**BRADLEY PENTA**

Ocean Sciences Branch, Oceanography Division

Naval Research Laboratory, Code 7331

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**PROFESSIONAL PREPARATION**

Emory University, Atlanta, GA. Physics, Bachelor of Arts, 1989

University of South Florida, St. Petersburg, FL. Marine Science, Master of Science, 1993

University of South Florida, St. Petersburg, FL. Marine Science, Doctor of Philosophy, 2000

Florida Marine Research Institute, St. Petersburg, FL. Ecosystem Assessment and Restoration, Postdoctoral Research Staff, 2000 - 2001

Monterey Bay Aquarium Research Institute, Moss Landing, CA. Biological Oceanography, Postdoctoral Fellow, 2001 - 2003

**APPOINTMENTS**

Naval Research Laboratory: Stennis Space Center, MS. Mar. 2003 – Present: Oceanographer III

Marine Ecosystems Analysis Laboratory, USF: St. Petersburg, FL. Jan. 2000 – Aug. 2000: Associate in Research

University of South Florida: St. Petersburg, FL. Jan. 1990 – Jan. 2000: Research Assistant in Oceanography

Georgia State University: Atlanta, GA. Sep. 1989 – Dec. 1989: Laboratory Instructor – Astronomy

**PUBLICATIONS**

5 publications most closely related to the proposed project

Penta, B., Z. Lee, R. Kudela, S. Palacios, D. Gray, J. Jolliff, and I. Shulman (2008). An Underwater Light Attenuation Scheme for Marine Ecosystem Models. Optics Express 16, pp. 16581-16591.

Lehrter, J.C., D-S. Ko, M.C. Murrell, J.D. Hagy, B.A. Schaeffer, R.M. Greene, R.W. Gould, B. Penta (2013). Nutrient Distributions, Transport Pathways, and Fate on the Inner Margin of a River-Dominated Continental Shelf. *Journal of Geophysical Research* *(Oceans)*, 118, doi:10.1002/jgrc.20362.

Penta, B., D. Ko, R. Gould, R. Arnone, R. Greene, J. Lehrter, J. Hagy, B. Schaeffer, M. Murrell, J. Kurtz, B. Herchenroder, R. Green, and P. Eldridge (2009). Using Coupled Models to Study the Effects of River Discharge on Biogeochemical Cycling and Hypoxia in the Northern Gulf Of Mexico. Oceans ’09 Conference Proceedings.

Jolliff, J. K., J. C. Kindle, B. Penta, R. Helber, Z. Lee, I. Shulman, B. Arnone, C. D. Rowley (2007). On the Relationship Between Satellite-Estimated Bio-Optical and Thermal Properties in the Gulf of Mexico, *Journal of Geophysical Research,* 113, G01024, doi:10.1029/2006JG000373.

Penta, B., J. C. Kindle, I. Shulman, S. deRada, S. C. Anderson, Z.P. Lee, F. Chai, and R. A. Arnone (2005). Remote Sensing in Conjunction with the Navy Coastal Ocean Model (NCOM): examples from the California Current System. *Proceedings of the Eighth International Conference on Remote Sensing for Marine and Coastal Environments, Halifax, Nova Scotia, 17-19 May 2005*.

5 other significant publications

Shulman, I., B. Penta, J. Richman, G. Jacobs, S. Cayula, P. Sakalaukus, B. Bartels, F. Chavez, S. Haddock, and J. Ryan. (2014). Impact of submesoscale processes on dynamics of phytoplankton filaments. *Journal of Geophysical Research (Oceans),* in review.

Shulman, I., J. Kindle, P. Martin, S.deRada, J. Doyle, B. Penta, S. Anderson, F. Chai, F. Chavez, J. Paduan, and S. Ramp (2006). Modeling of upwelling/relaxation events with the Navy Coastal Ocean Model. *J. Geophys. Res.* V. 112, C06023, doi:10.1029/2006JC003496 *.*

Walsh, J. J., B. Penta, D. Dieterle and W. P. Bissett (2001). Predictive ecological modeling of harmful algal blooms. *Human and Ecological Risk Assessment*, *7*:1369-1383.

Penta, B. (2000). Phytoplankton Competition on the West Florida Shelf: A simulation analysis with "red tide" implications. Ph.D. Dissertation. University of South Florida, 192pp.

Penta, B. and J. J. Walsh (1995). A one-dimensional ecological model of summer oxygen distributions within the Chukchi Sea. *Continental Shelf Research,* *15*:337-356.

**SYNERGISTIC ACTIVITIES**

* NASA Biodiversity and Ecoforecasting Team
* Multi-institutional partnership (NRL, NASA, NOAA, BOEM, EPA) to develop the Adaptive Ecosystem Climatology for the Gulf of Mexico.
* Partnership with the EPA to develop a hypoxia modeling capability for the Gulf of Mexico.
* Multiple institution partnership (CANON/Biospace - BlumEx) to study plankton blooms in Monterey Bay, CA.
* Annual (2010-peresent) Gulf of Mexico Hypoxia Research Coordination Workshop/Ecosystem Modeling Workshop/GOM Integrated Ecosystem Assessment (GoM-IEA) Workshop.

**COLLABORATORS & OTHER AFFILIATIONS**

(a) Collaborators and Co-Editors.

Arnone, Robert – University of Southern Mississippi

Chavez, Fransisco - Monterey Bay Aquarium Research Institute.

Frolov, Sergey - Naval Research Laboratory, Monterey, CA

Gould, Richard – Naval Research Laboratory, Stennis Space Center.

Greene, Richard – Environmental Protection Agency, Gulf Ecology Division.

Grey, Deric - Naval Research Laboratory, Washington, D.C.

Haddock, Steven - Monterey Bay Aquarium Research Institute

Hagy, James - Environmental Protection Agency, Gulf Ecology Division

Jacobs, Gregg - Naval Research Laboratory, Stennis Space Center

Jolliff, Jason - Naval Research Laboratory, Stennis Space Center

Ko, Dong-Shan - Naval Research Laboratory, Stennis Space Center

Kudela, Raphael – University of California, Santa Cruz

Lehrter, John - Environmental Protection Agency, Gulf Ecology Division

Miller, W. David - Naval Research Laboratory, Washington, D.C.

Moline, Mark - University of Delaware

Murrell, Michael - Environmental Protection Agency, Gulf Ecology Division

Oliver, Matthew – University of Delaware

Richman, James - Naval Research Laboratory, Stennis Space Center

Ryan, John - Monterey Bay Aquarium Research Institute

Schaeffer, Blake - Environmental Protection Agency

Shulman, Igor - Naval Research Laboratory, Stennis Space Center

Teague, William - Naval Research Laboratory, Stennis Space Center

Weidemann, Alan - Naval Research Laboratory, Stennis Space Center

(b) Graduate and Postdoctoral Advisors.

Graduate Advisor (M.S. and Ph.D.) - Dr. John Walsh, University of South Florida

Postdoctoral Advisor – Dr. Karen Steidinger, Florida Fish and Wildlife Conservation Commission

Postdoctoral Advisor – Dr. Francisco Chavez, Monterey Bay Aquarium Research Institute

**THESIS ADVISOR AND POSTGRADUATE-SCHOLAR SPONSOR**  none