Dale B. Haidvogel

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Professional Positions:

1990-	Professor II, Rutgers University, Institute of Marine and Coastal Sciences, New Brunswick, NJ
1986-90	Principal Research Scientist, The Johns Hopkins University, Chesapeake Bay Institute, Baltimore, MD
1982-86	Scientist II, National Center for Atmospheric Research, Boulder, CO
1986-00	Affiliate Scientist, National Center for Atmospheric Research, Boulder, CO
1978-82	Associate Scientist/Assistant Scientist, Woods Hole Oceanographic Institution, Department of Physical Oceanography, Woods Hole, MA
1976-78	Research Fellow, Harvard University, Center for Earth and Planetary Physics, Cambridge, MA

Education:

1971	B.S. Massachusetts Institute of Technology
1976	Ph.D. MIT and the Woods Hole Oceanographic Institution

Fellowships:

1999	Miller Institute for Basic Research in Science; University of California, Berkeley; September – December 1999
1997	Faculty Fellowship; Associated Western Universities, Inc.; June – August; Pacific Northwest National Laboratory; Sequim, WA
1984	Commander, Naval Oceanography Command Chair in Oceanography; June – December; Naval Postgraduate School; Monterey, CA

Recent synergistic activities:

Chair,	U.S. GLOBEC Science Steering Committee, 2003—present; Member, 1996—present
Member,	Science Review Panel, Arctic Region Supercomputing Center, 2004--present
Director,	Graduate Program in Oceanography, Rutgers University, 1995—2004
Co-Editor,	*Dynamics of Atmospheres and Oceans*, 1980--2005

Research interests and web sites:

- Advanced algorithms for geophysical modeling (*e.g.*, the spectral finite element and finite volume methods; Choi *et al.*, 2004)
- Coupled modeling of earth systems and regional climate impacts (*e.g.*, Powell *et al.*, 2006)
- Numerical and laboratory studies of fundamental processes (*e.g.*, flow-topography interaction; Boyer *et al.*, 2004)
- Ocean prediction systems and data assimilation methodologies (*e.g.*, Levin *et al.*, 2005)
- Quantitative evaluation of ocean model performance (*e.g.*, The USECoS Group, 2008)
- Promotion and distribution of models and products (http://www.ocean-modeling.org/)

Five publications:

2004 Boyer, D. L., D. B. Haidvogel and N. Perenne. Laboratory – Numerical model comparisons of canyon flows: A parameter study. *J. Phys. Oceanogr*., **34**, 1588--1609.

2004 Choi, B.-J., M. Iskandarani, J. Levin, and D. B. Haidvogel. A spectral finite volume method for the shallow water equations. *Mon. Wea. Rev*., **132**, 1777--1791.

2006 Levin, J. C., D.B. Haidvogel, B. Chua, A. F. Bennett, M. Iskandarani. Euler-Lagrange Equations for the Spectral Element Shallow Water System. *Ocean Modeling*, **12**, 348-377.

2006 Powell, T. M., C. V. Lewis, E. N. Curchitser, D. B. Haidvogel, A. J. Herman, E. L. Dobbins. Results from a three-dimensional, nested biological-physical model of the California Current System and comparisons with statistics from satellite imagery, *J. Geophys. Res.*, **111**, doi:10.1029/2004JC002506.

2008 The USECoS Group. Eastern U.S. continental shelf carbon budget: Integrating models, data assimilation and analysis. *Oceanography*, 21, 86-104.

Collaborators and currently funded co-PIs (external to Rutgers; last 48 months): J. Allen (OSU), A. Hermann (University of WA), E. Hofmann (ODU), K. Stocks (UCSD), T. Powell (UC Berkeley), Tony Song (JPL), Kate Hedstrom (ARSC), Jorge Sarmiento (Princeton University), D. McGillicuddy (WHOI), A. Gangopadhyay (UMass Dartmouth), D. Mountain (U Arizona), Peter Wiebe (WHOI), Ann Bucklin (UConn), Fei Chai (UMaine), A. Bennett (OSU)

Ph.D. graduate advisor: Robert C. Beardsley (WHOI)

Postdoctoral advisor: Allan R. Robinson (Harvard University)

PhD dissertations supervised: E. Curchitser (IMCS Rutgers), B.-J. Choi (Chonnam National University, Korea) and S. Durski (OSU)