

Brian H. Jensen, Ph.D.
Associate Professor of Biology
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Education:

- 1994-2001 University of Delaware, Newark, DE
Ph.D. in Biology, 2001
- 1989-1993 Siena College, Loudonville, NY
B.S. in Biology, 1993

Teaching Experience:

- The College of Saint Rose – Associate Professor of Biology
 - Anatomy and Physiology Lecture and Laboratory
 - Comparative Anatomy of the Vertebrates Lecture and Laboratory
 - Invertebrate Zoology Lecture and Laboratory
 - Marine Ecology Lecture and Field Laboratory
 - Marine Biology Online Hybrid Course
 - Comparative Animal Physiology Lecture and Lab
 - Human Biology Lecture and Laboratory
 - Cape Cod Fitness
- Manhattanville College – Assistant Professor of Biology
 - Developmental Biology Lecture and Laboratory
 - Human Anatomy and Physiology Lecture and Laboratory
 - Invertebrate Zoology Lecture and Laboratory
 - Marine Biology Lecture and Laboratory
 - Advanced Mammalian Physiology
 - Vertebrate Biology Lecture and Laboratory
 - Introduction to Animal Behavior
 - Principles of Biology II Laboratory
- Rensselaer Polytechnic Institute – Adjunct Professor of Biology
 - Developmental Biology Lecture
- University of Delaware – Teaching Assistant
 - Human Anatomy and Physiology Laboratory and “Guest” Lectures
 - Comparative Physiology Laboratory and “Guest” Lectures
 - Microbial Biology Laboratory
 - General Biology II Laboratory
 - General Biology I Laboratory

Research Experience:

- January 2013 – Present. Role of oxytocin in melanophores dispersal.
- May 2010 – Present. Identification of meiofauna associated with artificial oyster reefs.
- May 2008 – Present. Developing models for assessment of endocrine disrupting chemicals using intact mummichog follicles and zebrafish embryos.
- September 2005 – Present. Developed undergraduate research program focusing on the function of spontaneous ovarian contractions in teleost fish.
- September 2002 – Present. Developed undergraduate research program focusing on the behavioral, physiological and morphological effects of endocrine disruptors on fish and anurans.
- January 2002- July 2002. NRSA Postdoctoral fellow at the University of Pennsylvania's Institute for Environmental Medicine. Working in the lab of Aron B. Fisher, M.D. on the effects of fluid shear stress and ischemia on gene regulation in lung microvascular endothelial cells.
- June 2001-January 2002. Postdoctoral research in the lab of Mary Cindy Farach-Carson, Ph.D. Identifying Ca²⁺ channel types present in murine pre-adipocytes (3T3-L1 cell line) during differentiation, and the effects of extracellular calcium on differentiation.
- 1998-1999. Collaboration with Bruce Richards, Ph.D. of the Delaware Center for the Inland Bays. Determined the spread of *Hemigrapsus sanguineus* (Japanese Shore Crab) in the Delaware Bay and inland bays.
- 1994-2001. Ph.D. student at the University of Delaware under Malcolm H. Taylor, Ph.D. Dissertation title: Lipid Transport and Allocation During the Reproductive Cycle of *Fundulus heteroclitus*.
- 1992-1993. Independent research under Douglas Frasier, Ph.D. Researched guppy predation on *Rivulus hartii* (Trinidad Jumping Juabine).
- 1991-1992. Intern for New York State Research Laboratory of John Fenton, Ph.D. Studied enzyme kinetics of thrombin.

Peer-Reviewed Publications:

Jensen, BH. 2016. Zebrafish Melanophores: A Model for Teaching Second Messenger Systems. *Zebrafish*. 13(4): 305-309.

Jensen, BH. 2010. A Better Way to Teach Basic Microscopy Using the Organisms found in Fish "Poop." *The American Biology Teacher*. 72(8): 495-498.

Marino, CL and BH Jensen. 2008. Ovarian Contractions in Zebrafish (*Danio rerio*) Coincide With Mating Behavior. *JBMR*.

Jensen, BH, MC Farach-Carson and KA Akanbi. 2004. High Extracellular Calcium Attenuates Adipogenesis in 3T3-L1 Preadipocytes. *Exp. Cell Res*. 301(2):280-92

Jensen, BH and MH Taylor. 2002. Lipid Transport in Female *Fundulus heteroclitus* During the Reproductive Season. *Fish Physiol. Biochem*. 25: 141-151.

