

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.