Leah Johnson

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EDUCATION

PhD Oceanography 2018 University of Washington Seattle, WA 2015 MS Applied Mathematics University of Washington Seattle, WA 2014 MS Oceanography University of Washington Seattle, WA MS Geosciences 2010 San Francisco State University San Francisco, CA 2004 **BS** Physics University of California, Davis Davis, CA

Research Positions

Senior Oceanographer, Applied Physics Laboratory, University of Washington 2022-Present Postdoctoral Researcher, Brown University 2018-2021 Research Assistant, University of Washington 2011-2018

TEACHING EXPERIENCE

Instructor, GFL Workshop - Chennai, India
Instructor, Atmospheric Dynamics - Brown University
Instructor, Monsoon Workshop - Ahmadabad, India
Instructor, Monsoon Workshop - Bangalore, India
Teaching Assistant, Integrative Oceans - University of Washington

Memberships/Committees

Member - CLIVAR Small-Scale Processes Working Group, 2024-present
Associate Editor - Journal of Physical Oceanography, 2022-present
Steering Committee - Mentoring Physical Oceanography Women to Increase Retention, 2020-2023
Member - American Geophysical Union, 2007-present

AWARDS

Ocean Sciences Early Career Award American Geophysical Union, 2024 Young Investigators Program Office of Naval Research, 2023 Editor's Award American Meteorological Society, 2021 Competition Award Association of Pacific Rim Universities/New York Times, 2017

Competition Award Association of Pacific Rim Universities/New York Times, 2017

Mary Landsteiner Scholar University of Washington, 2015

Workshops

Geophysical Flows - From the Field to the Lab: Chennai, India, 2024

CLIVAR Summit: Seattle WA, 2023

CLIVAR Mesoscale and Frontal-Scale Air-Sea Interactions Workshop: Boulder CO, 2023

FilaChange From filaments to climate change: recent advancements and future challenges in finescale ocean dynamics.: Providence RI, 2022

ICERM, Prediction and Variability of Air-Sea Interactions: the South Asian Monsoon: Brown University, 2022

ICERM, Prediction and Variability of Air-Sea Interactions: the South Asian Monsoon: Virtual, 2021

International Workshop, Ocean Monsoon Mixing: Ahmadabad, India, 2020

Air-Sea Interactions in the Bay of Bengal, From Monsoons to Mixing: Bangalore, India, 2020

CLIVAR, Ocean Carbon Hotspots Workshop: Biophysical drivers of carbon uptake in western boundary current regions: MBARI, 2017

W. M. Keck Institute for Space Studies, Satellites to the Seafloor II: Autonomous Science to Forge a Breakthrough in Quantifying the Global Ocean Carbon Budget: Caltech, 2014

W. M. Keck Institute for Space Studies, Satellites to the Seafloor I: Autonomous Science to Forge a Breakthrough in Quantifying the Global Ocean Carbon Budget: Caltech, 2013

NCAR Advanced Study Program, Carbon Connections in the Earth System: NCAR, 2013

NCAR Advanced Study Workshop, Key Uncertainties in the Global Carbon-Cycle: NCAR, 2013

