

## **LAUREN S. MULLINEAUX**

Senior Scientist and Chair, Biology Department  
Woods Hole Oceanographic Institution  
<http://web.whoi.edu/mullineaux/>

## **RESEARCH INTERESTS**

Benthic community ecology; Larval dispersal and settlement; Population connectivity; Deep-sea biology

## **PROFESSIONAL PREPARATION**

B.A., summa cum laude, Biology, Pomona College, 1980  
M.Sc., Earth Sciences, University of California, San Diego, 1984  
Ph.D., Oceanography, U.C. San Diego, Scripps Institution of Oceanography, 1987

## **APPOINTMENTS**

Chair, Biology Department, Woods Hole Oceanographic Institution, 2016 – present  
Senior Scientist, Biology Department, Woods Hole Oceanographic Institution, 2001- present  
Associate Scientist (tenured 1996), Biology Department, WHOI, 1992 -2001  
Assistant Scientist, Biology Department, WHOI, 1988 - 1992  
Postdoctoral Investigator, Ocean Engineering Department, WHOI, 1987 - 1988

## **AWARDS AND HONORS**

Arnold B. Arons Award for Excellence in Teaching, Advising, and Mentoring, 2004  
WHOI Ocean Life Fellow, 2011-2015  
Henry L. and Grace Doherty Chair in Oceanography, 2008-2010  
Holger W. Jannasch Chair for Excellence in Oceanography, 2002-2007

## **CRUISE EXPERIENCE**

Chief Scientist on 11 blue-water cruises (Atlantis /DSV Alvin, Atlantis II, Kila/DSV Pisces V)  
Principal Investigator or participant in a total of 32 cruises since 1979.

## **EDUCATIONAL ACTIVITIES**

Chair, JCBO, MIT/WHOI Joint Program in Oceanography, 2015 - 2016  
Coordinator WHOI Summer Student Fellow Program, 2014 - 2016  
Education Coordinator (J. Seward Johnson Chair), Biology Dept., WHOI, 1997-2002  
Instructor for MIT/WHOI courses in Biol Oce, Communicating Ocean Sci, Topics in Mar Ecol  
Graduate Advisor for 11 MIT/WHOI Joint Program students  
Postdoctoral Advisor for 7 WHOI Scholars and Investigators  
Undergraduate Research Advisor for 36 students including 9 under-represented minorities  
High School Research Advisor for 4 students; Coach and Judge for annual FHS science fair

## **OTHER SELECTED PROFESSIONAL ACTIVITIES**

Associate Editor, Deep-Sea Research (2015 – 2016)  
EPSCoR Advisory Board Member for program in Marine Science at U Virgin Islands  
Executive Committee Member, NSF Ridge2000, 2007-2008  
Associate Editor, Limnology and Oceanography, 2000-2006  
Visiting Professor, Université Pierre & Marie CURIE, Paris France, 2003  
Member, National Research Council Panel on Seafloor Observatories, 1999-2000  
Chair, InterRidge Biology Committee (International), 1996-2000

## **NATIONAL AND INTERNATIONAL COMMITTEES:**

2015-pres Advisory Board for EPSCoR project (5yr, \$20M grant to USVI)  
2015-pres Co-Chair InterRidge Working Group on Vent Connectivity & Resilience  
2015-pres Member, DOSI Working Group on Deep-Sea Climate Change  
2014-pres ASLO Award Selection Committee  
2014-pres Co-Chair, Scientific Committee for 6<sup>th</sup> Int'l Symposium on Chemosynthesis-Based Ecosystems, to be held in Woods Hole Aug 2017  
2013-pres Review Editor, Frontiers in Microbiology  
2010-pres INDEEP Population Connectivity Working Group  
2002-pres Member, Canada Research Chairs College of Reviewers  
2007-2008 Executive Committee Member, NSF Ridge2000  
2006-2008 Steering Committee Member, NSF Ridge2000  
2007-2008 Chair, East Pacific Rise Oversight Committee (Ridge2000)  
2000-2006 Associate Editor, Limnology and Oceanography  
2003 Visiting Professor, Université Pierre & Marie CURIE, Paris France  
2002-2003 Member, NSF Steering Committee on Cabled Observatories for Time Series  
1999-2000 Member, National Research Council Panel on Seafloor Observatories  
1999 Member, NSF Ridge2000 organizing committee  
1996-2000 Chair, InterRidge Biology Committee (International)  
1995-2000 Member, InterRidge Steering Committee (International)  
1995-2001 Member, NSF LARVE Coordinating Committee  
1993-1997 Member, NSF RIDGE Steering Committee

