

BIOGRAPHICAL SKETCH

PETER A. JUMARS

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Professional Preparation

B.A.: 1969, University of Delaware, Newark, Delaware (Biological Sciences)

Ph.D.: 1974, Scripps Institution of Oceanography

University of California, San Diego, California (in Oceanography) with R.R. Hessler

Dissertation: "Dispersion patterns and species diversity of macrobenthos in two bathyal communities"

Postdoctoral work: 1974-1975, USC, with Kristian Fauchald in polychaete systematics

Appointments

2007 - present Director, School of Marine Sciences, University of Maine

1999 - present Professor of Oceanography, School of Marine Sciences & Darling Marine Center,
University of Maine

1983 - 1999 Professor, School of Oceanography, University of Washington

1992 - 1993 Acting Director, University Research Initiative in Marine Bioremediation

1986 - 1992 Editor, Limnology and Oceanography

1979 - 1983 Associate Professor, Department or School of Oceanography, University of Washington

1980 - 1982 Oceanic Biology Program (Code 422CB) and Sediment on leave) Dynamics Program
(Code 425GG), Office of Naval Research, Arlington, Virginia

1975 - 1979 Assistant Professor, Department of Oceanography, University of Washington

1974 - 1975 Postdoctoral Research Associate, Allan Hancock Foundation, University of Southern
California, Los Angeles, California

1971 - 1974 Research Assistant, Scripps Institution of Oceanography, La Jolla, University of
California, San Diego, California

1964 - 1969 Research Assistant, Department of Entomology and Applied Ecology, University of
Delaware, Newark, Delaware

Publications over the past three years:

(downloads available at <<http://www.umaine.edu/marine/people/sites/pjumars/>>)

Weissberger, E.J., P.A. Jumars, L.M. Mayer and L.L. Schick. 2008. Structure of a Northwest Atlantic
129. shelf macrofaunal assemblage with respect to seasonal variation in sediment nutritional
quality. *J. Sea Res.*, **60**: 164-175.

Dorgan, K.M., S.R. Arwade and P.A. Jumars. 2008. Worms as wedges: Effects of sediment mechanics on
burrowing behavior. *J. Mar. Res.*, **66**: 219-254.

Dorgan, K.M., S.R. Arwade and P.A. Jumars. 2008. Burrowing in marine muds by crack propagation:
Kinematics and forces. *J. Exp. Biol.* **210**: 4198-4212.

Sato, M., and P.A. Jumars. 2008. Periods and phases of emergence rhythms dependent on season and
depth. *Limnol. Oceanogr.* **53**: 1665-1677.

Voparil, I.M., L.M. Mayer and P.A. Jumars. 2008. Emulsions vs. micelles in the digestion of lipids by
benthic invertebrates. *Limnol. Oceanogr.* **53**: 387-394.

Jumars, P.A. 2007. Habitat coupling by mid-latitude, subtidal, marine mysids: Import-subsidized
omnivores. *Oceanogr. Mar. Biol. — Ann. Rev.* **45**: 89-138.

Jumars, P.A., K.M. Dorgan, L.M. Mayer, B.P. Boudreau and B.D. Johnson. 2007. Physical constraints on
infaunal lifestyles: May the persistent and strong forces be with you. pp. 442-457. In: W. Miller,

III, Ed. *Trace Fossils: Concepts, Problems, Prospects*. Elsevier, Amsterdam.
Dorgan, K.M., P.A. Jumars, B.P. Boudreau and B.D. Johnson. 2006. Macrofaunal burrowing: The medium is the message. *Oceanogr. Mar. Biol. – Ann. Rev.* **44**: 85-121.

Other Significant Publications:

Taylor, L.H., S. M. Shellito, H. U. Abello and P.A. Jumars. 2005. Tidally cued emergence events in a 9. strongly tidal estuary, *Estuaries* **28**: 500-509.
Abello, H.U., S. M. Shellito, L.H. Taylor and P.A. Jumars. 2005. Light-cued emergence and re-entry 10. events in a strongly tidal estuary, *Estuaries* **28**: 487-499. December 2008.

Synergistic Activities:

Cross-trained many non-biological oceanographers in the basic concepts of biological oceanography through an interdisciplinary course at the graduate level and a text tailored to it (1983-1998); mentored successful Ph.D. students, including 4 NSF Graduate Fellows (below)

Edited *Limnology and Oceanography* for six years (1986-1992; as sole editor for the first four years); currently serve as its Associate Editor for Scholarly Reviews

Board service: President of the American Society of Limnology and Oceanography 2002-2004; Board of Directors, Council of Scientific Society Presidents 2004-2008, Chair-Elect 2007, Chair 2008

Co-chaired (with Mark Hay) review and prognosis of biological oceanography for the National Science Foundation (OEUVRE — Ocean Ecology: Understanding and Vision for REsearch) and participated in the synthesis effort (aka Decadal Planning, leading to the report, *Ocean Sciences at the New Millenium*) to combine and update the results of the disciplinary reports in biological, chemical, geological and physical oceanography; currently active in development of benthic ocean observing approaches

Provided or initiated web materials for education:

Doing Science <<http://www.marine.maine.edu/~jumars/science/directory.html>>

Introduction to Physical Thinking

<http://www.marine.maine.edu/%7eeboss/classes/SMS_491_2003/SMS_491_index.htm>

Design of Marine Organisms <http://www.marine.maine.edu/~jumars/classes/SMS_481/index.html>

Fluid Physics for High School Students <<http://aslo.org/education/teaching/fluids.html>>

Low Reynolds Number Phenomena <http://aslo.org/education/teaching/suspension_feeding.pdf>

-adviser with A.R.M. Nowell), Oregon State University