

CURRICULUM VITAE

Michael Randall Roman

University of Maryland Center for Environmental Studies
Horn Point Environmental Laboratory
P.O. Box 775 Cambridge, MD 21613 - 0775

DEGREES AND ADVANCED STUDY:

B. A. Lake Forest College (Biology), 1971
M. A. The City College (Biology), 1973
Ph.D. University of New Hampshire (Zoology), 1976

POSITIONS HELD:

Director, Horn Point Laboratory, University of Maryland Center for Environmental Science,
October 2001 – Present.

Professor, University of Maryland, Center for Environmental and Estuarine Studies, Horn Point
Environmental Laboratory, July 1990.

Acting Director, University of Maryland Center for Environmental and Estuarine Studies, Horn
Point Environmental Laboratory, April 1, 1989 - October 31, 1990.

Associate Professor, University of Maryland Center for Environmental and Estuarine Studies,
Horn Point Environmental Laboratories, July 1986 July 1990.

Assistant Professor, University of Maryland, Center for Environmental and Estuarine Studies,
Horn Point Environmental Laboratories, September 1983 – June 1986.

Assistant Professor, University of Maryland, Center for Environmental and Estuarine Studies,
Chesapeake Biological Laboratory, June 1981- September 1983.

Assistant Professor, University of Miami, School of Marine and Atmospheric Science, June
1978 - June 1981.

Postdoctoral Fellow, University of Miami, School of Marine and Atmospheric Science, October
1976 - June 1978.

Guest Student Investigator, Woods Hole Oceanographic Institution, September 1974 - October
1976.

GRADUATE COURSES TAUGHT:

Univ. of Miami:

Biological Oceanography
Marine Population Ecology
Seminar on Topics in Marine Ecology

UMCES:

Plankton Dynamics
Seminar on Topics in Marine Ecology
Seminar on Interdisciplinary Coastal Oceanography
Seminar on Carbon Cycling in the Ocean
Seminar on Estuarine Turbidity Maximum Zones
Seminar on BP Oil Spill
Zooplankton Ecology
Seminar on Using Chesapeake Bay Time Series Data

STUDENTS ADVISED:

Univ. of Miami:

Daniel Dossman, M.S., 1979 “Nutritional Relationships Between a Harpacticoid Copepod and Mangrove Detritus.”

Mark Gottfried, M.S., 1981 “The Ingestion and Assimilation of Coral Mucus Detritus by Reef Zooplankton.”

Michael Incze, M.S., 1981 “Episodic Detrital Organic Carbon Export from South Biscayne Bay, Florida.”

Mary Alice Russell, M.S., 1981 “The Ingestion of Coral Mucus Particles by Gorgonian Soft Corals.”

UMCES:

Sarah Libourel - Houde, M.S., 1985 “The Effect of Food Quality on the Functional Ingestion Response of the Copepod, *Acartia tonsa*.”

Jacques White, Ph.D., 1991 “Seasonal Study of Zooplankton Dynamics in the Mesohaline Chesapeake Bay.”

Carolyn Miller, Ph.D., 1992 “Effects of Food Quality and Quantity on Nitrogen Excretion by the Copepod, *Acartia tonsa*.”

Steve Jameson, Ph.D., 1995 “Morphometric Analysis of the Poritidae (Anthozoa:Scleractinia) off Belize.”

Judy O’Neil, Ph.D., 1995 “Interaction of Pelagic Harpacticoid Copepods and the Colonial Marine Cyanobacterium *Trichodesmium* spp.”

Louise Wooton, Ph.D., 1996 “Patterns of Protein and Energy Availability in Detrital Substrates as a Function of Source and Degree of Degradation.”

Juanita Urban, Ph.D., 1997 “The Role of Zooplankton Fecal Pellets in Carbon Flux.”

Matt Reaugh, M.S. 2005 “The effects of fresh water flow and grazing on plankton community structure in Chesapeake Bay tributaries.”

Scott Lloyd, Ph.D. 2006 “Zooplankton ecology in the Chesapeake Bay estuarine turbidity maximum, with special emphasis on the calanoid copepod, *Eurytemora affinis*.”

Allyson Barba, M.S. 2015 “Hypoxia effects on zooplankton in Chesapeake Bay.”