## **NATIONAL AND INTERNATIONAL WORKSHOPS AND SYMPOSIA:**

2015 COP21, Paris France Dec 10  
2015 6<sup>th</sup> International Oyster Symposium, WBNERR, Oct 20  
2015 Site visit for EPSCoR Mare Nostrum project at UVI, St. Thomas, Oct 22-23  
2015 Deep-Sea Biology Symposium, Aveiro Portugal, Aug 31 – Sep 4  
2015 Deep Ocean Stewardship Initiative (DOSI) Workshop, Aveiro Portugal, Aug 30  
2015 Conférences Jacques-Monod, Marine Ecosystems Biology, Roscoff Jun 22-26  
2013 5<sup>th</sup> Int'l Symposium on Chemosynthesis-Based Ecosystems, Victoria, Aug 18  
2012 Nautilus Minerals workshop, Salt Lake, Feb. 18-19 (Invited participant)  
2009 4<sup>th</sup> Int'l Symposium on Chemosynthesis-Based Ecosystems, Okinawa Jun 28  
2009 Deep-Sea Mining Workshop and Colloquium, Woods Hole, MA; Apr 1-3  
2009 WHOI Ocean Ridge Initiative Workshop, Woods Hole, Feb 25  
2008 Marine Benthic Ecology & Biodiversity Symposium for J.F. Grassle, Nov 20-21  
2008 COI Coastal Symposium, Woods Hole, Nov 13  
2008 Ridge2000 St. Com. meeting, Boston, Nov 6-7  
2008 Ridge 2000 MAR workshop, Portland  
2007 InterRidge Theoretical Institute, Woods Hole Sep 10-14, *invited speaker*  
2006 Seamount Biogeosciences Network workshop, San Diego, 24-25 Mar; *keynote speaker and working group chair*  
2004 ORION meeting, *Working Group Rapporteur*, San Juan Puerto Rico, 4-9 Jan  
2003 RIDGE2000 Community meeting, *Working Group Chair*, Boulder, CO Nov 6-8  
2002 SCOTS planning workshop, Sept.  
2002 RIDGE2000 Implementation Plan workshop, 6-9 April  
2002 Regional planning workshop for NOAA Ocean Exploration, Avery Pt. CT, 27 Mar  
2001 International Symposium on Deep-sea Vent Biology; Brest Fr. 8-13 Oct; *organizing committee*  
2001 LARVE Results Symposium; May 19-22; *convenor*

