

CURRICULUM VITAE

Byron Christopher Crump

Horn Point Laboratory

University of Maryland Center for Environmental Science

2020 Horns Point Rd.

Cambridge, Maryland 21613

Phone: 410-221-8382

Fax: 410-221-8490

Email: bcrump@hpl.umces.edu

I. Personal Data

Date of birth: January 25, 1968

Place of Birth: Augsburg, Germany

Citizenship: USA

II. Education

1990 B.A., Oberlin College. Biology.

1996 M.S., University of Washington, Seattle. Biological Oceanography.

1999 Ph.D., University of Washington, Seattle. Biological Oceanography.

III. Professional Background

1999-2003 Postdoctoral Scientist, The Ecosystems Center, Marine Biological Laboratory, Woods Hole, Massachusetts.

2003- Assistant Professor, University of Maryland Center for Environmental Science, Horn Point Laboratory, Cambridge, Maryland. 2003 to present

IV. Research

A. Areas of professional expertise

Microbial ecology. Bacterial and Archaeal diversity. Organic matter and nutrient cycling. Microbial food web structure. Composition and development of microbial communities. Influence of hydrodynamics and particle cycling on microbial activity.

B. Publications

1. Papers in Refereed Journals

- Crump, B.C., M. Bahr, G.W. Kling, and J.E. Hobbie. 2003. Bacterioplankton community shifts in an arctic lake correlate with seasonal changes in organic matter source. *Appl. Environ. Microbiol.* **69**:2253-2268.
- Zwart G., E.J. van Hannen, A.P. Kamst-van Agterveld, K. van der Gucht, E.S. Lindström, J. Van Wichelen, T. Lauridsen, B.C. Crump, S.K. Han, and S. Declerck. 2003. Rapid screening for freshwater bacterial groups using reverse line blot hybridization. *Appl. Environ. Microbiol.* **69**: 5875-5883.
- Klepac-Ceraj V., M. Bahr, B.C. Crump, A.P. Teske, J.E. Hobbie, and M.F. Polz. 2004. Large-scale analysis of 16S rRNA gene sequences reveals high diversity and unexpected dominance of δ -proteobacterial SRB-like sequences in salt marsh sediment. *Environ. Microbiol.* **6**:686-698. [UMCES Contribution No. 3816]
- Crump, B.C., C.S. Hopkinson, M.L. Sogin, and J.E. Hobbie. 2004. Microbial biogeography along an estuarine salinity gradient: the combined influences of bacterial growth and residence time. *Appl. Environ. Microbiol.* **70**:1494-1505. [UMCES Contribution No. 3831]
- Bahr, M., B. C. Crump, J. E. Hobbie, and A. Teske. 2005. Molecular characterization of sulfate-reducing prokaryotes during an annual cycle in a New England salt marsh. *Environmental Microbiology* **7**(8):1175-1185. [UMCES Contribution No. 3834]
- Crump B. C., and J. E. Hobbie. 2005. Synchrony and seasonality in bacterioplankton diversity of two temperate rivers. *Limnol and Oceanogr* **50**:1718-1729. [UMCES Contribution No. 3944]
- Judd, K. E., B. C. Crump, and G. W. Kling. 2006. Variation in dissolved organic matter controls bacterial production and community composition. *Ecology* **87**:2068-2079. [UMCES Contribution No. 4080]
- Kan J. J., B. C. Crump, K. Wang, and F. Chen. 2006. Bacterioplankton community in Chesapeake Bay: Predictable or random assemblages. *Limnology and Oceanography* **51**:2157-2169. [UMCES Contribution No. 4079]
- Judd, K. E., B. C. Crump, and G. W. Kling. 2007. Bacterial responses in activity and community composition to photo-oxidation of dissolved organic matter from soil and surface waters. *Aquatic Sciences* **69**:96-107. [UMCES Contribution No. 4081]

Crump, B. C., H. E. Adams, J. E. Hobbie, and G. W. Kling. 2007. Biogeography of freshwater bacterioplankton in lakes and streams of an Arctic tundra catchment. *Ecology* 88:1365-1378 [UMCES Contribution No. 4140]

