Summer 2007 (Allison Rogers, GFDII), Winter 2008 (Christopher Wells, Communication of Climate Change), Summer 2009 (Sarah Purkey, GFDII)
PHY 402, Physics Independent study, Spring 2009, Summer 2009 (Elizabeth McHugh)
OCE 513 Geophysical Fluid Dynamics II (Spring, 1998, 1999,2000, 2001,2002 2006)
OCE 587 Climate Dynamics (Fall, 2002, 2006, 2007, 2008)
OCE 420 Physical Processes in the Ocean (Winter 2003, 2005, 2007)
OCE 210 Ocean Circulation (Winter 2006)
OCE 586 Climate Seminar: The Thermohaline Circulation (Spring 2005)
OCE 481 General physical oceanography (Spring 2002)
OCE 402 General physical oceanography (Winter, 1996, 1998, 2000)
OCE/ATM 509 Geophysical Fluid Dynamics I (Winter 1995, Winter 1999)
OCE 516 General Circulation: Theories (Fall 1994, Fall 1995, Fall 1996, fall 2000)
OCE 519A Graduate student seminar in physical oceanography (Spring, 1996)
OCE 548B Geophysical Fluid Dynamics III (Spring 1994)
OCE 485C Topics in Physical Oceanography (Spring 1994)
Teaching fellow Harvard University, Department of Physics, Laboratory and Recitation Instructor. Fall 1984, fall 1985: physics for non-science majors. Spring 1985: Physics for physics majors, electromagnetic theory

GUEST LECTURES (University of Washington):

OCEAN/ATM S/ESS 593 Communicating Climate Seminar, Discussion. Going Public, Sharing Research Beyond the Academy, April 29, 2017
OCEAN 558/ATM S 559 Climate Modeling, Spring 2015, 2017, Ocean Climate Modeling
OCEAN 330: Ocean Biogeochemical Cycles, April 10,11 The Upper Ocean, May 8,9 2016, The thermocline
ATMO S 220, Exploring Atmospheric Sciences, The Oceans and Climate, February 23, 2015.
LARCH 503 Community design studio, winter, 2011, 2012, 2013, 2014.
Topic: climate change in Peru and El Nino,
Spring 2015, Climate Change: consequences for Seattle and San Francisco.
G H 402/502 Contemporary Issues Global Health, Topic: Climate Change and Global Health, March 5, 2014
ENVH 594: Current topics in Environmental Health. Winter 2013:
Topic: Climate Change and Extreme events.
ANTH 469: Climate Change and Global Health in Southeast Asia Winter 2013
Topic: Climate Change, and Climate Change Impacts in Southeast Asia
OCEAN/ATM S/ESS 593 Communicating Climate Seminar, Winter 2012 Reaching out to high school teachers through UW in the High School
ANTH 469 Global Health and Climate Change, spring 2011 Topic: Climate change and climate change policy
BIOL 497 The Ecology of Climate Change, spring 2010 Topic: Climate modeling the biosphere
OCE 100 Explore Oceanography, Fall 2009 Topic: The oceans and climate

GRADUATE ADVISING: CURRENT (3)
Advisor: Jacob Cohen, September 2019-
Advisor: Noah Rosenberg, June 2020-
Advisor: Cassia Cai, will arrive September 2021

GRADUATE ADVISING: PAST (12 completed PhD, 4 completed M.S.)
Past Ph.D. Students
Hillary Scanell, PhD granted Fall 2020, PhD Thesis Title, *Seas in hot water -marine heatwaves on the move; following the heat.* Post-doctoral Researcher, Columbia University
Shirley Leung, PhD granted Spring 2020, PhD Thesis Title: *Particles, prey, and purse seines: A data-driven investigation into the impacts of climate on biological processes across the global ocean.* Post-doctoral Researcher, Institute for Disease Modeling, Bellevue Washington
Miguel Urias-Jimenez, PhD Granted summer 2016.
Ph. D. Thesis title: *Topographic Constraints on Rotating Stratified Throughflows Across Large Amplitude Topography.* Post-Doctoral Researcher, Johns Hopkins University
Andrew Shao, Summer, PhD Granted Winter 2016. Co-Advisor Sabine Mecking
Ph.D. Thesis Title: *The response of thermocline ventilation to variability at the ocean surface from observations and offline tracer modeling.* Earth System Coupling Scientist at Environment and Climate Change Canada
Jinting Zhang, PhD Granted Spring, 2015. Co-advisor with Kathie Kelly
PhD Thesis Title: *Variability of Large-scale Ocean Circulation and Meridional Heat Transport in the Atlantic Ocean,* Data scientist, American Express
Kyle Armour (Physics) PhD granted spring 2012. Co-advisor with Cecilia Bitz, Atmospheric

Sciences.
Ph.D. Thesis Title: *Reversible decline of the Arctic sea ice cover and committed climate warming due to greenhouse gas emissions,* UW Faculty Member in Oceanography and Atmospheric Sciences

Chuanli Jiang, PhD granted Fall 2008. M. S. Thesis Title: *Evaluation of a hybrid satellite and NWP based turbulent heat flux product using TAO buoys* PhD. Thesis Title: *The role of Horizontal Advection in SST Variability in the Eastern Equatorial Pacific: Influence of QuikSCAT winds,* Co-advisor with Kathie Kelly

David Trossman, M.S. Summer 2007, Summer 2008-Spring 2011.
M. S. Thesis Title: *Estimates of North Atlantic Ventilation and Mode Water Formation for Winters 2002-2006.* PhD Granted Spring 2011.
PhD Thesis Title*: Advection-Diffusion Process Inference via Statistical Oceanographic Methods in the North Atlantic and Southern Oceans*,
Research Scientist, University of Texas, Austin.

