

# *Yawei Luo*

## *Curriculum Vitae*

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### **PERSONAL INFORMATION**

1. Name: Yawei Luo
2. Office address: The Ecosystems Center, Starr 316  
Marine Biological Laboratory (MBL)  
7 MBL Street, Woods Hole, MA 02543
- Phone: (508) 289-7754 Fax: (508) 457-1458 email: yluo@mbl.edu
3. Position: Ph.D. Candidate, Brown University – MBL Graduate Program  
Major Advisor: Hugh W. Ducklow

### **EDUCATION**

- 2009 (expected):** Ph.D.; Brown University-MBL Graduate Program, Woods Hole, MA, USA;  
Major Field: Biological Oceanography
- Dissertation: Modeling Microbial Dynamics in the Open Ocean with Data Assimilation
- 2003:** M.S.; Peking University, Beijing, China; Major Field: Environmental Sciences
- Thesis: Modeling Marine Pelagic Ecosystem Dynamics in the Bohai Sea
- 2000:** B.A.; Ocean University of China, Qingdao, China; Major Fields: Fishery and Computer Science

### **RESEARCH EXPERIENCE**

- Graduate Research Assistant*, Ecosystems Center, Brown University-MBL Graduate Program, Woods Hole, MA. 2007 - present. Advisors: Hugh W. Ducklow, Marjorie A.M. Friedrichs.  
Research: marine ecosystem modeling
- Graduate Research Assistant*, Department of Biological Sciences, Virginia Institute of Marine Science, The College of Williams and Mary, Gloucester Point, VA. 2003 - 2007. Advisor: Hugh W. Ducklow.  
Research: marine ecosystem modeling
- Research Volunteer*, Palmer Antarctica Long Term Ecological Research Project, Western Antarctica Peninsula. 2006 Jan - 2006 Feb. Supervisor: Hugh W. Ducklow.  
Research: 40-day cruise, collect and analyze biogeochemical and bacterial samples.
- Graduate Research Associate*, National Marine Environmental Forecast Center of China, Beijing, China. 2001 -2003. Supervisor: Huiding Wu.  
Research: develop sea ice forecast system of HY-1 satellite; marine ecosystem modeling

*Graduate Research Assistant*, College of Environmental Sciences, Peking University, Beijing, China. 2000 -2001. Supervisors: Xuhui Cai, Baozhang Liu.

Research: wind tunnel simulation experiment for vehicle pollution

### **HONORS and AWARDS**

2009: Member, Sigma Xi

2007-2009: Graduate Fellowship (for Tuition), Marine Biological Laboratory and Brown University

2007-2009: Research Assistantship, Marine Biological Laboratory and Brown University

2003-2007: Graduate Fellowship (for Tuition), The College of Williams and Mary

2003-2007: Research Assistantship, The College of Williams and Mary

2002: Excellent Study Award, Peking University

2000: Graduate with Honor, Ocean University of China

### **EXTERNAL COLLABORATION**

*Affiliated Researcher*, Center for Microbial Oceanography: Research and Education (C-MORE)

### **PUBLICATIONS**

**Luo, Y.**, Ducklow, H. W., Friedrichs, M. A. M., Doney, S. C., Prell, W., Vallino, J. J. (*submitted*) Heterotrophic Microbial dynamics in the open ocean revealed by data assimilation modeling. *Aquatic Microbial Ecology*.

**Luo, Y.**, Ducklow, H. W., Friedrichs, M. A. M., Doney, S. C. (*in prep.*) Modeling decadal variation of the pelagic ecosystem at the Station ALOHA: primary production, dissolved organic matter and heterotrophic bacteria.

**Luo, Y.**, Ducklow, H. W. (*in prep.*) The importance of heterotrophic bacterial production for constraining marine ecosystem model.

Gasol, J.M., Pinhassi, J., Alonso-Sáez, L., Ducklow, H., Herndl, G.J., Koblížek, M., Labrenz, M., **Luo, Y.**, Morán, X.A.G., Reinthaler, T., Simon, M. (2008) Towards a better understanding of microbial carbon flux in the sea. *Aquatic Microbial Ecology* 53:21-38.

**Luo, Y.**, Wu, H., Zhang, Y., Sun, C., Liu, Y. (2004) Application of the HY-1 satellite to sea ice monitoring and forecasting. *ACTA OCEANOLOGICA SINICA* 23:251-266.

### **Oral and Poster Presentations**

**Luo, Y.**, Ducklow, H. W. and Friedrichs, M. A. M. (poster) Decadal primary production variability at station ALOHA: Revealed by data assimilation. *Ocean Carbon and Biogeochemistry (OCB) Summer Workshop*. Woods Hole, MA, July 21 -24, 2008.

**Luo, Y.**, Ducklow, H.W., (oral) Ecosystem modeling of the North Pacific: Constraining a model

with Bacterial and DOM data. Bay Paul Center Seminar, MBL, Woods Hole, MA, May 2, 2008.

**Luo, Y.**, Ducklow, H. W. and Friedrichs, M. A. M. (poster) The importance of microbial dynamics in marine biogeochemical modeling: a tentative data assimilation study of open ocean ecosystems. 2008 Ocean Sciences Meeting, Orlando, FL. March 2 - 7, 2008.

**Luo, Y.**, Ducklow, H.W., (oral) Importance of microbial processes in marine biogeochemical modeling: a tentative data assimilation for the Arabian Sea. 10th Symposium of Aquatic Microbial Ecology, Faro, Portugal, September 1-7, 2007.

**Luo, Y.** and Ducklow, H. W. (poster) A Flexible C:N:P Ratio Model of the Microbial Loop in the Open Sea. Ocean Carbon Biogeochemistry (OCB) Workshop. Woods Hole, MA, July 10 -13, 2006.

**Luo, Y.** and Ducklow, H. W. (poster) Modeling the diversity of nitrogen fixing organisms in the North Central Pacific Gyre. An Ocean Carbon and Climate Change (OCCC) Workshop. Woods Hole, MA, August 1 - 4, 2005.

*Invited Participant*, 2007 George Bush China-US Relations Conference. October 22-25, Washington D.C.