Crump, B. C., C. Peranteau, B. Beckingham, and J. C. Cornwell. 2007. Respiratory succession and community succession of bacterioplankton in seasonally anoxic estuarine waters. *Applied and Environmental Microbiology* 73:6802-6810 [UMCES Contribution No. 4139]

2. Books or Chapters

Crump, B. C. 2005. Book review of del Giorgio, P. A., and P. J. le B. Williams, *Respiration in aquatic systems*. Oxford University Press. *Limnology and Oceanography Bulletin*, December, 2005. [UMCES Contribution No. ES-89-05]

Crump, B. C., H. W. Ducklow, and J. E. Hobbie. Submitted. Estuarine Microbial Food Webs. *In: Estuarine Ecology*. Day, J. W., W. M. Kemp, and A. Yanez-Arancibia (eds.) Wiley Interscience

4. Papers Submitted for Publication

Bowen, J. L., B. C. Crump, L. A. Deegan and J. E. Hobbie. Submitted. Increased supply of ambient nitrogen has minimal effect on salt marsh bacterial production. *Ecology*.

C. Contracts and Grants

1. Awarded

a. Active

Dynamic stability and particle transformations: tracing pathways of production in Estuarine Turbidity Maxima. National Science Foundation, Biological Oceanography. 2005-2009. \$2,500,000. (Co-Principal Investigator, 30% time).

Big River Microbiology: Bacterioplankton diversity and community dynamics of the six largest rivers in the Arctic Ocean Watershed. National Science Foundation, Arctic Natural Sciences, 2005-2007. \$168,688. (Lead Principal Investigator, 30% time).

Science and Technology Center for Coastal Margin Observation and Prediction. National Science Foundation, Science and Technology Center. 2006-2011. \$225,466. (Co-Principal investigator, 20% time).

LTREB: Collaborative research: What controls long-term changes in freshwater microbial community composition? National Science Foundation, Ecosystem Sciences. 2007-2012. \$251,830. (Lead Principal Investigator, 8% time)

Microbial community diversity in select Chesapeake Bay watersheds. National Oceanographic and Atmospheric Administration. 2007-2012. \$190,000 (Lead Principal Investigator, 8% time)

b. Terminated

Breaking barriers in SAV restoration: using plant-associated bacteria to enhance restoration success. National Oceanographic and Atmospheric Administration, Chesapeake Bay Studies. 2005. \$66,955. (Lead Principal Investigator, 30% time).

Supplemental Funding: Big River Microbiology: Bacterioplankton Diversity and Community Dynamics of the Six Largest Rivers in the Arctic Ocean Watershed. National Science Foundation Research Experience for Teachers, Arctic Natural Sciences. 2006. \$9,925. (Lead Principal Investigator, 8% time)

2. Submitted

Molecular identification of seagrass microflora for development of restoration-enhancing probiotics. NOAA-CICEET. 2004. \$25,000. (Lead Principal Investigator, 10% time). (Declined)

Collaborative proposal: Microbial Observatory: Culturable or not - accessing the metabolic capabilities of estuarine bacteria. National Science Foundation Microbial Observatories. 2004-2009. \$1,500,000. (Lead Principal Investigator, 30% time). (Declined)

Microbial Observatory: Salt marsh microbes and microbial processes: changes along the salinity gradient. National Science Foundation, Microbial Observatories. 2004-2009. \$1,500,000. (Co-Principal Investigator, 30% time). (Declined)

Collaborative proposal: How do particle dynamics and environmental variability influence bio-physical interactions in estuarine turbidity maxima? National Science Foundation, Biological Oceanography. 2004-2008. \$2,877,798. (Co-Principal Investigator, 50% time). (Declined)

Collaborative research: MO: Accessing the metabolic capabilities of estuarine bacteria with and without cultivation. National Science Foundation, Microbial Observatories. 2005-2010. \$1,915,694. (Lead Principal Investigator, 30% time). (Declined)