POST - DOCS ADVISED:

Parke Rublee, Hans Dam, Xincheng Zhang, Dave Kimmel, Jamie Pierson, David Elliott, Klaus Huebert (current), Amie West (current)

SYNERGISTIC ACTIVITIES:

National Academy of Sciences Committee to Review Large Oceanographic Programs; Chair - Steering Committee National Science Foundation program in Coastal Ocean Processes (CoOP); Interim Steering Committee, National Science Foundation program on Global Ecosystem Dynamics (GLOBEC) ; Executive Committee, Global Ocean Flux Study of Equatorial Pacific Ocean (NSF); Chair -National Academy of Sciences Panel to Review Proposed Research and Monitoring in the Gulf of Alaska in the wake of the Exxon Valdez Oil Spill; Co-Chair National Science Foundation Committee of Visitors; Editorial Board – Limnology and Oceanography; U.S. Committee for Census of Marine Life (CoML); Vice-Chair Steering Committee for Integrated Marine Biogeochemistry and Ecosystem Research (IMBER), President of The Oceanography Society 2011-2012, Steering Committee Ocean Carbon and Biogeochemistry 2014-2016, Steering Committee NSF Planning Arctic- North Atlantic Research Program 2014-2015, Co-Chair 2nd International Ocean Research Conference Barcelona Spain 11/14; Associate Editor Limnology and Oceanography Letters 2016-**present**; Steering Committee for IOC Global De-oxygenation 2016 – **present**; Trustee and Executive Committee Consortium of Ocean Leadership 2018-**present**.

PUBLICATIONS (last 6 years):

2018 Breitburg, D., Levin, L.A., Oschlies, A., Grégoire, M., Chavez, F.P., Conley, D.J., Garçon, V., Gilbert, D., Gutiérrez, D., Isensee, K., Jacinto, G.S., Limburg, K.E., Montes, I., Naqvi, S.W.A., Pitcher, G.C., Rabalais, N.N., Roman, M.R., Rose, K.A., Seibel, B.A., Telszewski, M., Yasuhara, M., Zhang, J. Declining oxygen in

the global ocean and coastal waters. *Science*. (80) 359:7240. doi:
10.1126/science.aam7240

Glaspie, C.N., Clouse, M., Adamack, A.T., Cha, Y.K., Ludsins, S.A., Mason, D.M., Roman, M.R., Stow, C.A., Brandt, S.B. Effect of hypoxia on diet of Atlantic bumper *Chloroscombrus chrysurus* in the Northern Gulf of Mexico. *Trans. Amer. Fish. Soc.* <https://doi.org/10.1002/tafs.10063>

Roman, M.R. and J.J. Pierson. Estuarine and Coastal Plankton. *In: Ocean Deoxygenation*. International Union for Conservation of Nature (IUCN) John Baxter (ed), *In Press*.

Roman, M.R., S. B. Brandt, E. D. Houde and J. J. Pierson: Interactive Effects of Hypoxia and Temperature on Coastal Pelagic Zooplankton and Fish. *Frontiers of Marine Science*. *In Review*.

- 2017 Pierson, J.J., Slater, W.C.L., Elliott, D., Roman, M.R. Synergistic effects of seasonal deoxygenation and temperature truncate copepod vertical migration and distribution. *Marine Ecology Progress Series*. 575, 57-68.
- 2016 Pierson, J. J., D. G. Kimmel & M. R. Roman. Temperature impacts on *Eurytemora* size and vital rates in the upper Chesapeake Bay in winter. *Estuaries and Coasts*. 39 (4): 1122–1132.
- 2015 K.K. Liu, K.C. Emeis, L.A. Levin, W. Naqvi, M.R. Roman. Preface — Biogeochemistry–ecosystem interaction on changing continental margins in the Anthropocene. *J. of Mar. Sys.* 141: 1-2.
- 2014 Zhang H, Mason D.M., Stow C.A., Adamack A.T., Brandt S.B., Zhang X., Kimmel D.G., Roman M.R., Boicourt W.C., Ludsins S.A. Impact of hypoxia on habitat quality of pelagic planktivorous fishes in the northern Gulf of Mexico. *Mar. Ecol. Prog. Ser.* 505:209-226.
- 2013 Elliott, D.T., J. J. Pierson, M. R. Roman. Predicting the effects of coastal hypoxia on vital rates of the planktonic copepod, *Acartia tonsa* Dana. *PLOS One*. 8(5): e63987. doi:10.1371/journal.pone.0063987
- Elliott, D.T., J. J. Pierson, M. R. Roman. Copepods and hypoxia in Chesapeake Bay: Abundance, vertical position, and non-predatory mortality. *Jour. Plankton Res.* 1-8:doi:10.1093/plankt/fbt049.
- Lloyd, S.S., D. T.E. Elliott and M.R. Roman. Egg production by the copepod, *Eurytemora affinis*, in Chesapeake Bay turbidity maximum regions. *Jour. Plankton Res.* 35: 299-308.