2001 Pilot Census of Marine Life: Gulf of Maine Workshop; May 9-10; *working grp Chair*  
 2001 Census of Marine Life: ChEss Workshop; Woods Hole, 16-17 March, *panel member*  
 2001 ASLO "Benthos" session, Feb 12-16; *session chair*  
 2000 Pilot Census of Marine Life: Gulf of Maine & Georges Bank; Woods Hole, May 2-3  
 2000 Management of Hydrothermal Vent Ecosystems Workshop, 28-29 Sept; *organizer*  
 2000 Symposium on Seafloor Observatories, Islamodoro Jan 9-12; *NAS organizing panel*  
 1999 RIDGE 2000 Meeting, 22-25 Sep; *on organizing committee*  
 1999 InterRidge Steering Committee Meeting, 25-26 Jun  
 1998 RIDGE 9N EPR results symposium, 24-26 Sept; *keynote biology speaker*  
 1998 InterRidge Steering Committee Meeting, 14-15 Sep  
 1997 RIDGE Steering Committee Meeting, 17-18 Oct.  
 1997 InterRidge Steering Committee Meeting, 25-26 Sep  
 1997 RIDGE Steering Committee Meeting, June  
 1996 RIDGE Steering Committee Meeting, 7-9 Oct  
 1996 InterRidge Steering Committee Meeting 25-26 Sep  
 1995 International Conference on Invertebrate Reproduction, 5-10 Aug; *inv. speaker*  
 1995 InterRidge Biology Workshop, 23-25 Apr.; *invited participant*  
 1995 LARVE Experimental Design Workshop (NSF), 21-22 Apr; *convenor*  
 1995 RIDGE Steering Committee Meeting, 20-22 Feb.  
 1994 Dispersal and Gene Flow at Hydrothermal Vents Workshop (NSF); *convenor*  
 1994 RIDGE Steering Committee Meeting, 20-24 Feb.  
 1993 RIDGE Theoretical Institute, 27 Aug. - 3 Sept.; *convenor and speaker*  
 1992 ONR Topographic Interactions Workshop, 13-14 Oct.; *invited participant*  
 1992 RIDGE Biology Workshop, 12 Oct.; *Co-chair*  
 1992 INTER-RIDGE Workshop, 11-13 Mar.; *invited as U.S. biology delegate*  
 1991 Am Soc Zoologists Symposium on Deep-Sea Reproduction, 28-30 Dec.; *invited speaker*  
 1991 ONR Topographic Interactions Workshop, 20-21 Nov.; *invited participant*  
 1991 RIDGE Temporal Variability Workshop, 27 Aug. and 13-16 Nov.; *group chair*  
 1989 ONR Topographic Interactions Workshop, 16-17 Nov.; *invited participant*  
 1989 ONR Biosurfaces Workshop, 20-22 May; *invited participant*  
 1988 ONR Topographic Interactions Workshop, 10-13 April; *invited participant*  
 1988 ONR Topographic Interactions Workshop, 15-16 Nov.; *invited participant*  
 1987 ONR Biosurfaces Workshop, 18-20 Nov.; *invited participant*  
 1987 NOAA Undersea Science Symposium, 21-23 Oct.; *invited speaker*

#### **INVITED PRESENTATIONS:**

2016 Life in the Ocean, MIT Lecture Series, Jan 25  
 2015 COP21, Paris France Dec 10  
 2015 PROMEX Lectures, Banyuls sur Mer France, Dec 7-8  
 2015 6<sup>th</sup> International Oyster Symposium, WBNERR, Oct 20  
 2015 Jacques-Monod Conference, Roscoff France (withdrew), Jun 22-26  
 2015 MIT/WHOI Geodynamics Seminar Series: Hydrothermal Systems, Mar 2  
 2014 University of Maine, Marine Science Seminar, Orono, ME, Apr 4  
 2013 Pint of Science talk, WHOI Biology Dept  
 2009 Deep-Sea Mining Workshop and Colloquium, Woods Hole, Apr. 1-3  
 2008 Coastal Ocean Symposium, Nov. 13  
 2007 InterRidge Theoretical Institute, invited speaker, Woods Hole, Sept 10-14  
 2007 ASLO invited speaker, Santa Fe, NM, (4-9 Feb.)  
 2004 BUMP seminar, 15 Sept.  
 2003 VisitingScholar Lectures, Universite Pierre et Marie Curie, Paris (17-19 Jun)

2001 Plenary talk at LARVE Results Symposium, Utah, May 20-22  
 2001 Guest lecture in Marine Biological Laboratory Geochemistry course  
 2001 University of Charleston Graduate Colloquium, visiting scholar  
 2000 Guest lecture in Scripps Institution of Oceanography Deep-Sea Biology course  
 2000 Plenary talk at Workshop on Management of Hydrothermal Vent Ecosystems  
 2000 Office of Naval Research Symposium: Oceanography the Making of a Science; March 30-31, Woods Hole, MA  
 1999 Plenary talk at RIDGE2000 meeting, Newport OR  
 1999 MIT Environmental Brown Bag Seminar, Cambridge, MA  
 1998 Scripps Institution of Oceanography, La Jolla, CA  
 1995 Pennsylvania State University, PA  
 1995 International Conference on Invertebrate Reproduction, Santa Cruz, CA  
 1995 University of New Hampshire, Durham  
 1993 RIDGE Theoretical Institute Short Course, Big Sky, MO  
 1991 American Society of Zoologists, Atlanta, GA  
 1991 University of Massachusetts, Boston  
 1990 Scripps Institution of Oceanography, La Jolla, CA  
 1989 University of Connecticut, Avery Point  
 1989 College Faculty Workshop on Oceanography, Woods Hole, MA  
 1989 Northeastern University, Boston, MA  
 1989 State University of New York, Stony Brook  
 1988 Marine Biological Laboratory, Woods Hole, MA  
 1988 University of California, Santa Barbara  
 1987 University of Rhode Island, Narragansset  
 1987 Annual Naval Officer's Reserve meeting, Woods Hole, MA

