

BIOGRAPHICAL SKETCH – Raleigh R. Hood

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Professional Preparation:

University of Washington, Seattle, WA, Oceanography, B.S. *cum laude* 1983
University of California, San Diego, CA (SIO), Oceanography, Ph.D. 1990
Oregon State University (Post-doc), College of Oceanography, 1990-1991
University of Miami (Post-doc), RSMAS, 1991-1992

Positions Held:

2007 Professor, University of Maryland Center for Environmental Science, Horn Point Laboratory, Cambridge Maryland.
2001-07 Associate Professor, University of Maryland Center for Environmental Science, Horn Point Laboratory, Cambridge Maryland.
1995-01 Assistant Professor, University of Maryland Center for Environmental Science, Horn Point Laboratory, Cambridge Maryland.
1992-95 Research Associate, Division of Meteorology and Physical Oceanography, Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, Florida.

Relevant Publications in the Last Three Years:

Hood, R. R., and E. A. Laws et al. (2006) Pelagic functional group modeling: Progress, challenges and prospects. *Deep-Sea Research II*, 53: 459-512.
Hood, R. R., X. Zhang, P. M. Glibert, M. R. Roman and D. K. Stoecker (2006) Modeling the influence of nutrients, turbulence and grazing on *Pfiesteria* population dynamics. *Harmful Algae*, 5: 459-479.
Decker, M. B., C. W. Brown, **R. R. Hood**, J. E. Purcell, T. F. Gross, J. C. Matanoski, R. L. Owens and E. M. Setzler-Hamilton (2006) Predicting the distribution of the scyphomedusa, *Chrysaora quinquecirrha*, in Chesapeake Bay. *Marine Ecology Progress Series*, 329: 99-113.
Xu, J., and **R. R. Hood** (2006) Modeling biogeochemical cycles in Chesapeake Bay with a coupled physical-biogeochemical model. *Coastal, Shelf and Estuarine Science*, 69 (1-2): 19-46.
Coles, V. J. and **R. R. Hood** (2007) Modeling the impact of iron and phosphorus limitations on nitrogen fixation in the Atlantic Ocean. *Biogeosciences*, 4: 455-479.
Hood, R. R., E. A. Laws, M. J. Follows and D. A. Siegel (2007) Chapter 11: Modeling and prediction of marine microbial populations in the genomic era. *Oceanography*, 20(2): 155-165.
Hood, R. R., and J. R. Christian (2008) Ocean N-cycle modeling. In: *Nitrogen in the Marine Environment*, 2nd Edition, E. Carpenter, D. Capone, D. Bronk and M. Mullholland (eds), Elsevier, pp. 1445-1496.

Five Other Relevant Publications:

- Anderson J. T., **R. R. Hood**, and X. Zhang (2002) Quantification of *Pfiesteria piscicida* growth and encystment parameters using a numerical model. *Marine Ecology Progress Series*, 246: 105-113.
- Zhang, X., J. T. Anderson, and **R. R. Hood** (2003) Modeling *Pfiesteria* population dynamics: A new approach for tracking size and mass in mixotrophic species. *Marine Ecology Progress Series*, 256: 29-44.
- Hood, R. R.**, K.E. Kohler, J.P. McCreary, and S. L. Smith (2003) A four-dimensional validation of a coupled physical-biological model of the Arabian Sea. *Deep-Sea Research, Part II*, 50: 2917-2945.
- Hood R. R.** V. J. Coles and D. G. Capone (2004) Modeling the distribution of *Trichodesmium* and nitrogen fixation in the Atlantic Ocean, *Journal of Geophysical Research*, 109 (C6): C06007, doi: 10.1029/2002JC001753.
- Matanoski, J. C., and **R. R. Hood** (2005) An individual-based numerical model of medusa swimming behavior and implications for foraging efficiency and spatial distributions. *Marine Biology*, 149(3): 595-608.

Synergistic Activities (2006-present):

- 2008-present AGU Ocean Sciences Biological Oceanography Secretary (re-elected, 2nd term)
- 2006-present AGU Ocean Sciences Biological Oceanography Secretary
- 2005-present Committee Chair, SIBER Indian Ocean Research Planning Committee
- 2002-present Steering Committee Chair, CRC, Chesapeake Community Modeling Project
- 2007 Lead-organizer, convener, SIBER workshop on the Indian Ocean, Goa, India, Nov. 27-30
- 2007 Invited participant, CLIVAR IOP meeting, Pretoria, South Africa, Apr. 23 -25
- 2006 Lead-organizer, convener, SIBER conf. on the Indian Ocean, Goa, India, Oct. 3-6
- 2006 Invited participant, CLIVAR IOP meeting, Honolulu, HI, Feb. 27 - Mar. 2

Current Collaborators:

D. Bronk (VIMS), C. Brown (NOAA/NESDIS), C. Carlson (UCSB), R. Colwell (UMCP), G. Constantin de Magny (UMCP), C. Duffy (JHU), E. Laws (U. Hawaii), J. McCreary (U. Hawaii), R. Murtugudde (UMCP), W. Naqvi (NIO/India), D. Repeta (WHOI), G. Shenk (CBP), W. Smith (VIMS), D. Steinberg (VIMS), A. Voinov (CRC SERC), C. Wazniak (MD DNR), J. Wiggert (ODU), K. Wommack (U. Del.)

Advisors, Postdocs and Students:

Graduate Advisors: M.R. Abbott and R.W. Eppley

Post-graduate Advisors: W.M. Balch and D.B. Olson

Students: J. Anderson, J. Matanoski, J. Xu, M. Brooks, D. Keller, M. Sexton, D. Yoon

Postdocs: E. North, X. Zhang, J. Xu, J. Wiggert, C. Yoshikawa, W. Long