

CURRICULUM VITAE

PATRICIA MARGUERITE GLIBERT

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Education

BA Skidmore College, Saratoga Springs, NY, 1974, Biology (Phi Beta Kappa)

MS University of New Hampshire, 1976, Earth Sciences

PhD Harvard University, 1982, Organismal and Evolutionary Biology

Recent Professional Background

1993 - present Professor, University of Maryland Center for Environmental Science, Horn Point Laboratory

1989 – 1993 Associate Professor, University of Maryland Center for Environmental Science, Horn Point Laboratory

Recent Award

2006 Recipient of the University System of Maryland Regent's Award for Research, Scholarship and Creative Activity

Research

Research Interests

Transformations and fate of inorganic and organic nitrogen in marine and estuarine systems; ecology of phytoplankton in coastal and oceanic environments; effects of eutrophication; growth and physiology of marine cyanobacteria and harmful algal bloom species; stable isotope techniques; "top-down" control of nitrogen cycling; global eutrophication.

Representative Publications of Past 3 Years (out of 27 total since 2006)

2008

Stoecker, D.K., J.E. Adolf, A.R. Place, P.M. Glibert, and D. Meritt. 2008. Effects of the dinoflagellates *Karlodinium veneficum* and *Prorocentrum minimum* on early life history stages of the Eastern Oyster, *Crassostrea virginica*. *Marine Biology*. DOI 10.1007/s00227-007-0901-z

Alexander, J.A. D. K. Stoecker, D. W. Meritt, S. T. Alexander, A. Padeletti, D. Johns, L. Van Heukelem and P. M. Glibert. 2008. Differential feces and pseudofeces production by the oyster *Crassostrea ariakensis* when exposed to diets containing harmful dinoflagellate and raphidophyte species. *J. Shellfish Res.* 27: 1-12.

- Glibert, P. and 57 co-authors. 2008. Ocean urea fertilization for carbon credits poses high ecological risks. *Marine Pollution Bulletin* 56: 1049-1056.
DOI:10.1016/j.marpolbul.2008.03.010
- Heisler, J., P. Glibert, J. Burkholder, D. Anderson, W. Cochlan, W. Dennison, Q. Dortch, C. Gobler, C. Heil, E. Humphries, A. Lewitus, R. Magnien, H. Marshall, K. Sellner, D. Stockwell, D. Stoecker, and M. Suddleson. 2008. Eutrophication and harmful algal blooms: A scientific consensus. *Harmful Algae*. 8: 3-13.
DOI:10.1016/j.hal.2008.08.006
- Glibert, P.M., E. Mayorga and S. Seitzinger. 2008. *Prorocentrum minimum* tracks anthropogenic nitrogen and phosphorus inputs on a global basis: application of spatially explicit nutrient export models. *Harmful Algae*. 8: 33-38
DOI:10.1016/j.hal.2008.023
- Glibert, P.M., V. Kelly, L.A. Codispoti, W.C. Boicourt, T.M. Trice and B. Michael. 2008. In situ nutrient monitoring: A tool for capturing nutrient variability and the antecedent conditions that support algal blooms. *Harmful Algae*.8: 175-181.
DOI:10.1016/j.hal.2008.08.013

2007

- Glibert, P.M., J. Alexander, D.W. Meritt, E.W. North and D.K. Stoecker. 2007. Harmful algae pose additional challenges for oyster restoration: Impacts of the harmful algae *Karlodinium veneficum* and *Prorocentrum minimum* on early life stages of the oysters *Crassostrea virginica* and *Crassostrea ariakensis*. *J. Shellfish Res.* 26: 919-925.
- Glibert, P.M., C.E. Wazniak, M. Hall and B. Sturgis. 2007. Seasonal and interannual trends in nitrogen in Maryland's Coastal Bays and relationships with brown tide. *Ecol. Applications* 17 (5): S79-S87.
- Heil, C.A., M. Revilla, P.M. Glibert and S. Murasko. 2007. Nutrient quality drives phytoplankton community composition on the West Florida Shelf. *Limnology Oceanogr.* 52: 1067-1078.