#### **WHOI/MIT COMMITTEES:**

2015-2016 Chair JCBO  
 2015 Search Committee for WHOI HR Director  
 2015 Chair, ad-hoc promotion committee for Amanda Spivak  
 2015-pres Facilities Planning Steering Committee  
 2015 Contributor to JCPO Comprehensive Exam  
 2014-pres Summer Student Fellow Coordinator  
 2013-pres JCBO member  
 2013 Linda Morse Porteous Award Committee  
 2013-pres Biology Mentoring Committee for Joel Llopiz  
 2013-2015 Biology Mentoring Committee for Neel Aluru  
 2012-2015 Biology Performance Evaluation Committee (Assistant and Assoc. Sci)  
 2012-2015 Biology Mentoring Committee for Julie Kellner  
 2011-pres Science Manager, Shore Lab Bio-Physical Fluid Dynamics Facility  
 2011-2014 SciSEC  
 2011-pres Marine Chemistry Mentoring Committee for Amanda Spivak  
 2011-pres Biology hiring committee  
 2010-2011 Co-chair, JP Strategic Planning Committee  
 2010 Chair, advisory committee for selection of next Biology Department Chair  
 2010 Chair, JCBO Comprehensive Exam committee  
 2010 Contributor to JCPO Comprehensive Exam  
 2009 Search committee for Chief Development Officer  
 2009 Mid-ocean Ridge Initiative planning workshop (DOEI)  
 2008 MIT Faculty Environmental Network

2007	Communications Advisory Committee
2006	Promotion Committee for S. Sievert
2005-2006	Chair: Gender Equity at Sea ad hoc committee
2005	JCBO Exam Committee
2005	Promotion Committee for T. Shank
2005	Chair, MIT/WHOI Joint Program Gender Equity ad hoc Committee for Research Cruise and Field Program Activities
2004	Chair, Biology Aquarium Room ad hoc committee
2004	OLI proposal review committee
2003-2004	Mentoring Pilot Program
2003-2006	DEOI Advisory Board
2001-2003	Biological Oceanography Exam Committee
2001-2003	Biology Staffing Committee
1995-1998	Deep Submergence Advisory Committee
2002	Promotion Committee for K. Halanych
2001	Promotion Committee for M. Neubert
2001	Biology Dept. Exec. Search Committee
2001, 2003	Biological Oceanography Exam Committee Chair
2000	RCRC review panel
1997-2002	Joint Committee on Biological Oceanography
1997-2002	Admissions Committee
1997-1999	Women's Committee
1996-2002	Education Council
1995-2000	Biology Curriculum Committee
1995	Review committee, Mellon Independent Study Awards
1995	Biology Visiting Scholar/Seminar speaker selection committee
1993	Benthic Ecology Search Committee (chair)
1992	WHOI Assembly
1991-1994	Summer Fellow selection committee
1990-1992	Staff Committee
1990	Selection committee for Jason Argonauts
1989-2002	Friends of Vents
1989	Review committee, Mellon Independent Study Awards
1988	Women's Staff Visiting Scholar Program

#### **WHOI EDUCATIONAL ACTIVITIES:**

Instructor for graduate courses in Biological Oceanography (MIT 7.47: 1989-1994; 2001 – 2004; 2009 – 2011; 2015-pres); Communicating Ocean Sciences (MIT 12.754; 2006, 2008, 2010, 2012, 2014), Deep-Sea Patterns & Processes (MIT 7.431: 1996, 2013), Larval Ecology (MIT 7.433: 1995, 2013), Plankton Ecology in the Dynamic Ocean (MIT 7.431, 2011), Marine Invertebrates of Cape Cod (2002, 2005), Benthic Organisms in Flow (MIT 7.432: 2000), Biological Interactions in Benthic Communities (MIT 7.432: 1998)