Collaborative research: Does water residence time control microbial communities and mechanisms of inorganic and organic nitrogen movement in forest soils? National Science Foundation, Ecosystem Studies. 2005-2008. \$566,344. (Co-Principal Investigator, 20% time). (Declined)

Predicting response of aquatic networks to environmental change. National Science Foundation, Office of Polar Programs. 2005-2010. \$8,710,184. (Co-Principal Investigator, 30% time). (Declined)

Breaking barriers in SAV restoration: using plant-associated bacteria to enhance restoration success. National Oceanographic and Atmospheric Administration, Chesapeake Bay Studies. 2006. \$80,000. (Lead Principal Investigator, 30% time). (Declined)

OHHI 2005 Pathogens as natural bacterioplankton: Using molecular tools to characterize inter-species linkages and ecosystem controls of *Vibrio parahaemolyticus* and the greater bacterioplankton community. 2005-2008. National Oceanographic and Atmospheric Administration, Oceans and Human Health Initiative. \$255,697 (Lead Principal Investigator, 15% time). (Declined)

Life in the Dead Zone: Microbial ecology in seasonally anoxic waters of a stratified estuary. National Science Foundation, Biological Oceanography. 2006-2010. \$781,202 (Lead Principal Investigator, 20% time). (Declined)

Collaborative Research: MO: Nitrogen Cycling in Estuaries: Linking Microbial Diversity with Ecosystem Function. National Science Foundation, Microbial Observatories and Microbial Interaction Processes. 2006-2010. \$143,224 (Co-principal investigator, 10% time). (Declined)

Collaborative Research: Long-term changes in freshwater microbial community composition of and arctic ecosystem. National Science Foundation, Long Term Research in Environmental Biology through the Division of Environmental Biology, Ecosystem Studies. 2006-2011. \$439,882 (Lead Principal Investigator, 10% time). (Declined)

Life in the Dead Zone: Microbial production and respiration in seasonally anoxic waters of the Chesapeake Bay. Maryland Sea Grant. 2007-2009. \$164,565. (Lead Principal Investigator, 8% time). (Pre-proposal accepted, full proposal declined)

Breaking barriers in SAV restoration: using plant-associated bacteria to enhance restoration success. Maryland Sea Grant. 2007-2009. \$161,565. (Lead Principal Investigator, 8% time). (Pre-proposal accepted, full proposal declined)

Collaborative Research: MO: Microbial Observatory for Virioplankton Ecology: Synecology of phage and their bacterioplankton hosts. National Science Foundation, Microbial Observatories and Microbial Interactions and Processes. 2007-2012. \$317,734 (Co-Principal Investigator, 8% time). (Declined)

MultiStress 07: Synergistic Stressors on an Estuarine Coastal Lagoon. National Oceanic and Atmospheric Administration, Cumulative Impacts of Multiple Stressors. 2007-2012. \$374,266. (Co-Principal Investigator, 8% time). (Declined)

RUI: Coupling Microbial Populations and Community Compositions to Biogeochemical Rates: Climate Change and Salinity Intrusion into Tidal Freshwater Marshes. National Science Foundation, Ecosystem Science. 2008-2009. \$401,432 (UMCES share \$70,334) (Co-Principal Investigator, 8% time, Lead PI Nathaniel Weston, Villanova University) (Declined)

MA08: Cumulative development stressors in the Mid-Atlantic: from measurements to forecast models and integrated assessments. National Oceanographic and Atmospheric Administration. 2008-2013. \$4,999,194 (Co-Principal Investigator, 8% time, Lead PI Patricia Glibert, UMCES) (Pending)

Ecological and exposure assessment of select bacterial and viral public health pathogens in estuarine and marine areas of importance to public use. National Oceanographic and Atmospheric Administration, Oceans and Human Health Initiative. 2008-2011. \$471,262 (Lead Principal Investigator, 8% time) (Pending)

Collaborative Research: MO: Microbial Observatory for Virioplankton Ecology: Synecology of phage and their bacterioplankton hosts. National Science Foundation, Microbial Observatories. 2008-2013. \$1,989,569 (UMCES share \$358,568) (Co-Principal Investigator, 8% time, Lead PI K. Eric Wommack, University of Delaware) (Pending)

