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Education

1984	B.A. in Physics, Oberlin College
1990	Ph.D. in Oceanography University of California, San Diego
2012	Masters of Science, Computer Science and Information Systems University of North Carolina Wilmington

Employment

1990-1991	Foreign Postdoctoral Fellow Tohoku University, Sendai, Japan
1992-1994	Assistant Researcher University of Hawaii at Manoa
1994- present	Assistant, Associate and full Professor, Department of Physics & Physical Oceanography University of North Carolina at Wilmington
2005	Visiting Associate Professor Tohoku University, Sendai, Japan

Professional Affiliations

[American Geophysical Union](#), [The Oceanography Society](#), [Oceanographic Society of Japan](#);
[European Geosciences Union](#), NASA Ocean Salinity Science Team

Peer-reviewed Publications

Chi, N.-H., Thompson, E. J., Chen, H., Shcherbina, A., Bingham, F., & Rainville, L. (2023). Spatiotemporal variability of rainfall and surface salinity in the Eastern Pacific Fresh Pool: A joint in situ and Satellite analysis during the SPURS-2 field campaign. *Journal of Geophysical Research: Oceans*, 128, e2022JC019599. doi: [10.1029/2022JC019599](https://doi.org/10.1029/2022JC019599)

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Bingham, F. M., Brodnitz, S. K., & Gordon, A. L. (2023). Seasonal and interannual variability of the subtropical South Indian Ocean sea surface salinity maximum. *Journal of Geophysical Research: Oceans*, 128, e2022JC018982. doi:[10.1029/2022JC018982](https://doi.org/10.1029/2022JC018982)

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Guimbard, S.; Reul, N.; Sabia, R.; Herlédan, S.; Khoury Hanna, Z.E.; Piollé, J.-F.; Paul, F.; Lee, T.; Schanze, J.J.; Bingham, F.M.; et al. The Salinity Pilot-Mission Exploitation Platform (Pi-MEP): A Hub for Validation and Exploitation of Satellite Sea Surface Salinity Data. *Remote Sens.* 2021, 13, 4600. doi:[10.3390/rs13224600](https://doi.org/10.3390/rs13224600)

Bingham, F. M. and S. Brodnitz (2021) Sea Surface Salinity Short Term Variability in the Tropics. *Ocean Sci.*, 17, 1437–1447. doi:[10.5194/os-17-1437-2021](https://doi.org/10.5194/os-17-1437-2021)

Bingham, F.M.; Brodnitz, S.; Fournier, S.; Ulfsax, K.; Hayashi, A.; Zhang, H. (2021) Sea Surface Salinity Subfootprint Variability from a Global High-Resolution Model. *Remote Sens.* 13,4410. doi:[10.3390/rs13214410](https://doi.org/10.3390/rs13214410)

Bingham, F. M., S. Fournier, S. Brodnitz, K. Ulfsax and H. Zhang (2021) Matchup Characteristics of Sea Surface Salinity using a High-resolution Ocean Model. *Remote Sens.* 2021, 13(15), 2995; doi:[10.3390/rs13152995](https://doi.org/10.3390/rs13152995)

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Bingham, F.M., V. Tsontos, A. deCharon, C.J. Lauter, and L. Taylor. (2019). The SPURS-2 eastern tropical Pacific field campaign data collection. *Oceanography* 32(2):142–149, DOI:[10.5670/oceanog.2019.222](https://doi.org/10.5670/oceanog.2019.222)

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Grant Funding

Salinity and Stratification at the sea Ice Edge (SASSIE). PI Kyla Drushka. NASA/University of Washington, \$272,407

Satellite Sea Surface Salinity Sampling Error. NASA Ocean Salinity Science Team. PI Severine Fournier, NASA/JPL, August 2019. \$155,028

S-MODE Participation, submitted March 2019. From NASA AMES. \$254,994.

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Subfootprint Variance and Surface Salinity Extreme Values as Indicators of Air-sea Interaction. NASA Ocean Salinity Science Team. Co-investigator: Oksana Chkrebti, Ohio State University. \$373,167

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Multi-scale Data Assimilation, Forecasting and Modeling in Support of SPURS-2. From NASA. Co-Is Z. Li and P. Li, NASA JPL. \$100,500.

The SPURS-2 Information System (SPURS-IS). From NASA. Co-I's, Z. Li and P. Li, NASA JPL. \$426,892.

SPURS Field Campaign Analysis Phase. From NASA. PI: T. Farrar (WHOI). \$50,000 (UNCW portion). 1/1/2014-6/30/2015.

The SPURS Data Management System. From NASA. Co-Is, Yi Chao and Peggy Li, NASA JPL. \$342,042. 1/1/2011 – 12/31/2014.

Statistical Evaluation of Sea Surface Salinity from Aquarius. From NASA. Co-I, Montserrat Fuentes, NCSU. \$210918. 10/1/2009 – 9/30/2012.

SE Atlantic Marine Monitoring and Prediction Center: 2002 Coastal Ocean Research and Monitoring Program. From NOAA. Multiple co-I's. 920,900. 2002-2003.

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Coastal Ocean Monitoring in the South Atlantic Bight. From NOAA. Multiple co-I's. \$730,000. 1999-2000.

Coupling of Gulf Stream Water Intrusions with Postlarval Settlement of Snapper-Grouper and Lobster at a Midshelf Reef, Onslow Bay, NC. From NURP/NOAA. Co-I David Lindquist, UNCW. \$27997. 2000.

Short-term Invitation Fellowship. From Japan Society for the Promotion of Science, for travel and subsistence during fellowship. 1999.

Water Mass Variations in the Western Equatorial Pacific. From NSF for \$113,000. 1994-1996.

The Cape Hatteras Gulf Stream Front as an Aggregator of the Pelagic Stages of Tuna and Mackerel: Sampling with Light-traps Across the Frontal Zone. From NOAA/NURP for \$2500. 1996.

Coupling of Gulf Stream Intrusions and Spring-summer Arrival of Presettlement Stages of Snapper-Grouper Complex Species at a Midshelf reef, Southern Onslow Bay, North Carolina. From NOAA/CIFO for \$24,961. 1995-1996.

The Structure and Dynamics of the Current Systems North of the Hawaiian Ridge. From NSF for \$229,000. Co-I Bo Qiu, U. Hawaii. 1994-1997.

The Hawaii Ocean Time-series: WOCE Component. From NSF for \$1,690,674. Co-I Roger Lukas, U. Hawaii. 1994-1997.

Datasets published

SPURS-1

SPURS PROJECT, Fred Bingham. 2015. SPURS Field Campaign ADCP Products. Ver. 1.0. PO.DAAC, CA, USA. Dataset accessible at <https://doi.org/10.5067/SPUR1-ADCP0>

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SPURS-2

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