Postdoctoral Advisor: Scott France (1992-1993), Anna Metaxas (1997-1999), Heather Hunt (1998-2000), Stace Beaulieu (1998-2000), Nathalie Reyns (2005-2007), Irene Garcia Berdeal (2006-2007), Shawn Arellano (2010 – 2012), Ashley Lillis (2015-pres)

Graduate Advisor: Stacy Kim (PhD 1997), Ewann A. Berntson (PhD 1998), Gorka Sancho (PhD 1998), Lara K. Gulmann (PhD 2004), Heidi Fuchs (PhD 2005), Rob Jennings (PhD 2005), Diane Poehls (PhD 2007), Carly Strasser (PhD 2008), Meredith White (PhD 2012), Skylar Bayer (MS 2011), Jeanette Wheeler (PhD exp 2015)

Thesis Committee Member, MIT/WHOI Joint Program: Cheri Recchia (PhD 1995), Bonnie Ripley (PhD 1998), Michael Atkins (PhD 2000), Yale Passamaneck (PhD 2003), Kelton McMahon (PhD 2010), Christine Mingione (PhD 2010), Li Ling Hamady (PhD 2013), Alex Bergen (PhD exp 2017)

Thesis Committee Member, other programs: Rachel Carmichael (Boston University, PhD 2004), MirtaTeichberg (Boston University PhD 2007), Eric Crandall (Boston University PhD 2007)

Thesis Proposal Defense Chair: Brenda Jensen (1997), Rebecca Coverdale (1997), Robert Hamersley (1998), Mark Hill (1998), Jim Ruzicka (2000), Masami Fujiwara (2000), John Tolle (2000), Annette Frese (2000), Sheri Simmons (2003), Kristin Whalen (2005), Ben Jones (2014)

Thesis Defense Chair: Connie Hart (1998), Sue Bello (1999), Mark Hill (2000), Robert Hamersley (2001), Sheri Simmons (2006), Benjamin Walther (2007), Petra Klepac (2007), Kristen Whalen (2008), Abigail Fusaro (2008), Kate Buckman (2009)

Undergraduate Research Advisor: John Withey (1990), Wendy Walker (1992), Kelly Rankin (1993), Shannon Smith (minority, 1994), Erica Goldman (1995), Erin Fisher (1996), Robert Dunn (1997), Sheri Simmons (1998), Archie McLean (1999-2000), Kristin France (1999), Anne Beaudreau (2000), Nilauro Markus (2000), Andrew Sweetman (2000-2001), Barbara Juncosa (minority, 2001), Shawn Arellano (minority, 2001), Yuri Yamashita (2002), Taki Michaelidis (2003), McKenzie Johnson (2004), Michael Workman (2004), Lynne Davies (2004), Alexis Jackson (minority, 2005), Nika Stagicic (2006), Skylar Bayer (2007), Gar Secrist (2009), Adrienne George (PEP, 2009), Anna Wargula (2010), Nam Siu (PEP, 2010), Jacob Kravens (PEP, 2011), Brenna McGann (2011), Rebecca Certner (2011-2012), Andre Price (PEP, 2012), Elaine Luo (2013), Jennifer Middleton (PEP 2013), Amber Emerson (minority 2014), Mariah Dennis (PEP 2014), Carlton Metz (PEP 2015), Michael Tobin (2016)

High School Research Advisor: Samantha Hutchinson (2003), Stephanie Pommrehn (2004), Kim Johansson (2010), Charlie Goodyear (2010)

## **OTHER EDUCATIONAL AND OUTREACH ACTIVITIES:**

Instructor for PROMEX: Deep-Sea Ecosystems and Extreme Environments, Université Pierre et Marie Curie, Banyuls sur Mer (2009, 2011, 2015)

Thesis Committee Member: Florence Pradillon (PhD 2002 Université Pierre et Marie Curie), Ruth Carmichael (PhD 2004 Boston University Marine Program), MirtaTeichberg (PhD 2007 BUMP), Eric Crandall (PhD 2008 BUMP),