Other Publications:

Jensen, BH. 2011. Lawn Pesticides and Fish. For the Academic Minute (<http://www.publicbroadcasting.net/wamc/news.newsmain/article/0/0/1798804/Academic.Minute/Dr..Brian.Jensen..The.College.of.Saint.Rose.-.Lawn.Pesticides.and.Fish>). 12 May 2011.

Jensen, BH. 2008. Dance Potential. *The HAPS Educator EDUSnippets*.

Jensen, BH. 2008. Hudson River Fisheries Biology. *The Environmental Consortium of Hudson Valley Colleges & Universities for The Teagle Foundation*.

Jensen B. 2004. Pollution Alters Body Chemistry. *The Poughkeepsie Journal*. 26 December 2004

Jensen, B. 2001. Delaware Hickory Shad. *The Fisherman Mid Atlantic Edition*. 24 May 2001 No.21.

Manuscripts in Preparation:

Jensen, BH and MH Taylor. The Role of the Plasma in Lipid Allocation During the Reproductive Cycle of a Multiple Spawning Teleost (*Fundulus heteroclitus*). In Preparation for: *Transactions of the American Fisheries Society*.

Invited Presentations:

Fish of Wellfleet Bay Wildlife Sanctuary. Presented during the volunteer workshops. May 2012.

The Science Behind the Important Ethical Issue of Stem Cells. Presented at the First Interdisciplinary Conversation in Ethics at The College of Saint Rose. November 2008.

Fisheries Biology of The Hudson River and New York Bight. Presented over two days for Lamont-Doherty Earth Observatory's River Summer Program. July 2008 - July 2009

Preventing to Prevent Plagiarism. Presented at a College of Saint Rose ProVision seminar. November 2007.

Teaching Research. Presented at a College of Saint Rose ProVision seminar. October 2006.

Fisheries Biology and The Hudson River. Presented as a Six-Hour Seminar for River Summer. July 2005-2007.

Teaching with Technology Forum; Use of Excel to Manage My Gradebook. The College of Saint Rose. February 2005.

Getting a Job in Academia. Presented for the Wadsworth Laboratories Post-Doctoral Retreat. March 2005.

Lipid Metabolism During the Reproductive Cycle of the Mummichog, *Fundulus heteroclitus*. Presented as a seminar at Swarthmore College, Swarthmore, PA. March 2001.

The Advance of *Hemigrapsus sanguineus* in the Delaware Bay and Inland Bays. Presented as a seminar at the Maryland Department of Natural Resources lab in Oxford, MD. December 1999.

Plasma Lipoprotein Profiles in *Fundulus heteroclitus* During Their Semilunar Spawning Cycle. Presented at the Spring meeting of the Mid-Atlantic Chapter of the American Fisheries Society at Rutgers University Marine Field Station, NJ. April 1997

Published Abstracts / Presentations:

Tyler, C and Jensen, BH. 2012. Changes in the meiofauna community associated with the construction of an artificial oyster reef. *Benthic Ecology Meeting*.

Jensen, BH. 2011. The Rich Benthic Community Found in Fish Tanks Is an Ideal Tool for Teaching Upper Level Biology Laboratories. *Int. Comp. Biol.*

Jensen, BH, Archambeault, J, and Krouse, S. 2010. A suite of tests to evaluate the effects of the common insecticide sevin on development of zebrafish. *Int Comp. Biol.*

Jensen, BH and Casey, A. 2009. Mummichog from Cape Cod have a much lower frequency of spontaneous ovarian contractions than has been reported from a Delaware population. *Int. Comp. Biol.*

Jensen, BH, Lai, M, Marino, CL, Bryce, B. 2008. Sexually regressed mummichog (*Fundulus heteroclitus*) lack spontaneous ovarian contractions. *Int. Comp. Biol.*

Marino, CL and Jensen, BH. 2007. Spontaneous Ovarian Contractions in Teleost Fish. *Int. Comp. Biol.*

Jensen, BH. 2006. Teleostean Ovarian Follicles as a Potential Detector of Endocrine Disrupting Chemicals and an Undergraduate Teaching Tool. *Int. Comp. Biol.*

Jensen, BH, Z Wei, and AB Fisher. 2002. Effects of Altered Shear Stress on Expression of Transcription Factors in Rat Pulmonary Microvascular Endothelial Cells. *Experimental Biology Late Breaking Abstracts*.

