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Education

1979 –81, University of Missouri, Columbia, Department of Forestry and Wildlife
1984 B.A. (Hons.), University of California, Santa Barbara, Department of Biology
1986 M.A., Duke University Graduate School, Department of Microbiology and Immunology
1992 Ph.D., Massachusetts Institute of Technology - Woods Hole Oceanographic Institution Joint
Program in Biological Oceanography
1992-94, Postdoctoral Fellow Monterey Bay Aquarium Research Institute (MBARI)

Professional Work Experience

1986–87, University of South Carolina, Columbia, Research Assistant Professor
1994–97, MBARI, Assistant Scientist I
1997–2001, MBARI, Associate Scientist II
2001–2006, MBARI, Associate Scientist III
2005–2009, Chair, MBARI Research Division
2006–2009, MBARI, Senior Scientist IV
2009-present, MBARI President and CEO

Current External Committee Service

Monterey Bay Aquarium Board of Trustees

Awards

2021 Lockheed Martin Award for Ocean Science and Engineering presented by the Marine
Technology Society
2011 Federal Laboratory Consortium (FLC) Award for Excellence in Technology Transfer:
Environmental Sample Processor with PCR Module
2010 FLC Far West Region Awards: Environmental Sample Processor
2009 R&D 100 Award: Environmental Sample Processor
2001 Ruth and Paul Fye Award for Excellence in Oceanographic Research: WHOI Graduate Student Best
Paper
2000 International Society for the Study of Harmful Algae (ISSHA) for scientific excellence in harmful
algal bloom research

Publications

Den Uyl, P.A., Thompson, L.R., Errera, R.M., Birch, J.M., Preston, C.M., Ussler, W.III,
Yancey, C.E., Chaganti, S.R., Ruberg, S.A., Doucette, G.J., Dick, G.J., Scholin, C.A., and Goodwin,
K.D. 2022. Lake Erie field trials to advance autonomous monitoring of cyanobacterial harmful algal
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Chavez, F.P., M. Min, K. Pitz, N. Truelove, J. Baker, D. LaScala-Grunewald, M. Blum, K. Walz, C. Nye, A. Djurhuus, R.J. Miller, K.D. Goodwin, F.E. Muller-Karger, H.A. Ruhl, and C.A. Scholin 2021. Observing life in the sea using environmental DNA. *Oceanography*, 34(2): 102-119. doi.org/10.5670/oceanog.2021.218

Zhang, Y., Ryan, J.P, Hobson, B.W., Kieft, B., Romano, A., Barone, B., Preston, C.M., Roman, B., Raanan, B-Y, Pargett, D., Dugenne, M., White, A.E., Freitas, F.H., Poulos, S., Wilson, S.T., DeLong, E.F., Karl, D.M., Birch, J.M., Bellingham, J.G., and Scholin, C.A. 2021. A System of Coordinated Autonomous Robots for Lagrangian Studies of Microbial Communities in the Open-Ocean Deep Chlorophyll Maximum. *Science Robotics* DOI: 10.1126/scirobotics.abb9138

Zhang, Y., Kieft, B., Hobson, B. W., Raanan, B-Y., Urmy, S. S., Pitz, K. J., Preston, C. M., Roman, B., Benoit-Bird, K. J., Birch, J. M., Chavez, F. P., Scholin, C. A. 2021. Persistent Sampling of Vertically Migrating Biological Layers by an Autonomous Underwater Vehicle Within the Beam of a Seabed-Mounted Echosounder, *IEEE Journal of Oceanic Engineering*, Vol. 46 (2), pp. 497-508. DOI: 10.1109/JOE.2020.2982811

Zhang, B. Kieft, B. W. Hobson, J. Ryan, B. Barone, C. Preston, B. Roman, B-Y. Raanan, R. Marin III, T. O'Reilly, C. Rueda, D. Pargett, K. Yamahara, S. Poulos, A. Romano, G. Foreman, H. Ramm, S. Wilson, E. DeLong, D. Karl, J. Birch, J. Bellingham, and C. Scholin. 2019. Autonomous Tracking and Sampling of the Deep Chlorophyll Maximum Layer in an Open-Ocean Eddy by a Long Range Autonomous Underwater Vehicle. *IEEE Journal of Oceanic Engineering*, 45(4) pp 1308-1321. DOI: 10.1109/JOE.2019.2920217

Kiene, R., B. Nowinski, K. Esson, C. Preston, R. Marin III, J. Birch, C. Scholin, J. Ryan, M. Moran. 2019. Unprecedented DMSP concentrations in a massive dinoflagellate bloom in Monterey Bay, CA. *Geophysical Research Letters*, 46 (21):12279-12288 <https://doi.org/10.1029/2019GL085496>

Krolicka, A., Boccadoro, C., Mæland Nilsen, M., Demir-Hilton, E., Birch, J., Preston, C., Scholin, C., Baussant, T. 2019. Identification of microbial key-indicators of oil contamination at sea through tracking of oil biotransformation: An Arctic field and laboratory study. *Sci Total Environ* 696:133715. doi: 10.1016/j.scitotenv.2019.133715.

Kolody, B., McCrow, J. P., Zeigler Allen, L., Aylward, F.O., Fontanez, K. M., A., Moustafa, A., Moniruzzaman, M., Chavez, F.P., Scholin, C.A, Allen, E. E., Worden, A. Z., Delong, E. F., Allen, A. E. 2019. Diel transcriptional response of a California Current plankton microbiome to light, low iron, and enduring viral infection. *ISME J* 13, 2817–2833

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Zhang, Y., J. Ryan, B. Kieft, B. Hobson, R. McEwen, M. Godin, J. Harvey, J. Bellingham, J. Birch, C. Scholin, F. Chavez. 2019. Targeted Sampling by Autonomous Underwater Vehicles. *Frontiers in Marine Science* <https://doi.org/10.3389/fmars.2019.00415>

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Scholin, C., Birch, J., Jensen, S., Marin III, R., Massion, E., Pargett, D., Preston, C., Roman, B., Ussler III, W. 2017. The quest to develop ecogenomic sensors: A 25-year history of the Environmental Sample Processor (ESP) as a case study. *Oceanography* 30:100-113. DOI: <https://doi.org/10.5670/oceanog.2017.427>

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Ryan, J., D. Greenfield, R. Marin III, C. Preston, B. Roman, S. Jensen, D. Pargett, J. Birch, C. Mikulski, G. Doucette and C. Scholin. 2011. Harmful phytoplankton ecology studies using an autonomous molecular analytical and ocean observing network. *Limnol. Oceanogr.* **56**: 1255-1272.

Marin III, R., and C. Scholin. 2010. Sandwich Hybridization. In: *Microscopic and molecular methods for quantitative phytoplankton analysis* (Chapter 12). Karlson, B., Cusack, C. and Bresnan, E. (editors). IOC Manuals and Guides, no. 55. (IOC/2010/MG/55) Paris, UNESCO. 110 pages.

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