Tour for NMFS Aquarium student interns (2002; 2003)

Korean TV interview on hydrothermal vents (March 2003)

Blue Planet radio interview (April 2002)

Earth and Sky radio interview (July 2002)

Mentor for 'Mission 2005- Solving complex problems' (MIT course 12.000); Fall 2002

Presentations at Massachusetts Marine Educators workshops (2001, 2002)

Featured scientist in NSF-sponsored web site 'Remarkable Careers in Oceanography: Women Exploring the Oceans' ([www.womenoceanographers.org](http://www.womenoceanographers.org))

Science demonstrations at local schools through Woods Hole Science and Technology Education Partnership (1992-present)

Science presentations to journalists and writers for WHOI 'Media Fellowship' program (1999-present)

Contribution of curriculum materials to books for grades 4-8 published by Harcourt: 'Off to the Sea' by D. Kovacs; 'Down to a Sunless Sea' by K. Madin and 'Dive to the Deep Ocean' by D. Kovacs.

Contribution of deep-sea specimens and advice to the 'Extreme Deep: Mission to the Abyss' museum exhibit, which tours museums nationally (1999-pres)

Coach for Science Projects, Lawrence School (Falmouth public middle school); 1999- present

Judge for Science Fairs, Falmouth Public Schools (1994-present) and Falmouth Academy (1999)

Volunteer in Public Schools (Mullen Hall School; 1998-present)

Boston Museum of Science "Science by Mail" Correspondent (1994-1996)

## PUBLICATIONS, REFEREED

- Wheeler, J.D., E.Y. Luo, K.R. Helfrich, E.J. Anderson, L.S. Mullineaux (in review). Light stimulates swimming behavior of larval eastern oysters (*Crassostrea virginica*) in turbulent flow. *Mar Ecol Prog Ser*
- White, M.M., L.S. Mullineaux, D.C. McCorkle, A.L. Cohen (in revision). Isolating critical exposure windows to elevated pCO<sub>2</sub> during early development of larval bay scallops (*Argopecten irradians*). *Limnology & Oceanography*
- 2016 Wheeler, JD & KYK Chan (co-first authors), EJ Anderson, LS Mullineaux (2016). Effects of turbulence on larval swimming and orientation of the sea urchin *Arbacia punctulata*. *J Exp Biol* 219: 1303-1310 [doi: 10.1242/jeb.129502](https://doi.org/10.1242/jeb.129502)
- 2015 Nedoncelle, K., Lartaud, F., Pereira, L. C., Yucel, M., Thurnherr, A. M., Mullineaux, L., & Le Bris, N. (2015). Bathymodiolus growth dynamics in relation to environmental fluctuations in vent habitats. DEEP-SEA RESEARCH PART I-OCEANOGRAPHIC RESEARCH PAPERS, 106, 183-193. [doi: 10.1016/j.dsr.2015.10.003](https://doi.org/10.1016/j.dsr.2015.10.003)
- 2015 Wheeler, J.D., K.R. Helfrich, E.J. Anderson, L.S. Mullineaux. Isolating the hydrodynamic triggers of the dive response in eastern oyster larvae. *Limnol & Oceanogr* 60: 1332-1343
- 2014 Mullineaux, L.S., Deep Sea Hydrothermal Vent Communities. Ch. 17 in: Bertness, M., Bruno, M., Silliman, B, Stachowicz, J. (Eds.), *Marine Community Ecology and Conservation*. Sinauer, Sunderland, Massachusetts.
- 2014 White, M.M., L.S. Mullineaux, D.C. McCorkle, A.L. Cohen. Elevated pCO<sub>2</sub> during fertilization of the bay scallop *Argopecten irradians* reduces larval survival but not shell size. *Mar Ecol Prog Ser* 498: 173-186
- 2013 Mills, S.W., Mullineaux, L.S., Beaulieu, S.E., Adams, D.K. Persistent effects of disturbance on larval patterns in the plankton after an eruption on the East Pacific Rise. *Mar. Ecol. Prog. Ser.* 491:67-76
- 2013 Mullineaux, L.S., McGillicuddy, D.J., Mills, S.W., Kosnyrev, V.K., Thurnherr, A.M., Ledwell, J.R., Lavelle, J.W. Active positioning of vent larvae at a mid-ocean ridge. *Deep Sea Research II* 92: 46-57
- 2013 Wheeler, J.D., Anderson, E.J., Helfrich, K.R., McGann, B., Staats, P., Wargula, A.E., Wilt, K., Mullineaux, L.S. 2013. Upward swimming of competent oyster larvae (*Crassostrea virginica*) persists in highly turbulent flow as detected by PIV flow subtraction. *Mar. Ecol. Prog. Ser.* 488: 171-185.
- 2013 White, M.M., McCorkle, D.C., Mullineaux, L.S., Cohen, A.L. Early Exposure of Bay Scallops (*Argopecten irradians*) to High CO<sub>2</sub> Causes a Decrease in Larval Shell Growth *Plos One* 8 (4), e61065.
- 2012 Mullineaux LS, Le Bris N, Mills SW, Henri P, Bayer SR, Secrist RG, Siu N. Detecting the influence of initial pioneers on succession at deep-sea vents. *PLoS ONE* 7: e50015. [doi:10.1371/journal.pone.0050015](https://doi.org/10.1371/journal.pone.0050015)
- 2012 Fornari DJ, Von Damm KL, Bryce JG, Cowen JP, Ferrini V, Fundis A, Lilley MD, Luther GW, Mullineaux LS, Perfit MR, Meana-Prado MF, Rubin KH, Seyfried WE, Shank TM, Soule SA, Tolstoy M, White SM (2012) The East Pacific Rise between 9°N and 10°N: Twenty-five years of integrated, multidisciplinary oceanic spreading center studies. *Oceanography* 25:18-43