Jimmy Booth (Atmospheric Sciences), co-advisor Jerome Patoux (Atmospheric Sciences), PhD Granted Summer 2010 PhD Thesis Title: *The Role of the Gulf Stream in Midlatitude Storm Intensification.* Associate Professor, City College of New York

Jordan Dawe, Ph. D. granted winter 2006. M.S. Thesis Title: *Viscosity-dependent internal variability in a model of the North Pacific*
PhD. Thesis Title: *Aspects of Modeling the North Pacific Ocean,* Data scientist

Carol Ladd, Summer, PhD granted Spring, 2000 (now a federal scientist at NOAA/Pacific Marine Environmental Laboratory).
M.S. Thesis Title: *The influence of eddies on tracer transport in the abyssal ocean*
PhD. Thesis title: *North Pacific Mode Waters: Formation and Variability*
Oceanographer, National Oceanic and Atmospheric Administration/Pacific Marine Environmental Laboratory retired

Emmanuel Boss, Spring, Ph. D. granted fall 1996 Ph.D. Thesis Title: *Dynamics of Potential Vorticity Fronts*, Professor, University of Maine

Students who left with M.S.

Megan Gambs, co advised with Susan Hautala, 2009-2015, M.S. 2012, Thesis Title: Tropical Response to Hosing in the North Pacific During the Last Glacial Maximum.
Environmental Educator

Rebecca Zanzig, M.S. Summer 2007 M. S. Thesis Title: *The Role of Sea Ice in Dense Water Formation in the Okhotsk Sea,* Senior Software Engineer, HashiCorp

Frances Evans, summer 1994-fall 1996 M. S. granted fall 1996. Thesis Title: *Mean Flow Induction by Topographic Rossby Waves,* Senior Director of Product Management, Lifecycle Collaboration Software at Siemens Digital Industries

Physics Students

Frank Wojcik, Spring 2016 Physics M.S. Thesis Title: *Analysis and enhancement of an offline climate modeling tool*

Michelle Brochmann (Physics), Summer 2010-Winter 2011, PhD in 2019 with a different advisor

Oceanography Students who left without a degree

Nathan Nutter, Summer 2006 to Summer 2008. Co-advisor Mark Warner

VISITING GRADUATE STUDENTS

Maylis Garcia (NESTA Paris) *On the relationship between surface fluxes and upper ocean heat content from observations*, Summer 2012.

Marta Umbert Cresuela (Marine Institute of CSIC, Barcelona, Spain), *Improved Maps of satellite sea surface salinity from a singularity-based fusion technique.* Fall 2013

POST-DOCS SUPERVISED (11 total)

1. Robb Wills, Atmospheric Sciences (with David Battisti, Dennis Hartmann, and Kyle Armour, UW Atmospheric Sciences) now research scientist in UW Atmospheric Sciences
2. Dan Amrhein (with Greg Hakim, Atmospheric Sciences) now a scientist at the National Center for Atmospheric Research
3. Andrew Davis
4. Helma Lindow
5. Frederic Vivier (with Kathie Kelly, APL, Universite Pierre et Marie Curie, *Paris*, France)
6. Ivan Lima (with Steve Emerson and Paul Quay) research specialist at Woods Hole Oceanographic Institution
7. Curtis Deutsch (with Steve Emerson) Program on Climate Change post-doc, Professor at Princeton University
8. Taka Ito JISAO post-doc (with Steve Emerson), Professor at Georgia Tech University
9. Susan Bates (with Kathie Kelly, APL) The Nature Conservancy Coastal Science Program Manager, Virginia
10. Jessica Kleiss (with Kathie Kelly, APL), JISAO post-doc, Associate Professor of Environmental Science at Lewis and Clark College
11. Wei Cheng, research scientist at JISAO/NOAA/PMEL

CURRENT PHD STUDENT COMMITTEES (5 current)

1. Michelle Dvorak
2. Sarah Ragan
3. Mary Margaret Stoll
4. Katie Brennan (GSR, Atmospheric Sciences)
5. Yue Dong (GSR Atmospheric Sciences)

PAST STUDENT PhD COMMITTEE FULL MEMBER (55)

1. Dylan Oldenberg
2. Elizabeth Brassaele
3. Elisa Bonnin
4. Nan-Hsun Chi
5. Ashley Maloney
6. Hally Stone
7. Rosalind Echols
8. Diane Rico
9. Melinda Webster
10. Alyssa Atwood
11. Shara Feld (Civil and Environmental Engineering)
12. Cate Coveny
13. Nicholas Beaird

14. Andrew Reed
15. Yanxu Zhang (Atmospheric Sciences)
16. Ana Ceclia Peralta Ferriz
17. Sally Warner
18. Kai-Chieh Yang
19. Julie Koester
20. Kevin Taylor
21. Jessie Anderson
22. Nicholas Beaird
23. Andrew Reed
24. Byron Killbourne
25. Mark Carson
26. Nathan Algren
27. Samantha Brody
28. Andy Chiodi
29. Dan Codiga
30. Jerome Cuny
31. Shenfu Dong
32. Julian Douglas
33. Catherine Greene
34. Robert Hallberg
35. Young-Oh Kwon
36. Debra Lebel
37. Bin Bin Ma
38. Amy MacPhayden
39. Erica McPhee
40. Sabine Mecking
41. David Meyers
42. Joanna Muench
43. Li Ren
44. Allison Gray
45. Christopher Sherwood
46. Shuanguang Song
47. Scott Springer
48. Fiamma Straneo
49. Natalia Stefanova
50. Leif Thomas
51. Gabe Vecchi
52. Rachel Wade
53. Weimin Wang
54. Xuemin Wang
55. Xuebin Zhang

PAST STUDENT PhD COMMITTEE GSR (Graduate School Representative) (40)