Ecological and exposure assessment of *Vibrio parahaemolyticus* and *Vibrio vulnificus* in Chesapeake Bay and Coastal Bays, Maryland. PADI Foundation. 2008-2010. \$20,000 (Lead Principal Investigator, 8% time) (Pending)

Collaborative Research: What is the true cost of hypoxia? Estimating the fate of carbon in an estuarine food web. National Science Foundation, Biological Oceanography. 2009-2012. \$1,527,916 (Co-Principal Investigator, 16% time, Lead PI David Kimmel, UMCES) (Pending)

Collaborative Research: What controls long-term changes in freshwater microbial community composition. Request for funding through the Research Experiences for Undergraduates (REU), National Science Foundation, Supplement Opportunity, NSF 07-569. 2008. \$8,000 (Lead Principal Investigator) (Pending)

Breaking barriers in SAV restoration: using plant-associated bacteria to enhance restoration success. Maryland Sea Grant. 2009-2011. \$148,744 (Lead Principal Investigator, 20% time) (Pending)

D. Invited Seminars and Presentations

Crump, B.C., C.S. Hopkinson, J.A. Baross, and J.E. Hobbie. 2003. Estuarine bacterioplankton: residence time, growth rate and community composition. 17th Biennial Conference of the Estuarine Research Federation, Seattle, WA, September 14-18, 2003.

Judd, K., G.W. Kling, B.C. Crump, R. Sinsabaugh, and D. Zak. 2003. Dissolved organic carbon in an Arctic catchment: linking bioavailability, chemical composition and bacterial community composition. The Ecological Society of America, 88th annual meeting, Savannah, GA, August 3-8, 2003.

Klepac-Ceraj, V., M. Bahr, B.C. Crump, A.P. Teske, J.E. Hobbie, and M.F. Polz. 2003. Molecular diversity of delta-proteobacterial sulfate reducers in salt marsh sediments. General Meeting of the American Society for Microbiology, Washington D.C., May 18-22, 2003.

Crump, B.C., C.S. Hopkinson, and J.E. Hobbie. 2003. Estuarine bacterioplankton: physical and biological influences on growth and diversity. American Society of Limnology and Oceanography Aquatic Sciences Meeting, Salt Lake City, UT, February 9-14, 2003.

Bahr, M., A. Teske, and B.C. Crump. 2003. Seasonal patterns of diversity of sulfate reducing bacteria in a salt marsh: analysis by sequencing dissimilatory sulfite reductase genes. American Society of Limnology and Oceanography Aquatic Sciences Meeting, Salt Lake City, UT, February 9-14, 2003.

Crump, B.C. 2003. Estuarine bacterioplankton: physical, chemical, and biological influences on growth and diversity. University of Maryland Center for Environmental Science Horn Point Laboratory, July 2, 2003.

Crump, B.C. 2003. Estuarine bacterioplankton: physics and community diversity. University of Maryland Center for Environmental Science Horn Point Laboratory. Sept. 3, 2003.