- 2012 Lavelle JW, Thurnherr AM, Mullineaux LS, McGillicuddy DJ, Ledwell JR. The prediction, verification and significance of flank jets at mid-ocean ridges. *Oceanography* 25:277-283.
- 2011 Adams\* DK, McGillicuddy DJ, Zamudio L, Thurnherr AM, Liang X, Rouxel O, German CR, Mullineaux LS. Surface-generated mesoscale eddies transport deep-sea products from hydrothermal vents. *Science* 332:580-583
- 2011 Thurnherr, A. M., J. R. Ledwell, J. W. Lavelle, L. S. Mullineaux. Circulation near the crest of the East Pacific Rise between 9° and 10°N. *Deep-Sea Res. I* 58: 365-376.
- 2011 Bayer SR, Mullineaux LS, Waller RG, Solow AR (2011) Reproductive traits of pioneer gastropod species colonizing deep-sea hydrothermal vents after an eruption. *Marine Biology* 158:181-192
- 2010 Lavelle, J.W., A.M. Thurnherr, J. R. Ledwell, D.J. McGillicuddy, Jr., L.S. Mullineaux. Deep ocean circulation and transport where the East Pacific Rise at 9–10°N meets the Lamont Seamount chain. *Journal of Geophysical Research – Oceans* 115:C12073
- 2010 Fuchs, H. L., A. R. Solow, and L. S. Mullineaux. Larvae from different adult habitats have genus-specific responses to turbulence in a tidal channel. *Journal of Marine Research* 68:153-188
- 2010 Adams, D.K., S.W. Mills, T.M. Shank, L.S. Mullineaux. Expanding dispersal studies at hydrothermal vents through species identification of cryptic larval forms. *Marine Biology* 157:1049-1062
- 2010 McGillicuddy DJ, Lavelle W, Thurnherr AM, Kosnyrev VK, Mullineaux LS. Larval dispersion along an axially symmetric mid-ocean ridge. *Deep Sea Res I* 57:880-892
- 2010 Mullineaux LS, Adams DK, Mills SW, Beaulieu SE. Larvae from afar colonize deep-sea hydrothermal vents after a catastrophic eruption. *PNAS* 107:7829–7834
- 2009 Mullineaux, L.S., F. Micheli, C.H. Peterson, H.S. Lenihan, N. Markus. Historical effects on succession: imprint of past conditions on structure of a deep-sea hydrothermal vent community. *Oecologia* 161:387-400.
- 2009 Rona, P. A., A. Seilacher, C. de Vargas, A. J. Gooday, J. M. Bernhard, S. Bowser, C. Vetriani, C. O. Wirsen, L. Mullineaux, R. Sherrell, J. F. Grassle, S. Low, R. A. Lutz. *Paleodictyonnodosum*: A living fossil on the deep-sea floor. *Deep-Sea Research II* 56: 1700-1712
- 2009 Beaulieu, S.E., Mullineaux, L.S., Adams, D.K., and Mills, S.W. Comparison of a sediment trap and plankton pump for time-series sampling of larvae near deep-sea hydrothermal vents. *Limnology and Oceanography: Methods* 7:235-248
- 2009 Metaxas, A., L.S. Mullineaux and J. Sisson. Distribution of echinoderm larvae relative to the halocline of a salt wedge. *Mar. Ecol. Prog. Ser.* 377: 157-168
- 2009 Jennings, R.M., T. M. Shank, L. S. Mullineaux, and K. M. Halanych. Assessment of the Cape Cod phylogeographic break using the bamboo worm *Clymenellatorquata* reveals the role of regional water masses and dispersal. *J. Heredity* 100:86-96
- 2009 Lenihan, H.S., S.W. Mills, L.S. Mullineaux, C.H. Peterson, C.R. Fisher, F. Micheli. Biotic interactions at hydrothermal vents: recruitment inhibition by the mussel *Bathymodiolus thermophilus*. *Deep-Sea Research* 155:1707-1717.
- 2008 Strasser, C.A., L. S. Mullineaux, S. R. Thorrold. Temperature and salinity effects on elemental uptake in the shells of larval and juvenile softshell clams (*Mya arenaria*). *Mar.*