1. Sean Khosuke Rohan (Aquatic and Fishery Sciences)
2. Michael Diamond (Atmospheric Sciences)

3. Kholood Altassan (Environmental and Occupational Health)
4. Stephanie Rushley (Atmospheric Sciences)
5. Hannah Director (Statistics)
6. Ruth Branch (Civil and Environmental Engineering)
7. Bradley Markle (Earth and Space Sciences)
8. Matthew G. Bonnema (Civil and Environmental Engineering)
9. Elizabeth Clark (Civil and Environmental Engineering)
10. Margaret Siple (Aquatic and Fishery Sciences)
11. Emily Newsome (Earth and Space Sciences)
12. Tsubasa Kohyama (Atmospheric Sciences)
13. Michelle Brochmann (Physics)
14. Adam Campbell (ESS)
15. Bryce Harrop (Atmospheric Sciences)
16. Elizabeth Maroon (Atmospheric Sciences)
17. Daniel McCoy (Atmospheric Sciences)
18. Emily Mosites (Epidemiology)
19. Shara Feld (Civil and Environmental Engineering)
20. Maxwell Hansen (Physics)
21. Kathleen Huybers (Earth and Space Sciences)
22. Twila Moon (Earth and Space Sciences)
23. Angie Pendergrass (Atmospheric Sciences)
24. Maxwell Hansen (Physics)
25. David Kaplan (Physics)
26. Nicole Feldl (Atmospheric Sciences)
27. Sandra Penny (Atmospheric Sciences)
28. Zheng Liu (Atmospheric Sciences)
29. Yanxu Zhang (Atmospheric Sciences)
30. Yen-Ting Hwang (Atmospheric Sciences)
31. Louise Leahy (Atmospheric Sciences)
32. Elizabeth Barnes (Atmospheric Sciences)
33. Kari Pederson (Chemistry)
34. Mike Bardaro (Chemistry)
35. Larissa Back (Atmospheric Sciences)
36. Angela Rae Bielefeldt (Civil and Environmental Engineering)
37. Julia Jarvis (Earth and Space Sciences)
38. David Kaplan (Physics)
39. Michelle Koutnik (Earth and Space Sciences)
40. Kristin Larsen (Atmospheric Sciences)

ADVISOR, GRADUATE CERTIFICATE IN CLIMATE SCIENCES COMMUNICATION CAPSTONE PROJECT (TOTAL 21)

1. Julie-Ann Khoelinger, Marine and Environmental Affairs
2. Forest Howk, Evans School Spring 2016
3. Brandon Ray, Atmospheric Sciences and Jackson School, Spring 2016-Fall 2017
4. Nicholas Wayand, Civil and Environmental Engineering, Spring 2015-Winter 2016
5. Elizabeth Maroon, Atmospheric Sciences, Summer-Fall 2015

6. Alison Saperstein, Evans School, Summer-Fall 2015
7. Pam Barrett, Oceanography,Fall 2014
8. Megan Gambs, Oceanography, Fall 2014
9. Hayley Dosser, Oceanography, Fall 2014
10. Katherine Heal, Oceanography, Spring 2012-Winter 2013.
11. Kirsten Feifel, Oceanography, Spring-Summer 2009
12. Alyssa Atwood, Oceanography, Spring-Summer 2009
13. Andrea Fassbender, Oceanography, Spring-Summer 2009
14. Sarah Purkey, Oceanography, Spring 2011-2013
15. Ashley Maloney, Oceanography, Spring 2011-2013
16. Elly Walsh, Education, Spring 2011-Spring 2012
17. Tania Busch-Isakson, Environmental and Occupational Health Sciences, Fall 2010-Winter 2012
18. Kristin Poinar, Earth and Space Sciences, Summer 2013-Fall 2016
19. Caroline Pew, Earth and Spaces Sciences, Spring-Summer 2013
20. Katie Fellows, Environmental and Occupational Health, Winter 2014
21. Hilary Palevsky, Oceanography, Summer 2013-Winter 2014

UNDERGRADUATE/HIGH SCHOOL STUDENT INTERACTIONS

Maude Gibbins (Cambridge University Undergraduate) Summer 2016: *Analyzing the relationships between meridional heat transport and heat storages in the North Atlantic from an observational perspective.*

JulieAnn Khoelinger (Oceanography Undergraduate) Winter 2014-Fall 2015 *On the relationship between sea level anomalies and cloud cover in the North Atlantic*

Paul Picciano (Pomona College Undergraduate) Summer 2014: *Quantifying the relationship between regional sea level variability and heat content variability in a model.*

Michelle Serino (JISAO Intern, Millersylvania State University) *On the relationship between surface fluxes of heat and clouds in the North Atlantic*. Summer 2013.

Rachael Robinson (Seattle Academy of Arts and Sciences, Tufts University), *Atlantic Meridional Overturning Circulation in CMIP5*, Spring 2013

Shirley Lueng (JISAO Intern, University of Pennsylvania), *A one dimensional model of ocean heat uptake*, summer 2012

Elizabeth McHugh (Oceanography undergraduate) *Hyperpycnal flows and abrupt climate change in the ocean* Spring-Summer 2009

April Bailey (Oceanography undergraduate) Project title: *Heat budget in the Gulf Stream* Summer 2007

Bruce Titus (Oceanography undergraduate) Project title: *Heat budget in the Gulf Stream* Summer 2006

Julian Kelly (high school student) Project title: *Storms in the North Atlantic* Summer 2006

Alison Shaw (Brown University) Project title: *Variability in North Pacific biogeochemistry* Summer 2004

SERVICE

National Service

Physical Oceanography Councilor, The Oceanography Society, 2021-

Ethics Committee, The Oceanography Society, 2019-2021

Advisory Board, National Center for Atmospheric Research Climate and Global Dynamics Laboratory, 2015-
Executive Committee U.S. Atlantic Meridional Overturning Circulation Program, Vice Chair Focus Group 2: Atlantic Meridional Overturning Circulation State, Variability, and Change, July 2013-October 2015
UCAR Membership Committee September 2009 to September 2012
Review and visiting committee member for CICOR, National Oceanic and Atmospheric Adminstration/Woods Hole Oceanographic Institution Joint Institute, Summer, 2005
Member of NSF ad-hoc committee on Petascale computing in the geosciences, Fall 2004 to Summer 2005
Member of American Meteorological Association Committee on Atmospheric and Oceanic Waves and Stability, January 1996-December 1998.

School of Oceanography
Chair, Diversity Committee, Fall 2019-
Faculty council, 2000-2001, Fall 2008-March 2010, Fall 2013-Fall 2015, Winter 2019-2020
Recruitment/Hiring Committee, 1993-94, 1994-95, 2015-2017
Physical Oceanography position faculty search committee, 2015-2016
Merit Review Committee May 2014, 2016
Graduate student recruitment committee, winter, 2005, 2006, 2014,2017, 2019.
Search Committees Fall 2007, Winter 2014, Fall 2011
Seminar Committee, Fall 2011
Member Graduate affairs committee, Fall 2004-2006
Committee on Applied Physics Laboratory/Without Tenure positions, fall 2006.
Undergraduate majors curriculum committee, 2000-2001
Open house committee, 2000-2001
Led effort to acquire first parallel computer within Physical Oceanography in the School, spring/summer, 1999.