Jensen, BH and MH Taylor. 2000. The Effects of Estradiol Implants on Lipid Transport in *Fundulus heteroclitus*. *American Zoologist* v40 n5.

Jensen, BH, KE Wong and MH Taylor. 1999. Lipid Allocation and Transportation in *Fundulus heteroclitus* over Three Consecutive Spawning Cycles. *American Zoologist* v39 n5.

Jensen, BH. 1999. *Hemigrapsus sanguineus* in the Delaware Bay: Dynamics of the Invasion and Potential Effects. *Proceeding of the 28th Annual Benthic Ecology Meeting, 1999.*

Jensen, BH and MH Taylor. 1997. The Relationship Between Plasma Estradiol and Plasma Lipoproteins in *Fundulus heteroclitus* During Their Semilunar Spawning Cycle. *American Zoologist* v37 n5.

Jensen, BH and MH Taylor. 1996. Lipid Transport Mechanisms During the Semilunar Spawning Cycle of *Fundulus heteroclitus*. *American Zoologist* v36 n5.

Jensen, BH, W Cain, and MH Taylor. 1995. Plasma Levels of Triglycerides and Total Cholesterol in *Fundulus heteroclitus* During the Semilunar Spawning Cycle. *American Zoologist* v35 n5.

Professional Affiliations:

- Society for Integrative and Comparative Biologists
- American Association for the Advancement of Science
- American Fisheries Society
- Environmental Consortium of Hudson Valley Colleges and Universities
- Human Anatomy and Physiology Society
- National Association of Biology Teachers

Community Service:

July 2011: Volunteer for fish survey in Wellfleet Bay, MA.

May 2008 – 2012: Volunteer on artificial oyster reef in South Wellfleet, MA.

June 2008: Participated in round table discussion on encouraging college use of MA Audubon Sanctuaries.

June 2004 – 2014: Present a One Day Workshop of Fisheries Techniques for the Massachusetts Audubon Society at Their Wellfleet Bay Wildlife Sanctuary. Workshop is currently used to train volunteers.

March 2004 – November 2004: Member of the Environmental Consortium of Hudson River Colleges and Universities Planning Committee for their Third Annual Conference.

2004 – Present: Judge for the Joseph Henry Science Fair

2004 – Present: Judge for the Capital District Science Olympiad

November 2002: Walk for Life. Volunteered at the American Cancer Society.

August 2000: University of Delaware TA conference. Co-developed and co-facilitated a workshop entitled, “When good labs go bad: Turning a lab fiasco into a teaching bonanza.”

August 1999, August 2000: Co-facilitated a workshop on laboratory teaching for the University of Delaware TA conference.

September 1998 - 2002: Cab Calloway School of Performing Arts, Wilmington, DE. Field trip volunteer and coordinator. Consulted with science faculty on ways to integrate local natural history into broader biological themes and judged science fairs.

July 1998, July 1997: Sterck School (Delaware School for the Deaf), Newark, DE. Presented two talks on fish diversity and the importance of natural habitat to preschoolers and 4-6th graders.

July 1996: Delaware School for the Deaf Summer Program for Deaf-Blind Children, Newark, DE. Discussed insect communication, emphasizing that communication does not always require sight or hearing with student who are deaf-blind.

Honors and grants:

- 2011-2013 New York Math Science Partnership. Acted as content resource, and program launch participant for three local school districts.
- 2008 Recipient of The College of Saint Rose Scholars and Artists Grant
- 2008 Recipient of The College of Saint Rose Research Release Time
- 2007 Recipient of Bristol-Myers Squibb undergraduate research Grant
- 2007 Recipient of The College of Saint Rose Scholars and Artists Grant
- 2006 Recipient of The College of Saint Rose Scholars and Artists Grant
- First-place honors, oral presentation category, 2000 annual Graduate Student Research Symposium at the University of Delaware.
- Block Fellowship recipient Fall, 1999.
- New York State Regents Scholar, 1989.