

## **Christopher Alan Scholin (10/07)**

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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  
July 2005–present, Chair, MBARI Research Division  
2006–present, MBARI, Senior Scientist IV

### **Current Committee Service**

External advisory committee for the University of Miami's NSF-NIEHS Oceans & Human Health Center  
(<http://www.rsmas.miami.edu/groups/ohh/>)

### **Selected Recent Peer Reviewed Publications**

W.J. Jones, C. Preston, R. Marin III, C. Scholin, R. Vrijenhoek. A Robotic Molecular Method for in situ Detection of Marine Invertebrate Larvae. *Molecular Ecology Notes* (in press).

John Paul, Chris Scholin, Ger van den Engh, Mary Jane Perry. 2007. In situ Instrumentation. *Oceanography* **20**: 58-66.

Scholin, C.A., G.J. Doucette, and A.D. Cembella. In press. Prospects for developing automated systems for in situ detection of harmful algae and their toxins. In: M. Babin, C.S. Roesler and J.J. Cullen (eds.) *Real-Time Coastal Observing Systems for Ecosystem Dynamics and Harmful Algal Blooms*, pp 413-462, UNESCO Publishing, Paris, France.

Roman, B., C. Scholin, S. Jensen, E. Massion, R. Marin III, C. Preston, D. Greenfield, W. Jones, and K. Wheeler. 2007. Controlling a Robotic Marine Water Sampler with the Ruby Scripting Language. *Journal of American Laboratory Automation* **12**: 56-61.

Greenfield, D.I., R. Marin III, S. Jensen, E. Massion, B. Roman, J. Feldman, C. Scholin. 2006. Application of the Environmental Sample Processor (ESP) methodology for quantifying *Pseudo-nitzschia australis* using ribosomal RNA-targeted probes in sandwich and fluorescent *in situ* hybridization. *Limnology and Oceanography: Methods* **4**: 426-435.

Metfies, K., K. Töbe, C. Scholin, and L.K. Medlin. 2006. Laboratory and field applications of ribosomal RNA probes to aid the detection and monitoring of harmful algae. In: *Ecology of Harmful Algae* (Granéli, E., and Turner, J.T. eds), pp. 311-325. Springer Verlag, Berlin, Heidelberg, New York.

Lundholm, N., Ø. Moestrup, Y. Kotaki, C. Scholin, P. Miller. 2006. Inter- and intraspecific variation of the *Pseudo-nitzschia delicatissima*-complex (Bacillariophyceae) illustrated by rRNA probes, morphological data and phylogenetic analyses identification of *P. decipiens* and *P. dolorosa* spp. Nov. *Journal of Phycology* **42**: 464-481.

Goffredi, S.K., W. Jones, C. Scholin, R. Marin, S. Hallam, R.C. Vrijenhoek. 2006. Molecular detection of marine larvae. *Marine Biotechnology* **8**: 149-160.

Ayers K, Rhodes L, Tyrrell J, Gladstone M, Scholin C. 2005. International accreditation of sandwich hybridisation assay format DNA probes for micro-algae. *New Zealand J. Marine and Freshwater Res.* **39**: 1225–1231.

Anderson, D.M., D.M. Kulis, B.A. Keafer, K.E. Gribble, R. Marin and C.A. Scholin. 2005. Identification and enumeration of *Alexandrium* spp. from the Gulf of Maine using molecular probes. *Deep-Sea Research II* **52**: 2467-2490.

Babin, M., J.J. Cullen, C.S. Roesler, P.L. Donaghay, G.J. Doucette, M. Kahru, M.R. Lewis, C.A. Scholin, M.E. Sieracki, and H.M. Sosik. 2005. New approaches and technologies for observing harmful algal blooms. *Oceanography* **18**: 210-227.

Ryan, J.P., H.M. Dierssen, R.M. Kudela, C.A. Scholin, K. S. Johnson, J.M. Sullivan, A.M. Fisher, E.V., Rienecker, P.R. McEnany, and F.P. Chavez. 2005. Coastal Ocean Physics and red tides: an example from Monterey Bay, California. *Oceanography* **18**: 246-255.

Matweyou, J.A., D.A. Stockwell, C.A. Scholin, S. Hall, V.L. Trainer, J.D. Ray, T.E. Whitledge, A.R. Childers, F.G. Plumley. 2004. Use of *Alexandrium* rRNA targeted probes to predict PSP events on Kodiak Island, Alaska. In: K. A. Steidinger, J. H. Landsberg, C. R. Tomas and G. A. Vargo (eds.) *Harmful Algae 2002*, pp. 267-269. Florida Fish and Wildlife Conservation Commission, Florida Institute of Oceanography, and Intergovernmental Oceanographic Commission of UNESCO. St. Petersburg, Florida, USA.

Scholin, C.A., F. Gulland, G. Doucette and others. 2000. Mortality of sea lions along the central California coast linked to a toxic diatom bloom. *Nature* **403**: 80-84.

Scholin, C., R. Marin, P. Miller, G. Doucette, C. Powell, J. Howard., P. Haydock and J. Ray. 1999. Application of DNA probes and a receptor binding assay for detection of *Pseudo-nitzschia* (Bacillariophyceae) species and domoic acid activity in cultured and natural samples. *Journal of Phycology* **35**: 1356-1367.

### **Selected Contribution**

Scholin, C. S. Jensen, B. Roman, E. Massion, R. Marin, C. Preston, D. Greenfield, W. Jones, K. Wheeler. 2006. The Environmental Sample Processor (ESP) – An Autonomous Robotic Device for Detecting Microorganisms Remotely using Molecular Probe Technology. Proceedings, OCEANS 2006 MTS/IEEE Conference. Boston, MA. Marine Technology Society, Columbia, MD.