- Crump, B.C. 2003. Bacterioplankton ecology in ultra-oligotrophic Toolik Lake: the big picture and the small picture. University of North Carolina, Greensboro, Dept. of Biology, Dec. 3, 2003.
- Crump, B. C. 2004. Microbial biogeography in estuaries: the combined influences of growth rate, advection, and residence time. Oregon Health and Sciences University, School of Science and Engineering, Mar. 12, 2004.
- Crump, B. C. 2004. Accessing the genetic diversity of unknown bacteria: new enzymes for industrial applications. Technology Applications for the Business Community: Biological, Environmental and Space Science Partnering Showcase sponsored by the Maryland Technology Development Corporation (TEDCO), Mar. 23, 2004.
- Crump, B. C. 2004. A downstream look at aquatic microbial diversity: research from the Plum Island Sound Microbial Observatory. The University of Maryland Biotechnology Institute, Center of Marine Biotechnology, Oct. 6, 2004.
- Judd, K. E., B. C. Crump, and G. W. Kling. 2004. Natural variation of dissolved organic matter controls rates of bacterial production and structures bacterial communities. International Symposium on Microbial Ecology, Cancun, Mexico, August 22-27, 2004.
- Crump, B. C., J. E. Hobbie, H. E. Adams, and G. W. Kling. 2005. Shifts in bacterioplankton community composition across a landscape: influence of bacterial production and lake residence time. American Society for Limnology and Oceanography Aquatic Sciences Meeting, Salt Lake City, UT, February 21-25, 2005.
- Judd, K. E., B. C. Crump, and G. W. Kling. 2005. Linking bacterial activity and community dynamics across the landscape. American Geophysical Union/ North American Benthological Society Joint Assembly, New Orleans, LA, May 23-27, 2005.
- Crump, B. C. 2005. Estuarine bacterioplankton: physical, chemical, and biological influences on growth and diversity. University of Maryland Center for Environmental Science Horn Point Laboratory, July 6, 2005.
- Crump, B. C. 2005. Short residence time and niche instability limits the development of estuarine bacterioplankton communities and may also limit their ecological function. The Ecological Society of America, 90th annual meeting, Montréal, Canada, August 7-12, 2005.

- Crump, B.C. 2005. Freshwater bacterioplankton biogeography: Observations from lakes and streams in temperate and arctic watersheds. University of Maryland Center for Environmental Science Appalachian Laboratory, Sept. 15, 2005.
- Crump, B. C., C. Peranteau, B. Beckingham, and J. C. Cornwell. 2005. Estuarine bacterioplankton metabolism and community composition across a seasonal oxygen gradient. 18th Biennial Conference of the Estuarine Research Federation, Norfolk, VA, October 16-21, 2005.
- Bowen, J. L., B. C. Crump, L. A. Deegan, and J. E. Hobbie. 2005. Nitrogen enrichment of a New England salt marsh: Changes in bacterial production and microbial community composition. 18th Biennial Conference of the Estuarine Research Federation, Norfolk, VA, October 16-21, 2005.
- Bowen, J. L., B. C. Crump, L. A. Deegan, and J. E. Hobbie. 2005. Nitrogen enrichment of a New England salt marsh: Changes in bacterial production and microbial community composition. American Society of Limnology and Oceanography Dialog VII Symposium, Dauphin Island, AL, Dec. 3-10, 2005.
- Crump, B.C. 2006. Microbial biogeography in estuaries: the combined influences of growth rate, dispersal, and residence time. Old Dominion University Department of Ocean, Earth, and Atmospheric Sciences, Norfolk, VA, March 2, 2006.
- Crump, B. C., A. Bajak, B. Severn, and E. W. Koch. 2006. Leaf- and root-attached bacteria of four S.A.V. species: Microflora community composition and effects on plant growth. Chesapeake Bay Integrated Research Symposium, Williamsburg, VA, April 25-26, 2006.
- Crump, B. C., H. E. Adams, J. E. Hobbie, and G. W. Kling. 2006. Mechanisms of spatial variability in bacterioplankton community composition among lakes and streams of an arctic tundra watershed. American Society of Limnology and Oceanography, Aquatic Sciences Meeting, Victoria, BC, Canada, June 4-9. 2006.
- Adams, H., B. C. Crump, and G. W. Kling. 2006. Bacterioplankton community composition mediates the effects of temperature and nutrients on bacterial activity. American Society of Limnology and Oceanography, Aquatic Sciences Meeting, Victoria, BC, Canada, June 4-9. 2006.
- Bowen, J. L., B. C. Crump, L. A. Deegan, and J. E. Hobbie. 2006. Bacterial community composition in the sediments of a New England salt marsh: Microbial response to experimental nitrogen enrichment. American Society of Limnology and Oceanography, Aquatic Sciences Meeting, Victoria, BC, Canada, June 4-9. 2006.

