

WENDY L. RYAN
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a. Professional Preparation

Michigan State University	Lyman Briggs/Biology	B.S., 1984
Scripps Institution of Oceanography University of California, San Diego	Marine Biology	M.S., 1988
Scripps Institution of Oceanography University of California, San Diego	Marine Biology	Ph.D., 1991

b. Appointments:

2001-present:	Professor. Kutztown University.
1997-2000:	Associate Professor. Kutztown University.
1992-1997:	Assistant Professor. Kutztown University.
1990-1992:	Visiting Assistant Professor/Instructor. University of San Diego.

c. Publications:

5 Recent Publications

- Ryan, Wendy L. 2004. Osmosis and Experimental Design. In: *A Non-traditional Physiology Laboratory Manual*, D. U. Silverthorn, B. Johnson and A. C. Mills, eds. Prentice-Hall.
- Ryan, Wendy L. 2004. Mammalian Dive Reflex - An Investigation. In: *A Non-traditional Physiology Laboratory Manual*, D. U. Silverthorn, B. Johnson and A. C. Mills, eds. Prentice-Hall.
- Ryan, Wendy L. 2003. Instructor's Manual and Test Bank to accompany Environment, 4/e, by P. Raven and L. Berg. John Wiley and Sons Publishers, Hoboken, NJ. 244 pp.
- Sacchi, Chris, Zayaitz, Anne, Ryan, Wendy, Towne, William, and Mapes, Carol. 2002. Integrating Digital Imaging Technology in the Undergraduate Biology Curriculum. *Syllabus* 15(11):30-31.
- Ryan, Wendy L. 2002. Test Bank to accompany Biology, 6/e by E. Solomon, L. Berg, and D. Martin. Harcourt Brace College Publishers, Fort Worth, TX. 512 pp.

3 Additional Publications

- Ryan, Wendy L. and Edvard A. Hemmingsen. 1998. Bubble formation at porous hydrophobic surfaces. *J. Colloid and Interface Sci.* 197(1):101-107
- Ryan, W. L. and E. A. Hemmingsen. 1993. Bubble formation in water at smooth hydrophobic surfaces. *J. Colloid Interface Sci.* 157:312-317
- Ryan, Wendy L. and Edvard A. Hemmingsen. 1988. Gas supersaturation thresholds for bubble formation in and damage to sea urchin embryos. *Bio. Bull.* 74:83-89.

d. Synergistic Activities

- 1) Sponsored or co-sponsored 19 student presentations (34 students) for meetings of American Society of Limnology and Oceanography, Society for Integrative and Comparative Biology, Pennsylvania Academy of Science, and the Commonwealth of Pennsylvania University Biologists since 1995. Ten of these student research projects were supported through student research funds from regional and/or local agencies.
- 2) Supervised 19 student interns since 2001 at diverse educational, non-profit, and business locations ranging from various sites in Pennsylvania, to Massachusetts, North Carolina, New York, and Puerto Rico.
- 3) Developed, written and revised laboratory exercises for use in the following courses at Kutztown University: BIO 011 Introduction to Biology (non-majors, two exercises), BIO 104 Principles of Biology (two novel exercises), BIO/MAR 226 Marine Biology, BIO 234 Animal Physiology, BIO/MAR 320 Physiological Ecology, BIO/MAR 326 Marine Ecology, and BIO/MAR 340/341 Marine Mammals.
- 4) Program Coordinator for the Marine Science Program at Kutztown University and Chair of the Academic Advisory Council for the Marine Science Consortium, Wallops Island, VA.
- 5) Twenty-one career day presentations and eleven additional seminars and/or hands-on presentations to pre-college students of various grade levels, either at Kutztown University or on-site at their schools over the past 17 years.
- 6) Served as a judge and facilitator for the Berks County Science Olympiad (1996, 2000, 2002, 2005, 2007) and as a judge for the Senior Division of the Berks County Science and Engineering Fair (1994, 1995, 1998, 1999, 2000)

e. Collaborations

- 1) Project proposal with Christopher F. Sacchi addressing "*Enrollment, Retention, and Success of High Ability Students in Two Field-based Interdisciplinary Science Programs at Kutztown University*"
- 2) Project examining the metabolic response of zooplankton to hyperbaric pressures and a range of environmental temperatures. Collaborators include Nancy Butler and students in advanced marine courses.
- 3) Project: Innovative Technology for the Non-Majors Biology Laboratory with Drs. Anne E. Zayaitz, Christopher F. Sacchi, Cristen L. Rosch, and Todd J. Underwood. Funded through a State System of Higher Education Faculty Professional Development Grant awarded in 2007
- 4) Curriculum development and related presentations at national meetings (National Association of Biology Teachers 2006 and 2007) with Lauren Hvorecny, Programs Manager at the Marine Science Consortium (MSC), Wallops Island, VA, in part through my role as the Chair of the Academic Advisory Council for the MSC.
- 5) Project: Integrated Study of Environmental Effects on Organisms with Drs. Christopher Sacchi (PI), Carol C. Mapes, and Anne E. Zayaitz. NSF-CCLI 2002
- 6) Project: Biology Lab Adaptation and Digital Imaging Technology Project with Drs. Christopher Sacchi (PI), Carol C. Mapes, William F. Towne, and Anne E. Zayaitz. NSF-CCLI 1999