College of Ocean and Fishery Sciences/College of the Environment
Program on Climate Board, 2020-
EarthLab Student Programs Task Force, Winter 2020
EarthLab Steering Committee, Fall 2016-Spring 2017, Fall 2018-Summer 2020
IGERT on Ocean Change Executive Committee, Fall 2012-Fall 2018
College Council, alternate Fall 2019-Winter 2021
College Council, College of the Environment, January 2015-Fall 2017
Future of Ice Task Force for the College of the Environment, September 2012-Fall 2014
Committee on the Arctic Studies Minor, September 2012-Fall 2014
Steering Committee for Masters in Science for Science Teachers, Fall 2013-Fall 2014
Future of Ice Faculty Search Committee, dynamics position Fall 2013-Spring 2014
Future of Ice Faculty Search Committee, biology/ecosystem position Fall 2013-Spring 2014
Created minor in Climate Science at the University of Washington, 2010
Program on the Environment ad-hoc committee on pathways, fall-winter 2010
Program on the Environment ad-hoc committee on geoscience requirement, fall-winter 2010
Program on Climate Change Executive Committee, Fall 2008-spring 2010
Search Committee for PCC faculty positions, spring 2004
College Council, College of Ocean and Fishery Science, July 1996-June 1999

University of Washington service outside of the College of the Environment/College of Ocean and Fishery Sciences and School of Oceanography

Member, Applied Research Team, Center for Health and the Global Environment CHanGE, fall 2020-

College of the Environment Dean Search Committee, Summer 2020-Spring 2021

Co-chair of review committee for Center for Health and Global Environmental Change, Departments of Global Health and Environmental and Occupational Health, Fall 2019

Center for Health and Global Environmental Change (CHanGE) Advisory Board, Fall 2016-Spring 2020

Husky Experience Faculty Advisory Council (HEFAC), Fall 2016-Spring 2017

Director of the Applied Physics Laboratory Search Committee, Fall 2016-Spring 2017

University of Washington Population Health Executive Council, Summer 2016-Spring 2017

e-Science Education Committee, Winter 2015-Fall 2016

Faculty Advisory Committee for the Scan Design Fellowship Program, February, 2015-2018

UW STEM Advisory Group for UW Educational Outreach, October 2012-2014

School of Public Health Global Environmental Change and Human Health faculty search committee, October 2012-January 2014

Sustainability Advisory Board for UW Educational Outreach, September 2012-Fall 2013

Board member, Program on the Environment, 2007-2010, 2019-2020

Member, UW Climate Action Plan Team, Academic Committee, Winter, 2009.

Faculty Council on Women in Academic, Faculty Senate, Fall 2005 to Spring 2008

Review committee for UW Bothell, Interdisciplinary Arts and Sciences BA, Environmental Sciences B.S. and Master of Arts in Policy Studies, May 2008

Chair of search committee for Director of the Program on Climate Change, Spring 2006

Member of search Committee for chair in Earth and Space Sciences, Winter 2005

University of Washington Service as Director of the Program on Climate Change

Lead the Program on Climate Change through successful Graduate School Review, 2013-2014.

Partner for Mellon-Sponsored Area and International Studies Initiatives:

Climate Change, Global Health, Vulnerability and Resilience: Towards an Area Studies of Risk, with Lowe-Anthropology

New Conceptualizations of Global Regions: Building a U.W. Arctic Academic Program – A Joint College Initiative, with Fabbi-Jackson School

Climate Change and the Historical Record: Engaging Area Studies in the Large Research University, with Lowe-Anthropology and Lape-Burke Museum/Archaeology

INVITED TALKS AND PANELS (44 total, chronological order)

Thompson, L. 1992. Two-layer quasi-geostrophic flow over finite isolated topography. University of Hawaii.

Thompson, L. 1993. Frontogenesis in the upper ocean, University of Washington, School of Oceanography.

Thompson, L, I. Lima and S. Emerson, 2003, Thermocline Ventilation and Apparent Oxygen Utilization in the North Pacific: Physical or Biological Changes? Invited talk for U.S. JGOFS Synthesis & Modeling Project Principal Investigators' Workshop, Woods Hole.

Thompson, L. A tale of two models: how are climate models doing in representing the ocean: a look at a CCSM and a high resolution ocean model, University of Washington, School of Oceanography, May, 2006.

Thompson, L., 2008, How does Ocean Circulation Matter for Climate Change? Program on Climate Change Summer Institute.

Thompson, L, and Y-O Kwon, 2009, Evaluation of WBC representation in climate models U. S. CLIVAR Western Boundary Current Workshop, Phoenix, AZ, January 2009.

Thompson, L, 2009. Climate Change and Ocean Physics: the challenges of ocean climate modeling, University of Washington Physics Department.

Thompson, L, 2009. Climate Change and Ocean Physics: the challenges of ocean climate modeling, University of Victoria Physics and Astronomy Department.

Thompson, L, 2009. Climate Change and Ocean Physics: the challenges of ocean climate modeling, University of Britsh Columbia, Physics and Astronomy Department.

Thompson, L. Climate Change and Ocean Physics: the challenges of ocean climate modeling, January 2010. Civil and Environmental Engineering Graduate Seminar, UW.

Thompson, L. Where do all the Oceanographers go? Career Paths in Oceanography, MPOWIR Town Hall at American Geophysical Union Ocean Sciences meeting, February 2010

Thompson, L. March 31, 2010 Physical Oceanography Seminar, Where do all of the Oceanographers go? Career paths in physical oceanography

Thompson, L, and Y-O Kwon, 2010, An Enhancement of Low-Frequency Variability in the Kuroshio-Oyashio Extension in CCSM3 Owing to Ocean Model Biases, at the Kuroshio Extension System Study meeting, Seattle, WA, May 19th, 2010

Thompson, L., 2010, Ocean Heat transport and storage: the role of strong currents and eddies, Program on Climate Change Summer Institute on Feedbacks. Friday Harbor, WA, September.

Thompson, L, K. A. Kelly, S. Dickinson, J. McClean, E. Greiner, and D. Menemenlis, 2010. Estimates of the Ocean Heat Budget in the Gulf Stream: the role of ocean heat transport convergence, L'Ocean, University Pierre Marie Curie, Paris, France, Oct 14, 2010.