2006

- Glibert, P.M., J. Harrison, C. Heil, and S. Seitzinger. 2006. Escalating worldwide use of urea – a global change contributing to coastal eutrophication. *Biogeochemistry* 77:441-463.
- Glibert, P.M., J.M. Burkholder, M.W. Parrow, A.J. Lewitus, and D. Gustafson. 2006. Rates of direct uptake of nitrogen and nitrogen nutritional preferences by functional types of *Pfiesteria piscicida* and *Pfiesteria shumwayae*. *Harmful Algae*. 5: 380-394.
- Hood, R., X. Zhang, P.M. Glibert, M.R. Roman and D. Stoecker. 2006. Modeling the influence of nutrients, turbulence and grazing on *Pfiesteria* dynamics. *Harmful Algae*. 5: 459-479.
- Wiegner, T.N., S.P. Seitzinger, P.M. Glibert and D.A. Bronk. 2006. Bioavailability of dissolved organic nitrogen and carbon from nine rivers in the eastern United States. *Aq. Microb. Ecol.* 43: 277-287

Synergistic Activities

P. Glibert serves on the SCOR/IOC GEOHAB Scientific Steering Committee, chairs the subgroup on HABS and eutrophication, and co-chairs the SCOR/LOICZ working group on land based nutrient pollution and HABS. She co-chairs the National HAB Committee and is secretary of the Coastal and Estuarine Research Federation (CERF). She has

been a consultant to the Government of Kuwait on recent HAB events. She was convener of an international symposium on HABs and Eutrophication, 2005, Baltimore MD, and co-convener of the ASLO 2006 conference in Victoria. She sits on the Harmful Algal Task Force of the State of Maryland, and scientific and technical advisory council for the Maryland Coastal Bays. She is a member of the EPA National Working Group on Nutrient Criteria for Estuaries. She is a member of the editorial boards of *Estuaries and Coasts*, *Harmful Algae*, and *Aquatic Microbial Ecology* and sits on the reader advisory panel for *Nature*. She recently co-edited 3 special issues of *Harmful Algae* (one on *Prorocentrum minimum*, published in 2005, and one on the Ecology of *Pfiesteria*, published in 2006, and one on Eutrophication and HABs, 2008), and 1 special ½ issue of *Oceanography* on the topic of harmful algae (2005).

Collaborators and co-editors of the past 48 months

University of Maryland UMCES and COMB: J. Adolf, J. Alexander, B. Boicourt, L. Codispoti, J. Cornwell, B. Dennison, R. Hood, D. Johns, T. Kana, V. Kelly, M. Kemp, D. Meritt, E. North, J. O'Neil, A. Place, M. Roman, C. Solomon, D. Stoecker, L. Van Heukelem

Maryland DNR and NOAA: S. Bricker, Q. Dortch, M. Hall, A. Lewitus, R. Magnien, B. Michael, M. Trice, C. Wazniak, X. Zhang

Other: D. Anderson (WHOI), L. Bouwman (Netherlands) M. Burford (Griffith Uni), J. Burkholder (NCState), A. Cembella (Bremerhaven), W. Cochlan (San Francisco State), J. Collier (Stony Brook), K. Furuya (Tokyo), E. Graneli and C. Legrand (Kalmar Univ), J. Harrison (Washington State U), P. Harrison (Hong Kong), C. Heil (FFWRI), R. Kudela (Santa Cruz), C. Madden (S. FL Water Mngmt), S. Murasko (FFWRI), H. Paerl (UNC), G. Pitcher (Univ. S. Africa), M. Kennish and S. Seitzinger (Rutgers), K. Sellner (SERC), B. Ward (Princeton), M. Zhou (Chinese Academy)

Current and former Students: D. Bronk, M. Lomas, C. Fan, G.M. Berg, K. Fielding, C. Solomon, D. Johns and J. Li

Advisors: T. Loder (retired, MS), J. McCarthy (Harvard, PhD), J. Goldman (WHOI, postdoc)