- Crump, B. C., H. E. Adams, F. Chen, J. E. Hobbie, J. Kan, and G. W. Kling. 2006. Synchrony and seasonality in bacterioplankton community composition. 11th International Symposium on Microbial Ecology, Vienna, Austria, August 20-25, 2006.
- Crump, B. C. 2006. Bacterioplankton biogeography in estuaries: Communities, metacommunities, and the role of dispersal. University of Delaware College of Marine and Earth Studies, Lewes, DE, October 10, 2006.
- Adams, H. E., B. C. Crump, and G. W. Kling. 2006. Bacterial physiological adaptation versus structural shifts in community composition. Triennial All Scientist meeting of the NSF LTER program, Estes Park, CO, 20-23 September 20-23, 2006.
- Kan, J., E. B. Örnólfsson, K. Wang, K. O'Mara, B. C. Crump, K. E. Wommack, and F. Chen. 2006. Co-monitoring virioplankton and bacterioplankton in Chesapeake Bay. The Scientific Committee for Oceanographic Research (SCOR)-working group on marine viruses. June 1-3, 2006, The University of British Columbia, Vancouver, BC. Poster presentation.
- Johnson, T. L., B. C. Crump, and J. K. Apple. 2007. The influence of spatial variation and dispersal on the composition of microbial communities. American Society of Limnology and Oceanography Aquatic Sciences Meeting, Santa Fe, NM, February 4-9, 2007.
- Apple, J. K., E. M. Smith, T. J. Boyd and B. C. Crump. 2007. Relationship between organic carbon source and spatial, tidal and seasonal variability in bacterioplankton community composition in Winyah Bay/North Inlet estuary. Baruch Institute Symposium, Baruch Marine Field Lab, Georgetown, SC, March 28-29, 2007.
- Crump, B. C. and E. W. Koch. Can Bacteria help restore SAV in Chesapeake Bay? University of Maryland Center for Environmental Science Horn Point Laboratory, May 16, 2007.
- Adams, H., J. Kostrzewski, A. Larsen, B. Crump, and G. Kling. 2007. Downstream processing of terrestrially-derived carbon by bacteria in lakes and streams in an arctic catchment, Alaska, USA. 'Workshop on High latitude terrestrial and freshwater ecosystems: Interactions and response to environmental change', 11 - 14 September 2007, Abisko, Sweden.
- Crump, B. C., J. L. Bowen, and J. K. Apple. 2007. An overview of estuarine gradients and the microbes that live in them. 19th Biennial International Conference of the Estuarine Research Federation, 4-8 November 2007, Providence, RI.

- Apple, J. K., T. Boyd, T., and B. C. Crump. 2007. Transferable patterns in the biogeography of estuarine bacterioplankton communities. 19th Biennial International Conference of the Estuarine Research Federation, 4-8 November 2007, Providence, RI.
- Bowen, J. L., K. Kroeger, B. Crump, J. Crusius, and J. Bratton. 2007. Microbial community composition along a salinity gradient in a subterranean estuary. 19th Biennial International Conference of the Estuarine Research Federation, 4-8 November 2007, Providence, RI.
- Hood, R. R., D. Keller, D. Lee, and B. C. Crump. 2007. Primary production in the Chesapeake Bay ETM: rates, sources and contribution to higher trophic level production. 19th Biennial International Conference of the Estuarine Research Federation, 4-8 November 2007, Providence, RI.
- Lee, D., R. R. Hood, and B. C. Crump. 2007. Community metabolism of estuarine turbidity maximum in Chesapeake Bay: primary production, respiration, and size-fractionated respiration. 19th Biennial International Conference of the Estuarine Research Federation, 4-8 November 2007, Providence, RI.
- Malpezzi, M., E. Kiss, and B. C. Crump. 2007. Bacterial production and particulate organic matter composition in the Chesapeake Bay ETM. 19th Biennial International Conference of the Estuarine Research Federation, 4-8 November 2007, Providence, RI.
- North, E. W., E. D. Houde, S.-Y. Chao, B. C. Crump, C. T. Friedrichs, R. R. Hood, D. G. Kimmel, E. J. Martino, M. R. Roman, J. J. Pierson, L. P. Sanford. 2007. A synthesis of biological-physical interactions in the Chesapeake Bay estuarine turbidity maximum. 19th Biennial International Conference of the Estuarine Research Federation, 4-8 November 2007, Providence, RI.
- Pierson, J., M. R. Roman, D. G. Kimmel, R. R. Hood, B. C. Crump, D. Keller, M. Malpezzi. 2007. Winter Zooplankton Abundance, Distribution, and Vital Rates in the Chesapeake Bay Estuarine Turbidity Maximum. 19th Biennial International Conference of the Estuarine Research Federation, 4-8 November 2007, Providence, RI.
- Crump, B. C., C. Peranteau, B. Beckingham, J. C. Cornwell. 2007. Respiratory succession and community succession of bacterioplankton in seasonally anoxic estuarine waters. 19th Biennial International Conference of the Estuarine Research Federation, 4-8 November 2007, Providence, RI.
- Crump, B. C. 2007. Bacterial biogeography in aquatic ecosystems: Communities, metacommunities, and the role of dispersal. Michigan State University, Department of Microbiology and Molecular Genetics, East Lansing, MI,