Thompson, L, K. A. Kelly, S. Dickinson, J. McClean, E. Greiner, and D. Menemenlis, 2010. Estimates of the Ocean Heat Budget in the Gulf Stream, Isaac Newton Institute, Cambridge University, Oct. 27th, 2010.

Thompson, L, T. Ackerman, M. Bertram, and T. Stetter, 2010, Collaboratively develop a dual credit (UW/HS) ATMS 211 course, adding more depth and hands on activities incorporating NASA Climate Science, at the NASA Innovations in Global Climate Change Education Funding Opportunities Workshop, University of Minnesota, December 3, 2010.

Thompson, L., 2011, Innovations in providing opportunities to engage in climate change education in high school and colleges: Partnerships between high schools and universities, The National Academies Board on Science Education, Committee on Human dimensions of Global Change, Division of Earth and Life Studies Workshop on Climate change Education in Formal Settings, K-14, August 31-September 1, Washington D.C.

Thompson, L., The role of the Ocean in Climate, focus on the Gulf Stream and my path to working in global health. Association for Women in Science, Seattle Chapter, October 18, 2011.

Thompson, L. Heat Storage in the Gulf Stream and Climate, University of Michigan Department of Earth and Environmental Sciences, Smith Lecture, Nov 18, 2011.

Thompson, L., Best Practices for Translating Research for K-12 Audiences, Panel Discussion, March 5, 2012, Beyond the Ivory Tower Series, Washington Sea Grant and COSEE University of Washington.

Thompson, L, and M. A. Bertram, Climate Change Education at the University of Washington: Bridging Academic Degrees, Departments and Disciplines (Invited), [illegible], ED42A-05 presented at 2012 Fall Meeting, American Geophysical Union, San Francisco, Calif., 3-7 Dec.

Thompson, L. and A. Mokdad, Connecting Environmental and Climate Data with Health Data, Department of Global Health Retreat, January 30, 2013

Thompson, L. The role of the ocean in North Atlantic climate: perspectives from satellite observations and ocean models, Atmospheric Sciences, UW Atmospheric Sciences Colloquium, January 25, 2013.

Thompson, L., Ocean forcing of the atmosphere in the North Atlantic Basin: a perspective from satellite observations, Earth and Environmental Sciences Colloquium, Stanford University, January 30, 2013.

Thompson, L, College of the Environment, Meet, Greet, Teach: Those who can do, those who can't teach: does learning STEM mean you can teach it? An informal conversation about interdisciplinary teaching on environmental issues. Panel member. Dec. 5, 2013.

Thompson, L. 2014, Climate Change: uncertainty in projections and prospects for the future, PoliInformatics Workshop, Islandwood, Bainbridge Island November 9.

Thompson, L., 2014, Uncertainty in Climate Projections, Oct 24, Perception of Climate change: Climate Communication and Decision Making Project, Psychology Department, UW.

Thompson, L. Discussants for UW Arctic Research Fellowship Symposium, May 30, 2014. UW.

Thompson, L. Climate Change: recent IPCC results and future challenges, Jackson School of International Affairs Symposium. Climate Change, Global Health and the Inequalities of Risk: Crossing Borders and Disciplines to Re-map Vulnerability and Resilience, April 18, 2014, UW.

Thompson, L. 2014, Air-sea interaction in the North Atlantic: interpretation using a modeling framework for understanding coupling and feedbacks, SAFS Quantitative Lunch, Nov 21, 2014.

Thompson, L, From the sun to the sea: moving heat around. UW Oceanography Seminar, January 12, 2015.

Thompson, L, Potential Collaborations with the UW College of the Environment at the intersection of Climate Change and Human Health, International Center of Diarrheal Disease Research, Bangladesh, Dhaka, Bangladesh, March 11, 2015.

Thompson, L, and Kristie Ebi, 2015, The Emerging Challenges of Climate and Environmental Change to Human Health, International Center of Diarrheal Disease Research, Bangladesh, Dhaka, Bangladesh, March 10, 2015.

Thompson, L, Climate Change: models and projections, Institute for Health Metrics and Evaluations, UW, February 18th, 2015

Thompson, L., My path to climate communication: A search for meaning and making a difference, UW PCC Climate Communication seminar, January 6, 2015.

Thompson, L. Bridging Physical Oceanography and Interdisciplinary Climate Science Research and Education, Scripps Institution of Oceanography, May 23, 2016.

Thompson, L. Insight into air-sea interaction in the North Atlantic from sea surface height, Scripps Institution of Oceanography, May 24, 2016.

Thompson, L., Linkages between the Atlantic Meridional Overturning Circulation, the Gulf Stream and the Atmosphere: circulation, heat content and air-sea interaction, University of South Florida, St. Petersburg, Florida, February 14, 2017. https://www.youtube.com/watch?v=9pxswGrHhK4&list=PLaMxac026NnDqBnoH4CNHxo0LAbN6i7f_&index=4

Thompson, L. SSH as a predictor of air-sea interaction in the North Atlantic. University of Rhode Island Graduate School of Oceanography, September 29, 2017.

Thompson, L, Ocean driven air-sea interaction in the North Atlantic: where, when and impacts on the atmosphere, University of Chicago, April 6, 2018

Thompson, L. Linked variations between the Gulf Stream, Atlantic Meridional Overturning Circulation and gyre circulation, 2018 International Atlantic Meridional Overturning Circulation Science Meeting, July 24-27 Coconut Grove, Florida.

Thompson, L. Ocean Data Analytics: Towards Prediction of Ocean Extreme Events. Transformative Technology: An Ocean Science Workshop for Funders. Alliance for Science Philanthropy. September 13, 2018, San Francisco, CA.

Thompson, L. Heat content, heat fluxes, and feedbacks, ECCO, Estimating the Circulation and Climate of the Ocean (ECCO) Summer School, 2019, May 20, 2019, Friday Harbor Laboratory.

Thompson, L. The effective depth of ocean-atmosphere interaction from monthly to interannual timescales, Physical Oceanography Seminar, School of Oceanography, University of Washington, May 29, 2019.

Thompson, L. Provinces of air-sea interaction in the North Atlantic Ocean, Climate, Atmospheric Sciences and Physical Oceanography Division, UCSD Scripps Institution of Oceanography, May 27, 2020 (remote).

Thompson, L. Provinces of Air-Sea Interaction, OSTST meeting closing plenary, October 23, 2020 (remote).

