

BIOGRAPHICAL SKETCH

HUIJIE XUE

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I. PROFESSIONAL PREPARATION

1984	B.S.	Phys. Oceanogr., Ocean Univ. of China
1988	M.A.	Atmos. & Ocean Sci., Princeton University
1991	Ph.D.	Atmos. & Ocean Sci., Princeton University
1991-1992	Postdoc	Marine Sci., Univ. of North Carolina

II. APPOINTMENTS

2007 –	Professor, School of Marine Sciences, University of Maine
2000 – 2007	Associate Professor, School of Marine Sciences, University of Maine
2002 – 2003	Visiting Assoc. Prof., AMCE, Hong Kong Univ. of Sci. & Tech.
1994 – 2000	Assistant Professor, School of Marine Sciences, University of Maine
1993 – 1994	Research Assist. Prof., Marine Sciences Program, UNC Chapel Hill

III. PUBLICATIONS

5 Related Publications

- Incze, L. S., H. Xue, N. Wolff, D. Xu, C. Wilson³, R. Steneck, R. Wahle, P. Lawton, N. Pettigrew, and Y. Chen, submitted: Connectivity of lobster populations in the coastal Gulf of Maine. Part II. Coupled biophysical dynamics. *Fisheries Oceanography*.
- Xue, H., L.S. Incze, D. Xu, N. Wolff, and N.R. Pettigrew, 2008: Circulation, connectivity and transport of lobster larvae in the coastal Gulf of Maine. Part I. Circulation and larval transport potential. *Ecological Modelling*, 210, 193-211.
doi:[10.1016/j.ecolmodel.2007.07.024](https://doi.org/10.1016/j.ecolmodel.2007.07.024).
- Incze, L. S., R. A. Wahle, N. Wolff, C. Wilson, R. Steneck, E. Annis, P. Lawton, H. Xue, and Y. Chen, 2006: Early Life History and a Modeling Framework for Lobster (*Homarus americanus*) Populations in the Gulf of Maine. *J. of Crustacean Biology*, 26(4), 555–564.
- Xue, H., L. Shi, S. Cousins, and N.R. Pettigrew, 2005: The GoMOOS Nowcast/Forecast System. *Cont. Shelf Res.*, 25, 2122-2146.
- Xue, H., F. Chai, and N. R. Pettigrew, 2000: A model study of seasonal circulation in the Gulf of Maine. *J. Phys. Oceanogr.*, 30, 1111-1135.

5 Other Significant Publications

- Xue, H., F. Chai, N. R. Pettigrew, D. Xu, M. Shi, and J. Xu, 2004: Kuroshio Intrusion and the Circulation in the South China Sea. *J. Geophys. Res.*, Vol. 109, C02017,
doi:[10.1029/2002JC001724](https://doi.org/10.1029/2002JC001724).
- Li, Y., H. Xue, and J. M. Bane, 2002: Air-Sea Interactions during the Passage of a Winter Storm over the Gulf Stream: A 3D Coupled Atmosphere-Ocean Model Study. *J. Geophys. Res.*, 107, C11, 3200, doi:[10.1029/2001JC001161](https://doi.org/10.1029/2001JC001161).
- Xue, H., Z. Pan, and J. M. Bane, Jr., 2000: A 2D coupled atmosphere-ocean model study of air-sea interactions during a cold air advection over the Gulf Stream. *Mon. Wea. Rev.*, 128, 973-996.

Xue, H., J. M. Bane, Jr. and L. M. Goodman, 1995: Modification of the Gulf Stream through Strong Air-Sea Interaction in Winter: Observational and Modeling Results. *J. Phys. Oceanogr.*, 25, 533-557.

Xue, H., and G. L. Mellor, 1993: Instability of the Gulf Stream Front in the South Atlantic Bight. *J. Phys. Oceanogr.*, 23, 2326 - 2350.

IV. SYNERGISTIC ACTIVITIES

- The instability analysis code that I developed has been adopted by a number of researchers with applications to the western boundary currents and coastal/shelf fronts and jets.
- The numerical studies of rapidly developing winter storms were the foremost effort to examine air-sea interactions between mesoscale atmospheric events and prominent oceanic features using coupled atmosphere-ocean models. The synchronized coupling algorithm, which uses concurrent programming, can also be used in other similar coupled systems.
- The South China Sea project has fostered strong international collaborations between the PI and colleagues in China, Hong Kong and Taiwan.
- My latest effort focuses on the development of the Gulf of Maine nowcast/forecast system, which is producing results that are used for research, management and recreational purposes. The forecast system is also being used to understand transport of biogeochemical elements and fish larvae.
- Editorships: Guest Editor – Northeastern Naturalist
Xue H., F. Chai, and J. Xu, 2001: Oceanography in China (13) – The South China Sea: Circulation Modeling and Observations. China Ocean Press, Beijing, China. 254pp.

V. SCIENTIFIC COLLABORATORS OUTSIDE OF UMAINE IN THE PAST 5 YEAR

G. Aiken (USGS), W. Balch (BLOS), A. Barnard (WET Labs), D. Brooks (TA&M), D. Greenberg (BIO, Canada), G. Hagerman (Virginia Tech), T. Huntington (USGS), L. Incze (U. of Southern Maine), X. Ning (2nd Institute of Oceanography, China), J. Salisbury (U. of New Hampshire), R. Wahle (BLOS), L.-A. Wong (HKUST)

Thesis advisor: Prof. George L Mellor (Princeton University)

Postdoc advisor: Prof. John M. Bane (Univ. of North Carolina at Chapel Hill)

Thesis advisees: Ziqin Pan, Danya Xu, Yi Du

Postgraduate-Scholar Sponsor: Yongping Li, Yuping Yan