EXPEDITIONS

RV Thompson, EKAMSAT: Bay of Bengal, India, 2024

RV Kronprins Haakon, NORSE: Jan Mayen Ridge, Norwegian Sea, 2023

RSS Discovery, EXPORTS: Porcupine Abyssal Plain, NA, 2021

RV Sally Ride, MISOBOB: Bay of Bengal, India, 2019

RV Revelle, Kuroshio Extension: South China Sea, 2017

RV Atlantis, Davis Straight: Greenland, 2015

One Tree Island Research Station, Great Barrier Reef: Australia, 2009

RV Point Sur, California shelf: Santa Monica Basin, 2008

PUBLICATIONS

- ·Johnson, L., Fox-Kemper, B., (2024) Modification of Boundary Layer Turbulence by Submesoscale Flows. Flow, 4, E20.
- ·San Soucie, J. E., Sosik, H. M., Girdhar, Y., Shalapyonok, A., Peacock, E., and **Johnson, L.**. (2024). Spatiotemporal Topic Modeling Reveals Storm-Driven Advection and Stirring Control Plankton Community Variability in an Open Ocean Eddy. Journal of Geophysical Research: Oceans, 129(11), e2024JC020907.
- ·Brzezinski, M. A., **Johnson, L.**, Estapa, M., Clevenger, S., Roca-Martí, M., Romanelli, E., ... and Jones, J. L. (2024). Physical mechanisms sustaining silica production following the demise of the diatom phase of the North Atlantic spring phytoplankton bloom during EXPORTS. Global Biogeochemical Cycles, 38(7), e2023GB008048.
- ·Johnson, L., Siegel, D., Thompson, A., Fields, E., Erickson, Z., Cetinic, I., Lee, C., D'Asaro, E., Nelson, N., Omand, M. and Sten, M., et al. (2023) Assessment of oceanographic conditions during the North Atlantic EXport processes in the ocean from RemoTe Sensing (EXPORTS) Field campaign. Progress in Oceanography, 103170.
- ·Erickson, Z. K., Fields, E., **Johnson**, L., Thompson, A. F., Dove, L. A., D'Asaro, E., and Siegel, D. A. (2023). Eddy tracking from in situ and satellite observations. Journal of Geophysical Research: Oceans, e2023JC019701.
- ·Ackerman, A., Yarincik, K., Murphy, S., Cetinić, I., Fundis, A., Miller, A.,...Johnson, L. et al. (2023). KNOW BEFORE YOU GO. Oceanography, 36(1), 38-43.
- ·Johnson, L., Fox-Kemper, B., Pham, H. Sarkar, S., and Li, Q., (2023) A Finite-Time Ensemble Method for Mixed Layer Model Comparison. Journal of Physical Oceanography. https://doi.org/10.1175/JPO-D-22-0107.1
- ·Pham, H. T., S. Sarkar, **Johnson, L.**, B. Fox-Kemper, P. P. Sullivan, and Q. Li, (2023) Multi-scale variability of turbulent mixing during a monsoon intraseasonal oscillation in the bay of bengal: an les study. Journal of Geophysical Research: Oceans. 128(1), e2022JC018959.
- ·Bodner, A and Fox-Kemper, B and **Johnson, L.** and Van Roekel, L P and McWilliams, J C and Sullivan, P P ,. Dong, J. (2022). Modifying the Mixed Layer Eddy Parameterization to Include Frontogenesis Arrest by Boundary Layer Turbulence. Journal of Physical Oceanography.
- ·Fox-Kemper, B., **Johnson, L.**, and Qiao., F. (2022) Ocean Mixing, chapter Ocean Near-Surface Layers. Elsevier. 69-94.
- ·Orenstein, P., Fox-Kemper, B., **Johnson, L.**, Li, Q., Sane, A. (2021). Evaluating Coupled Climate Model Parameterizations via Skill at Reproducing the Monsoon Intraseasonal Oscillation. Journal of Climate, 1-42.
- ·Johnson, L., Lee, C.M., D'Asaro, E.A., Wenegrat, J.O., and Thomas, L.N. (2020) Restratification at a California Current upwelling front II: Dynamics. Journal of Physical Oceanography, 50 (5), 1455-1472
- ·Johnson, L., Lee, C.M., D'Asaro, E.A., Thomas, L.N., and Shcherbina, (2020) A. Restratification at a California Current upwelling front, I: Observations. Journal of Physical Oceanography, 50 (5), 1473-1487
- ·Johnson, L., Lee, C.M. and D'Asaro, E.A., (2016) Global estimates of lateral springtime restratification. Journal of Physical Oceanography, 46(5), pp.1555-1573