November 20, 2007

Crump, B. C. 2007. Bacterial biogeography in aquatic ecosystems: Communities, metacommunities, and the role of dispersal. Stroud Water Research Center, Avondale, PA, November 28, 2007

Herfort L., M. Selby, D. Murphy, C Fortunado, B. C. Crump, H Simon, P. Zuber. 2008. Microbial-Mediated Activities in River-to-Ocean Environments in the Pacific Northwest. 108th General Meeting of the American Society for Microbiology, June 1-5, 2008, Boston, MA

F. Active Memberships in Professional Societies

American Society for Microbiology
American Society of Limnology and Oceanography
International Society for Microbial Ecology
Estuarine Research Federation
Ecological Society of America

G. Other Professional Recognition

1. Editorships

Subject Review Editor for the journal Aquatic Microbial Ecology (2006 - present).

2. Peer review activities

a. Proposals Reviewed

Hudson River Foundation (1)
National Oceanographic and Atmospheric Administration (2)
National Science Foundation (23)
New York Sea Grant (1)
North Carolina Sea Grant (1)
North Inlet Winyah Bay National Estuarine Research Reserve (1)
NSERC (1)
U.S. Civilian Research and Development Foundation (2)
Washington Sea Grant (1)

b. Articles Reviewed

Antarctic Science (1)
Applied and Environmental Microbiology (5)
Aquatic Microbial Ecology (16)
Ecology (1)
Environmental Microbiology (5)
Estuaries (1)

Estuarine and Coastal Shelf Science (2)
 FEMS Microbiology Ecology (9)
 Freshwater Biology (2)
 ISME Journal (1)
 Limnology and Oceanography (6)
 Marine Ecology Progress Series (1)
 Microbial Ecology (3)
 Oikos (1)

V. Teaching and Training

A. University System of Maryland Courses Taught

Course No.	Title	Institution	Semester	Enrollment	Credit Hrs.	Co-instructors	No. Lectures
MEES621	Biological Oceanography	HPL ^a	Fall '03	12	3	Hood, Koch, Stoecker	2 ^d
MEES698A	Aquatic Microbial Ecology	HPL ^a	Spring '04	10	3	Suzuki	14 ^b
MEES621	Biological Oceanography	HPL ^c	Fall '04	11	3	Hood, Koch, Stoecker	2 ^d
MEES608E	Seminar in Aquatic Microbial Ecology	HPL	Fall '05	6	1		
MEES621	Biological Oceanography	HPL ^c	Fall '05	7	3	Hood, Koch, Stoecker	2 ^d
MEES698A	Aquatic Microbial Ecology	HPL ^a	Spring '06	9	3	Suzuki	14 ^b
MEES621	Biological Oceanography	HPL ^c	Fall '06	11	3	Hood, Koch, Stoecker	2 ^d
MEES608f	Seminar in Bio-physical coupling in upper estuaries: tracing pathways of production at the freshwater- saltwater interface	HPL	Fall '06	13	1	North, Hood, Houde, Kimmel, Roman, Sanford ^e	
MEES621	Biological Oceanography	HPL ^c	Fall '07	8	3	Hood, Koch, Stoecker	2 ^d

^a Using IVN system, students were also taught at CBL, CP, COMB.

