Dr. RUBAO JI

Tenured Associate Scientist **Biology Department** Woods Hole Oceanographic Institution

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EDUCATION

Ph.D. in Biological Oceanography, 2003 M.Sc. in Computer Science, 2002 M.Sc. in Marine Ecology, 1994 B.Sc. in Marine Biology, 1991

University of Georgia University of Georgia Ocean University of China Ocean University of China

EXPERIENCE

2013 – Present:	Associate Scientist w/ tenure, Woods Hole Oceanographic Institution
2013 - Present: 2011 - Present:	Adjunct Professor, University of Massachusetts - Dartmouth
2011 - Flesent.	
2013 – Present:	Cooperative Institute for the North Atlantic Region (CINAR) Fellow
2009 - 2013:	Associate Scientist, Woods Hole Oceanographic Institution
2005 – 2009:	Assistant Scientist, Woods Hole Oceanographic Institution
2004.5-2005.7:	Costal Ocean Institute Postdoctoral scholar, Woods Hole Oceanographic Institution
2004.1-2004.4:	Research Associate, School for Marine Science and Technology, U. of Massachusetts
1999- 2003:	Research Assistant, Department of Marine Sciences, University of Georgia
1998.3-1998.8:	Visiting Scientist, University of Georgia
1997-1998	Visiting Scientist, Korean Ocean Research & Development Institute
1995-1996:	Visiting Scientist, Institut francais de recherche pour l'exploitation de la mer, France
1997-1998:	Associate Research Scientist, First Institute of Oceanography, China
1994-1997:	Assistant Research Scientist, First Institute of Oceanography, China

RESEARCH INTERESTS

- · Coupled biological-physical numerical modeling
- Climate change and marine ecosystem response
- Zooplankton and larval fish population dynamics
- Oceanography in polar and tropical regions
- Plankton phenology and biogeography
- Food web dynamics in coastal oceans
- Quantitative fisheries oceanography
- Meta-population connectivity

SYNOPSIS OF RESEARCH/EDUCATION ACTIVITIES

- PI or co-PI of >25 research projects over the last 11 years.
- Published 55 peer-reviewed research articles (41 in English, 14 in Chinese) as lead- or co-author on topics such as biological-physical coupled modeling, plankton dynamics and food web dynamics.
- Gave >100 presentations in various settings, including invited talks, and international conferences/meetings; co-chair for topical sessions in 5 international conferences.
- Advised a total of 14 students, postdocs and visiting investigators; served as a committee member for 2 students from WHOI and 3 students from UMass-Dartmouth.
- Reviewed over 60 papers from >20 different journals; served as panel member or proposal reviewer for NSF, NOAA, Sea Grant and other regional programs; co-chair for ICES working group. Review Editor for ICES Journal of Marine Sciences.

SELECTED PUBLICATIONS (* Denotes students/postdocs from Ji lab)

- *Li, Y., **R. Ji**, S. Jenouvrier, M. Jin, and J. Stroeve, 2016. Synchronicity between ice retreat and phytoplankton bloom in circum-Antarctic polynyas, Geophysical Research Letters, doi: 10.1002/2016gl067937.
- *Li, Y., P. S. Fratantoni, C. Chen, J. A. Hare, Y. Sun, R. C. Beardsley, **R. Ji**, 2015. Spatio-temporal patterns of stratification on the Northwest Atlantic shelf, *Progress in Oceanography*, doi:10.1016/j.pocean.2015.01.003
- *Li, Y., R. Ji, P. S. Fratantoni, C. Chen, J. A. Hare, C. S. Davis, and R. C. Beardsley (2014), Windinduced interannual variability of sea level slope, along-shelf flow, and surface salinity on the Northwest Atlantic shelf, *J. Geophys. Res. Oceans*, doi:10.1002/2013JC009385.
- Ji, R., M. Jin, Ø. Varpe, 2013. Sea ice phenology and timing of primary production pulses in the Arctic Ocean. *Global Change Biology*, 19: 734-741. DOI: 10.1111/gcb.12074
- Ji, R., C. Ashjian, R. Campbell, C. Chen, G. Gao, C. Davis, G. Cowles, R. Beardsley, 2012. Life history and biogeography of Calanus copepods in the Arctic Ocean: An individual-based modeling study. *Progress in Oceanography*, 96(1): 40-56. doi:10.1016/j.pocean.2011.10.001
- Ji, R., C. Stegert, C. Davis, 2012. Sensitivity of copepod populations to bottom-up and top-down forcing: a modeling study in the Gulf of Maine region. *Journal of Plankton Research*, 35(1): 66-79. doi: 10.1093/plankt/fbs070
- *Stegert, C. **R. Ji**, N. Li, C. Davis, 2012. Processes controlling seasonality and spatial distribution of *Centropages typicus*: A modeling study in the Gulf of Maine/Georges Bank region. *Journal of Plankton Research*. 34(1): 18-35.
- Ji, R., 2011. Calanus finmarchicus diapause initiation: new view from traditional life history based model. Marine Ecology Progress Series. 440:105-114.
- *Song, H., **R. Ji**, C. Stock, K. Kearney, Z. Wang, 2011. Interannual variability of phytoplankton bloom and plankton productivity in the Nova Scotian Shelf and Gulf of Maine. *Marine Ecology Progress Series.* 426:105-118.
- Ji, R., M. Edwards, D.L. Mackas, J. Runge, A.C. Thomas, 2010. Marine plankton phenology and life history in a changing climate:Current research and future directions. Journal of Plankton Research - Horizon, 32(10): 1355-1368. doi:10.1093/plankt/fbq062.
- Ji, R., C. Davis, C. Chen, R. Beardsley, 2009. Life history traits and spatiotemporal distributional patterns of copepod populations in the Gulf of Maine-Georges Bank region. *Marine Ecology Progress Series*, 384: 187-205
- Ji, R. C. Davis, C. Chen, D. Townsend, D. Mountain, R. Beardsley, 2008a. Modeling the influence of low-salinity water inflow on winter-spring phytoplankton dynamics in the Nova Scotian Shelf – Gulf of Maine region. *Journal of Plankton Research*, 30(12): 1399-1416.
- Ji, R., C. Davis, C. Chen, and R. Beardsley, 2008b. Influence of local and external processes on the annual nitrogen cycle and primary productivity on Georges Bank: A 3-D biological-physical modeling study. *Journal of Marine Systems*, 73: 31-47.
- Ji, R. C. Davis, C. Chen, D. Townsend, D. Mountain, R. Beardsley, 2007a. Influence of ocean freshening on shelf phytoplankton dynamics. *Geophysical Research Letters*, 34, L24607, doi:10.1029/2007GL032010.
- Ji, R., P. J. S. Franks, 2007b. Vertical migration of dinoflagellates: Model analysis of strategies, growth and vertical distribution patterns. *Marine Ecology Progress Series*, 344: 49-61.
- Ji, R., C. Chen, P. J. S. Franks, D.W. Townsend, E.G. Durbin, R. C. Beardsley, R.G. Lough, and R.W. Houghton, 2006. Spring bloom and associated lower trophic level food web dynamics on Georges Bank: 1-D and 2-D model studies. *Deep-Sea Research II*, 53(23-24): 2656-2683
- Ji, R., C. Chen, P. J. S. Franks, D.W. Townsend, E.G. Durbin, R. C. Beardsley, R.G. Lough, and R.W. Houghton, 2006. The impact of Scotian Shelf Water "cross-over" on the plankton dynamics on Georges Bank: A 3-D experiment for the 1999 spring bloom. *Deep-Sea Research II*, 53(23-24), 2684-2707