DIVERSITY EQUITY AND INCLUSION ACTIVITIES

Create resource for creation of COVID impact statement in faculty searches. https://mpowir.org/resources/covid/

Moderated Panel for UW College of the Environment post-docs: Getting an Academic Position in a COVID Era: Stories from Recent Assistant Professors, April 13, 2021

Organized and moderated panel for UW College of the Environment Post-docs: The Industry Experience, November 19, 2020

Mouw, C., S. Legg, L. Thompson, E. McPhee-Shaw, R. Bhatia, J. Garwood, J. Zhu, and S. Clem, Inclusivity and equity in virtual meetings, resources and suggestions from MPOWIR Virtual Discussion http://mpowir.org/inclusivity-and-equity-in-virtual-meetings-resources-and-suggestions-from-mpowir-virtual-discussion/ May 2020

Co-Chair, School of Oceanography Diversity Committee, Summer 2019-

UW representative, NSF-AGEP (Alliance for Graduate Education and the Professoriate): California Alliance Research Exchange Retreat at Stanford University, Stanford University, October 4-5, 2019

Panel member: Mentorship in Research, NSF-AGEP Research Exchange Retreat, Oct 5, 2019.

Panel member: Planning your post-doc, NSF-AGEP Research Exchange Retreat, Oct 4, 2019.

Presentation: *The status quo at scientific conferences*, Presentation at *Being the 'Change' In Global Change Science, Promoting a Culture of Diversity, Equity and Inclusion*, Aspen Global Change Institute, National Center for Atmospheric Research, May 5, 2018

Mentoring Oceanographers: Talk at NOAA/PMEL, June 21, 2018.

Invited participant, Being the 'Change' In Global Change Science, Promoting a Culture of Diversity, Equity and Inclusion, Aspen Global Change Institute, National Center for Atmospheric Research, May 5, 2018

Mentoring Oceanographers: MPOWIR speaker, American Geophysical Union, Ocean Sciences Town Hall, February 12, 2018.

Nominated for the UW College of the Environment Diversity Commitment Award, Spring 2015

University of Washington Committee on training for diversity in faculty searches, Spring 2013.

University of Washington Diversity Council, College of Ocean and Fishery Sciences representative, Fall 2008-spring 2010

WOMEN IN SCIENCE ACTIVITIES

Mentor for a MPOWIR junior scientist mentor groups, 2008-present

Group lead, Women in Mathematics and Public Policy, Institute for Pure and Applied Mathematics UCLA, January 22-25 2019.

Panel member ADVANCE Mentoring for Leadership Lunch, on experiences with promotion to full professor, November 25, 2014

Panel member "Careers in Physics" for the Northwest Conference for Undergraduate Women in Physics, January 2012.

Talk: The role of the Ocean in Climate, focus on the Gulf Stream and my path to working in global health. Association for Women in Science, Seattle Chapter, October 18, 2011.

Panel member "The Entrepreneur Professor: It's Not All Chalk and Talk these days" at WISE (Women in Science and Engineering) Conference in February, 2010

Where do all of the Oceanographers go? Career paths in physical oceanography, March 31, 2010 Physical Oceanography Seminar,

Thompson, L. Where do all the Oceanographers go? Career Paths in Oceanography, Town Hall at American Geophysical Union Ocean Sciences meeting, February 2010

Member of NSF/ONR committee on Women in Physical Oceanography, MPOWIR, Spring 2004 to Fall 2008

Convened Town Hall town hall American Geophysical Union Ocean Sciences meeting for MPOWIR on Dual Career Couples, February 2008

Lead discussion on the role of Women in the Geophysical Fluid Dynamics Summer School in Woods Hole, July 2008

Participant in WEBS (Women Evolving Biological Sciences) career development workshop, Pack Forest, October 2007

Panel member for WEBS Women Evolving Biological Sciences Conference, October, 2007, Networking/Mentoring and Designing Research Proposals

Panel member academic careers at WISE (Women in Science and Engineering) Conference in January, 2007

Presentation at the scoping workshop for MPOWIR Program, October 2006

Organizing committee for the first MPOWIR (Mentoring Physical Oceanography Women to Increase Retention) workshop, October, 2006.

Panel member on "Transitions for Women in Academia: Getting your first job in Academia" Northwest Center for Research on Women at the University of Washington, May 3, 1994.

OUTREACH: CLIMATE CHANGE FOR GENERAL AUDIENCES

Conversations with Mayoral Candidates: Reaching Seattle's 2030 Climate Goals: panelist, online July 9, 2021

Climate on Tap: Panel discussion after lectures on "Climate Change in History and Law from The Enlightenment to the Courthouse." Naked City Brewery, October 23, 2018.

Climate on Tap: The Variety Show. Lagunista Brewing Company, August 29, 2018. One-on-one discussions of the role of the oceans in climate and climate models.

Climate on Tap: Panel Discussion on Energy and Climate Policy at the Crossroad: Will the World Act on Climate Change Fast Enough? Lagunista Brewing Company, December 12, 2017
https://youtu.be/skGLqSS5ACE

Atmospheric Science 111, Spring 2017, Paris Agreement by Ben Tran
https://youtu.be/HHcEpfEEWx4

Hell and High Water: Global Warming and Rising Seas, Climate on Tap, Cascadia Climate Action, Peddler Brewing, May 31, 2017. https://soundcloud.com/user-269428231/climate-science-on-tap-hell-and-high-water-climate-change-rising-sea-levels

Hell and High Water, Global Warming and Rising Seas. Climate on Tap, Naked City Brewery, Climate on Tape, Cascadia Climate Action. April 24, 2017.

Climate Change: driver and changes, International Visitor Leadership Program, Our Planet – Climate Change and Renewable Energy. Office of International Visitors, Bureau of Educational and Cultural Affairs, U.S. Department of State. University of Washington, January 23, 2017.

Climate Change and Naval Operations: a talk for the Naval Staff College, for 50 naval officers from around the world. April 11, 2015

Faculty advisory group for "More Than Scientists", a web based climate change communication project, lead by Eric Michelman. Fall 2014-2015

Climate Change and the 2013 IPCC report, Aljoya Retirement community, Nov. 1, 2013, Mercer Island, WA.