^b Principle lecturer, 1.5-hr lectures

^c Using IVN system, students were also taught at CBL, CP, COMB, UMES.

^d 2-hr lectures; provided and graded exam questions; sponsored class discussion on current literature

^e Using IVN system, students were also taught at CBL.

C. Graduate Students Supervised as Major Advisor

2. Students Currently Supervised

Malpezzi, Michael; M.S.; Biological Oceanography; University of Maryland
Marine, Estuarine and Environmental Science.

Shaw, Kristi S.; Ph.D.; Biological Oceanography; University of Maryland Marine,
Estuarine and Environmental Science.

Fortunato, Caroline; Ph.D.; Biological Oceanography; University of Maryland
Marine, Estuarine and Environmental Science.

3. Current Graduate Student Committee Memberships

Heather E. Adams Ph.D. Dept of Ecol. & Evol. Biology U. of Michigan

Ji Li	Ph.D. UMCES	U. of Maryland
David Keller	Ph.D. UMCES	U. of Maryland
Daniel Lee	Ph.D. UMCES	U. of Maryland
Daohong Yao	M.S. UMCES	U. of Maryland
Tiffany Straza	Ph.D. College of Marine Studies	U. of Delaware
Suzanne DeLorenzo	Ph.D. Oregon Graduate Institute	OHSU

4. Research Internships Supervised

Dawn Turney ¹	Teacher, St. Mary of the Mills elementary school, Laurel, MD	Summer 2003	Teacher fellowship program	Effect of abiotic factors on hatching and mortality rates of <i>Artemia</i>
Cherie Peranteau	Undergraduate fellow, Stockton College, NJ	Summer 2004	Maryland Sea Grant REU fellowship program	Estuarine Bacterioplankton Metabolism and Diversity across a Seasonal Oxygen Gradient
Aleszu Bajak	Undergraduate fellow, Amherst College, MA	Summer 2005	Maryland Sea Grant REU fellowship program	Community composition of bacteria associated with <i>Zostera marina</i> , <i>Potamogeton perfoliatus</i> and <i>Stuckenia pectinata</i> within and across beds in the Chesapeake Bay
Charles Livingstone	High School Senior, Eleanor Roosevelt High School, Greenbelt, MD	2005 - 2006		Effects of nutrients on microorganisms in the Anacostia R.
Moeiz Witadalla	High School Senior, Eleanor Roosevelt High School, Greenbelt, MD	2005 - 2006		Effects of nutrients on microorganisms in the Patuxent R.
Robert Warrilow	High School Teacher, Annapolis High School	Summer 2006	NSF Research Experience for Teachers fellow	Biogeography of bacterioplankton in rivers and lakes of the Alaskan tundra
Todd Johnson	Undergraduate fellow, California State University, Fresno	Summer 2006	Maryland Sea Grant REU fellowship program	The influence of spatial variation and dispersal on the composition of microbial communities

V. Outreach and Service

D. Laboratory and Center

2004-2005	HPL Library Committee Chair
2003-present	HPL Library Committee member
2004-present	HPL Cambridge Christmas Parade Committee member
2005	HPL Open House Committee Chair
2004-2006	HPL Open House Committee Member
2006-present	HPL Education Committee Member
2006-2007	HPL Seminar Committee Chair
2005-2006	MEES Admissions Committee, Oceanography AOS
2007-present	HPL Environmental Sustainability Committee member

2007 April 5 – Presentation to HPL staff on Microbial Ecology

2007 November 12 –UMCES Science Forum on Thresholds and Resilience/Recovery

E. Outside University of Maryland

1. Service to government agencies

Member of review panel for National Science Foundation Arctic Natural Sciences program, April 5-7, 2006.

2. Volunteer Service to Professional Associations and Private Agencies

Session chair, 19th Biennial International Conference of the Estuarine Research Federation, 4-8 November 2007, Providence, RI. Estuarine microbes: a synthesis of their diversity, community structure, and biogeochemical relevance.