*Ecol. Prog. Ser.* 370- 155-169.

- 2008 Tyler, P.A., S. Pendlebury, S.W. Mills, L.S. Mullineaux, K.J. Eckelbarger, M. Baker and C.M. Young. Reproduction of gastropods from vents on the East Pacific Rise and the Mid-Atlantic Ridge. *J. Shellfish Res.* 27: 107–118
- 2008 Strasser, C.A., L.S. Mullineaux and B.D. Walther. Growth rate and ontogeny effects on *Mya arenaria* shell chemistry: implications for biogeochemical studies. *J. Exp. Mar. Biol. Ecol.*, 355: 153 – 163.
- 2008 Adams, D.K. and L.S. Mullineaux. Supply of gastropod larvae to hydrothermal vents reflects transport from local larval sources. *Limnology and Oceanography* 53: 1945 – 1955.
- 2007 Strasser, C.A., S.R. Thorrold, V.R. Starczak, and L.S. Mullineaux. Laser ablation ICP-MS analysis of larval shell in softshell clams (*Mya arenaria*) poses challenges for natural tag studies. *Limnology and Oceanography Methods* 5: 241-249
- 2007 Fuchs, H., M. Neubert and L.S. Mullineaux. Effects of turbulence-mediated larval behavior on larval supply and settlement in tidal currents. *Limnol Oceanogr* 52: 1156-1165
- 2007 Mills, S.W., L.S. Mullineaux and P.A. Tyler. Habitat associations in gastropod species at East Pacific Rise hydrothermal vents (9°50'N). *Biological Bulletin* 212: 185-194
- 2006 Neubert, M., L.S. Mullineaux and M.F. Hill. A metapopulation approach to interpreting diversity at deep-sea hydrothermal vents. In 'Marine Metapopulations', J. Kritzer and P. Sale, eds., Elsevier Academic Press, pp. 321-350.
- 2005 Pradillon, F., M. Zbinden, L.S. Mullineaux and F. Gaill. Effects of patch dynamics on size-structure and reproductive maturity of *Alvinellapompejana* (Polychaeta: Alvinellidae) populations. *Marine Ecology Progress Series* 302: 147-157
- 2005 Mullineaux, L.S., S.W. Mills, A. K. Sweetman, A.H. Beaudreau, A. Metaxas, H.L. Hunt. Spatial structure and temporal variation in larval abundance at hydrothermal vents on the East Pacific Rise. *Marine Ecology Progress Series* 293: 1-16
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