Climate Change Science Part 2: Models and Projections. Metcalf Institute Climate Change Seminar for Journalists, Bullitt Center, Seattle, September 6, 2013.
http://www.youtube.com/watch?v=t3Oq5FryUS0

UC Berkeley Promoting Climate Literacy Advisory Board, Fall 2011-Fall 2013

Climate Change in the Pacific Northwest, Sound Living Communiversity for Beach Watchers, Everett, Oct 20, 2012.

Remote presentation to the Arizona Corporation Commission on Climate Change Models What They Are, How They Work at *Commissioner Paul Newman of the Arizona Corporation Commission Solar Workshop*, July 13, 2012

Science Consultant to a proposal for an art installation "Climate Clock" at San Jose State University (see http://climateclock.blogspot.com/) (spring 2008).

Led the UW effort for *Focus The Nation*, an education day on climate change and solutions, January 31, 2008.

Climate 101 talk at Redmond branch of King County Library, March 25, 2007
Led discussion on the movie "An Inconvenient Truth" at a SPEEA meeting (The Society of Professions Engineering Employees in Aerospace) at Boeing, December 6, 2006.

OUTREACH: CLIMATE FOR HIGH SCHOOL STUDENTS AND TEACHERS

Climate Science Q&A for Earth Day, Online Panel Discussion, Seattle Climate Strike, April 22, 2020
Climate models: what are they? Woodland Park Zoo, Seattle Youth CAN summer experience. July 26, 2017, University of Washington
Climate Change and what high school students can do to prepare for the future. Ida B. Well High School students, UW Campus, Winter 2015.
The oceans and climate change, or why you use a hot water bottle rather than a hot air bottle. Exploring Environmental Majors Seminar December 5, 2014.
A simple climate model for use in the high school classroom. Workshop for UW in the High School teachers, Oct 18, 2014.
Ocean and Climate Change and some thoughts on interdisciplinary approaches, one in a series of talks to Lakeside School Teachers about climate Change, Oct 8, 2014
Oceans and Climate Change, talk for UW Math Science Upward Bound Program, July 7, 2014
Climate Change: recent report and future challenge, University of Washington in the High School Teacher training, May 10, 2014, UW Campus.
Southeast Asian Center Teacher Workshop "Climate Change, Global Health, Vulnerability and Resilience: Understanding Risk in the Context of Regional Area Studies. UW, January 29, 2014.
Climate Change Science and the Result from the Fifth Assessment Report. High school students from Inglemore High School Sustainable Design Course, at UW. Oct 28, 2013.
Climate Change and Extreme Events. UW in the High School training June 1, 2013
Climate modeling, detection and attribution. Lakeside School Sustainability Class. February 13, 2013.
Visited Kentlake High School to talk to high school students about UW in the HS program and majors in environmental/geoscience at UW, February 11, 2011.
Talk to a group of 25 minority high school students about opportunities in climate change science at UW through the Women's Center Making Connection program. November 2008.
Talk on Climate Modeling for Climate Quest, PCC/Burke Museum summer course for high school students, July 2008
Interviewed by middle school students on climate change and oceans and climate for school projects, May 2009, April 2008
Speaker at UW Environmental Opportunities fair, What can we do about global warming? Solutions, adaptations and Focus the Nation, fall 2007
Climate 101 talk at Olympic Community College, Bremerton, WA, April 16, 2007

OUTREACH: SCIENCE, FAITH AND CLIMATE CHANGE

Presentation at St. Mark's Episcopal Cathedral, Seattle in the Adult Forum on *Climate Change and our responsibility*, May 16, 2010.

Presentation for the Communion with Creation Conference of the Episcopal Church, January 30, 2010, "Climate Change and our responsibility" as part of the workshop on Living the Genesis Covenant: Coming Home.

Visiting speaker at the Alchemist's guild to lead discussion on Science and Faith, July 2008.

Lead discussion on climate change and critical environmental and economic issues at St. Mark's Cathedral, November 2008.

Taught middle school Sunday school class at Saint Mark's Cathedral on the topic of Climate Change and the Episcopal Church, May 2008

Moderated Panel on "Science Faith and the Environment" at the Healing Our Planet Earth Conference, a National Episcopal Church Conference on Climate Change, April 12, 2008, Bellevue Washington.

Led discussion on the movie "An Inconvenient Truth" global warming and climate change at Saint Mark's Episcopal Cathedral, Oct 1, 2006.

APPEARANCES IN POPULAR MEDIA

Media Appearances

Short wave podcast, Measuring Sea Level Rise from Space, November 20, 2020 https://www.npr.org/transcripts/936683335

NPR morning edition, November 19, 2020 https://www.npr.org/2020/11/19/933038332/nasa-satellite-to-measure-global-sea-level-rise

Sentinel-6 Michael Frielich Mission Science Briefing, Live NASA TV on November 20, 2020

Louisa Gaylord, Using Data Science to Track Marine Heatwaves, UW eScience Institute https://escience.washington.edu/data-science-to-track-mhws, Dec. 11, 2020

Women in Oceanography Still Navigate Rough Seas, Jessica Duncombe, EOS, 2019, https://eos.org/features/women-in-oceanography-still-navigate-rough-seas

Once a math geek always a math geek, Women in STEM podcast by Praphanit Doowa, 2017, http://uwpodcast.com/ep-6-once-a-math-geek-always-a-math-geek/

The GOP tax bill could cost us the next generation of climate scientists, December 8, 2017 http://grist.org/article/the-gop-tax-bill-could-cost-us-the-next-generation-of-climate-scientists/

4-ways the Republican tax plan could harm the planet, December 1, 2017 https://grist.org/briefly/4-ways-the-republican-tax-plan-could-harm-the-planet/

How Seattle's March for Science came to be, Crosscut, April, 20 2017. http://crosscut.com/2017/04/how-seattles-march-for-science-came-to-be/

Accelerating Population Health, UW Medicine Magazine http://depts.washington.edu/givemed/magazine/2017/01/accelerating-population-health/

Hannah Hickey, UW News, October 5, 2016, Atlantic Ocean's slowdown tied to changes in the Southern Hemisphere, http://www.washington.edu/news/2016/10/05/atlantic-oceans-slowdown-tied-to-changes-in-the-southern-hemisphere/

Hannah Hickey, UW News, April 22, 2016. UW Experts call Paris Climate Agrement "bold" and "encouraging" http://www.washington.edu/news/2016/04/20/uw-experts-call-paris-climate-agreement-bold-encouraging/

Katherine Gammon, Why is the winter's coldest day usually more than a month away?, December 22, 2014 http://www.insidescience.org/content/solstice-shmolstice-%E2%80%93-why-coldest-days-are-still-come/2436

Hannah Hickey, UW News, September 30, 2013, UW researchers helped draft international assessment of climate change *http://www.washington.edu/news/2013/09/30/uw-researchers-helped-draft-international-assessment-of-climate-change/*

Blog post by Peder Digre April 28, 2012
Health Impacts of Climate Change, Peder Digre, At a crossroads: choosing hidden paths in Global Health, University of Washington, WIHRC Conference.

