

Brian Schlining

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EDUCATION

Masters of Science in Marine Science/Physical Oceanography

1999 Moss Landing Marine Laboratories - Moss Landing, CA

Graduate research focused on the intrusion of equatorial waters into Monterey Bay and associated effects on midwater animal distributions. G.P.A 3.90/4.00. Graduated with distinction.

Bachelors of Science in Biology

1990 [University of Maryland](#) - College Park, MD

WORK EXPERIENCE

[Monterey Bay Aquarium Research Institute](#) - Moss Landing, CA

2004 - present *Software Engineer*

2001 - 2004 *Software Application Developer*

1998 - 2001 *Research Technician*

Develop and support software applications used for oceanographic research, data systems, GIS applications, and hardware control. Some highlights include:

- Lead engineer for the [Video Annotation and References System](#) (VARS) project, a software and hardware system for creating and archiving annotations of deep sea video footage. Built around a relational database management system, VARS is used to annotate video both at sea in real-time and in the lab after an expedition. Due to the frequency of MBARI's remotely operated vehicle (ROV) operations, MBARI employs five staff dedicated to managing a collection of over 15,000 hours of underwater video recorded by the ROV's Tiburon and Ventana. More than one hundred different scientists and staff have used VARS to catalog 2.1+ million observations from MBARI's video collection.
- Contributing engineer to the Shore-side Data System (SSDS) and the Software infrastructure and application for MOOS (SIAM) projects. SSDS and SIAM represent the core software components used for instrument control, data acquisition, and data archiving for both the Monterey Ocean Observing Systems (MOOS) and the Monterey Accelerated Research System (MARS).
- Developed computer models and analytical methods for interpreting bio-optical data collected by MBARI as part of the NASA/SIMBIOS project.
- Project manager for the core mooring data project.

1997 *Research Internship*

Examined physical processes affecting distribution of mesopelagic animals in Monterey Bay.

[California State University Monterey Bay](#) - Seaside, CA

1998 - 1999 *Diving Safety Officer*

Created and administered a scientific diving program meeting the American Academy of Underwater Sciences guidelines for research diving.

[Naval Post-graduate School](#) - Monterey, CA

1998 *Research Technician*

Developed software used for the archiving, visualization, and analysis of oceanographic data collected from drifter buoys deployed in the Mediterranean Sea.

1996, 1998 *Research Assistant*

Assisted software development for MOBY (Marine Optical Buoy), used for the calibration of the SeaWiFS (Sea-Viewing Wide Field-of-view Sensor) satellite package. Participated in data-collecting cruises and assisted with mooring replacement on SCUBA.

1996 - 1998 *Teaching Assistant*

Instructed SCUBA classes and prepared students for research diving in cold-water environments.

1997 *Acting Diving Safety Officer*

Directed scientific diving operations and instructed scientific diving classes.

PUBLICATIONS

Paull, C.K., **B. Schlining**, W. Ussler III, E. Lundsten, J.P. Barry, D.W. Caress, J.E. Johnson, and M. McGann (2010). Submarine Mass Transport Within Monterey Canyon: Benthic Disturbance Controls on the Distribution of Chemosynthetic Biological Communities. *Advances in Natural and Technological Hazards Research*, **28**: 229-246.

Schlining, B. (2006). Turning video into information. In: *Proceedings of the Australian Society for Fish Biology Conference and Workshop on Cutting-edge Technologies in Fish and Fisheries Science*, Hobart, Australia.

Schlining, B. and N. Jacobsen Stout (2006). MBARI's Video Annotation and Reference System. In: *Proceedings of the Marine Technology Society / Institute of Electrical and Electronics Engineers Oceans Conference*, Boston, Massachusetts.

Paull, C.K., **B. Schlining**, W. Ussler III, J.B. Paduan, D. Caress, and H.G. Greene (2005). Distribution of chemosynthetic biological communities in Monterey Bay, California. *Geology*, **33**: 85-88.

Drazen, J.C., S.K. Goffredi, **B. Schlining**, and D.S. Stakes (2003). Aggregations of egg brooding deep-sea fish and cephalopods on the Gorda Escarpment: a reproductive hotspot? *Biological Bulletin*. **205**: 1-7.

Graybeal, J., K. Gomes, M. McCann, **B. Schlining**, R. Schramm, and D. Wilkin (2003). MBARI's SSDS: Operational, extensible data management for ocean observatories. In: *The Third International Workshop on Scientific Use of Submarine Cables and Related Technologies*, Tokyo. pp. 288-292.

Chavez, F.P., J.T. Pennington, C.G. Castro, J.P. Ryan, R.P. Michisaki, **B. Schlining**, P.M. Walz, K.R. Buck, A. McFadyen, and C.A. Collins (2002). Biological and chemical consequences of the 1997-98 El Niño in central California waters. *Progress in Oceanography*, **54**: 205-232.

F.P. Chavez, P.G. Strutton, **B.M. Schlining**. 2000. Bio-Optical Measurements at Ocean Boundaries in Support of SIMBIOS. In: *SIMBIOS Project Annual Report*. pp. 51-55.

MENTORSHIPS

Pierre Venuat, graduate summer intern, University of Poitiers, France (MBARI Deep Sea Guide: designing a web interface that represents information about the Monterey Bay deep sea world). 2005.

Carolina Fayos, undergraduate, California State University, Monterey Bay (interannual variability of oceanic poleward currents of Monterey Bay during 1997-98 El Niño Southern Oscillation [ENSO] years versus prior ENSO and non-ENSO years). 1999.

FELLOWSHIPS

Frohlich Fellowship. CSIRO/CMAR Hobart Laboratories. (2007)