University of California - Los Angeles (2011, June 18). Ocean's harmful low-oxygen zones growing, are sensitive to small changes in climate. *ScienceDaily*. Retrieved June 20, 2011, from http://www.sciencedaily.com/releases/2011/06/110617110713.htm

Women in Academia Reports, A Sharp Drop in Tenure-Track Appointments for Women Oceanographers http://www.wiareport.com/2011/05/a-sharp-drop-in-tenure-track-appointments-for-women-oceanographers/ May 5, 2011.

Hines, S., 8 percent of women physical oceanographers in tenure track, down from 23 percent – with audio clip http://www.washington.edu/news/8-percent-of-women-physical-oceanographers-in-tenure-track-down-from-23-percent, *UW Today*, April 28,2011.

Lee, E., Tackling new terrain: climate change and global health, http://www.washington.edu/news/articles/tackling-new-terrain-climate-change-and-global-health, December 8, 2010, UW Today

Guest on KUOW The Conversation, Gender Discrimination at Work, March 24, 2010.

Stormy Waters, January 2010, Nature Geoscience 3, 4 (2010) doi:10.1038/ngeo742

O'Sullivan, Kate, Fall 2008, in *The Quarterly Newsletter for the Bishop's Committee for the Environment,The Episcopal Diocese of Olympia, and the Eco-Justice Group Saint Mark's Cathedral*

Olsen, J., 2008, UW to 'Focus the Nation' at Public Forum tonight, *The Daily*, January 31, 2008,

Hines, S., UW to participate in national teach-in Jan. 31: Global warming solutions to be discussed, *University Week*, January 17, 2008.

Baker, L, Coming to a Campus Near You, 2007, *E: the Environmental Magazine;* Sep/Oct 2007; 18, 5;

TRAINING

Faculty Leadership Seed Project, Winter 2019

UW Professional and Organizational Development Workshop, May 15, 2017, Leading with a Racial Equity Lens for Structural Transformation

COMPASS Science Communication training, October 16-18, 2013

CONFERENCE/WORKSHOP PARTICIPATION

Session Moderator: Large Scale Ocean Circulation Variability and Change, 2020. NASA Ocean Surface Topography Science Team Meeting, Oct 19-23, 2020, online

Session Moderator: Extratropical Air-Sea Interactions and Extreme Events, AGU Ocean Sciences Meeting, February 16-21, 2020, San Diego, CA.

Session Moderator: Large Scale Ocean Circulation Variability and Change, 2019. NASA Ocean Surface Topography Science Team Meeting, Oct 21-25, 2019, Chicago, IL.

Invited Participant: WGHA Planetary Health: Global Health Perspectives Roundtable, Woods Park Zoo, May 17, 2018.

Facilitator: Breakout session, Processes studies for model improvement, Bridging Sustained Observations and Data Assimilation for TPOS 2020 Workshop, May 1-3, 2018, National Center for Atmospheric Research, Boulder, CO.

Session Lead: Large Scale Ocean Circulation Variability and Change, 2017. NASA Ocean Surface Topography Science Team Meeting, Oct 23-27, 2017, Miami, FL.

Invited participant, Writing for General Audience for theconversation.com. UW News. April 6, 2017

Invited participant: Global Ocean Observing System: Promoting Implementation of Multi-Disciplinary Sustained Ocean Observations (IMSOO) NOAA/NASA workshop, Florida International University, Miami, Feb 8-10 2017. www.goosocean.org/imsoo

Invited Participant: Winds of Change Symposium,. *The Winds of Change? Exploring Climate Change-driven Migration and Related Impacts in the Pacific Northwest.* June 24, 2016, Portland, Oregon: Portland State University Population Research Center (Portland, Oregon)

Invited Participant NASA Coupled Ocean Surface Variables Workshop, April 12-14, 2016, UW Applied Physics Laboratory

Invited Participant NSF-GOLD ASPIRE (Active Societal Participation in Research and Education) Workshop, University of Washington, February 2-3, 2016

Convener of session at 2016 Ocean Sciences Meeting: Satellite-data based studies of heat and freshwater budgets and the air-sea interface: From diurnal to decadal timescales

Breakout lead for Oceanography discussion, Translating Process Understanding to Improve Climate Models, Geophysical Fluid Dynamics Laboratory, Oct 15-16 2015.

Convener of session at AGU Fall meeting: The Atlantic Meridional Overturning Circulation, Climate Variability, and Change, December 15-19, 2014

Lead Organizer and host, U.S. Atlantic Meridional Overturning Circulation Science Team Meeting, Seattle, WA, September 9-11 2014.

Invited Participant *Mathematical and Statistical Approaches to Climate Modelling and Prediction* at the Isaac Newton Institute, Fall 2010

Organizing Committee for CLIVAR Western Boundary Current Working Group meeting, Phoenix AZ, January 2009

Committee member of the CLIVAR working group on western boundary current ocean-atmosphere interactions, January 2007 to January 2009

Convener of session at 2008 American Geophysical Union Ocean Sciences Meeting, Fidelity and Metrics of Ocean Models in Climate Simulations

Invited participant to Geosciences High performance Computing Research Consortium Workshop, National Center for Atmospheric Research, Boulder, CO, September 2006

Lead Organizer: Workshop on Metrics in Ocean Models, Honolulu Hawaii, February, 2006

Participant: Modelling Oceanic Climate Interactions, NATO Advanced Study Institute on Modelling of Oceanic Climate Interactions, held at Les Houches, France, February 17-28, 1992