

DR. EMMA S. CREASER
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ACADEMIC DEGREES

Ph. D. Biology

UNIVERSITY OF SOUTH FLORIDA

1990-1997
TAMPA, FLORIDA

DISSERTATION: Clypeasteroid intraskeletal matrix proteins.

The intraskeleton matrix proteins were extracted from a variety of clypeasteroid taxa. These proteins were then characterized and the data used to investigate the relationships between these proteins.

B. Sc. Biology (Zoology) Hons.

UNIVERSITY OF EXETER

1987-1990
EXETER, DEVON, UNITED KINGDOM

PROFESSIONAL EXPERIENCE

Associate Professor of Marine Biology and Physiology

UNITY COLLEGE

2004-present
UNITY, MAINE

Assistant Professor of Marine Biology and Physiology

UNITY COLLEGE

1997-2004
UNITY, MAINE

BI 1014 Biology I, BI 1024 Biology II, BI 2033 Marine Biology, BI 3654 Microbiology, BI 3883 Littoral Marine Ecology, CS 2881 Computer Presentations, BI 3254 Comparative Animal Physiology, BI 3243 Genetics, BI 3154 Vertebrate Structure and Function, IC 1113 Perspectives on Nature, IC 4123 Environmental Stewardship, BI 2303 Cell Biology, BI 3133 Environmental Plant Physiology, BI 3253 Invertebrate Zoology, BI 3003 Research Methods, ES 3013 Oceanography, AR 1881 Introduction to Oriental Dance

Graduate Teaching Assistant

UNIVERSITY OF SOUTH FLORIDA

1991-1996
TAMPA, FLORIDA

BSC 2050 Environment, BSC 2035 Sex in Today's World, PCB 3023 Cell Biology, ZOO 3203 Invertebrate Zoology, BSC 2011 Biodiversity, BSC 2010 Biology II: Cellular biology and general chemistry

GRANT AWARDS

Faculty Research Award	\$2,500
SMARTer Kids grant for Smart Roomware products, 2002	\$689
Institute of Biomolecular Science, Summer Fellowship awards 1992,1993.	\$1,417
Institute of Biomolecular Science, Travel Grant, Summer 1993	\$300
Dept. Biology, Travel Grant, Summer 1993	\$200
Sigma Xi, Tampa Chapter	\$100

PUBLICATIONS

Polson, E. S., Robbins, L. L. and Lawrence, J. M. 1993. *Intraskeletal matrix proteins in echinoderms*. Journal of the Marine Biological Association U.K., **73**, 727-730.

Creaser, E.S. & Johnson, A. 2009. *Your life as an Environmental Biologist*. Published online:
www.thehighschoolgraduate.com/editorial/BO/environmental_biologist.htm

PUBLISHED ABSTRACTS FOR POSTER PRESENTATIONS

Romney, C.; Creaser, E.S. & Arnett, A. 2008 *A Behavioral Response of Asterias forbesi*: Sensing Umami. Fifth NAEC, Florida Institute of Technology, FL

Creaser, E.S. 2006 Sigma Xi Grants-in Aid of Research. Council for Undergraduate Research 2006 National Conference: Learning through Research, DePauw University.

- Creaser, E. S., Malmberg, M. and Fox, D. 2000. *Integration of biology into an interdisciplinary environmental stewardship curriculum*. American Zoologist, **39(5)**, 74A.
- Creaser, E. S. 2000. *An unusual mucus gland on the tubefeet of Acrocrida brachiata, a burrowing brittlestar*. American Zoologist, **39(5)**, 52A.
- Polson (Creaser), E. S., Robbins, L. L. and Lawrence, J. M. 1994. *Clypeasteroid skeletal matrix proteins (Abs)*. In: Echinoderms through time. David, B., Guille, A., Féral, J-P., Roux, M. (eds.), 835. Balkema, Rotterdam.
- Polson (Creaser), E. S., Robbins, L. L. and Lawrence, J. M. 1992. *Shell matrix proteins - a potential tool for investigating the phylogenetic relationships of the Echinodermata*. The Paleontological Society, Special Publication **6**, 236. Abstracts and Program of the Fifth North American Paleontological Convention.

CHAPTERS REVIEWED

- Chapter 24: Circulation and Chapter 23: Transportation of Oxygen and Carbon Dioxide. *In: Animal Physiology 3ed*. Hill, R.W.; Wyse G.A. & Anderson M. *in press*. Sinauer Associates
- Chapter 24: Circulation *In: Animal Physiology 2ed*. Hill, R.W.; Wyse G.A. & Anderson M. 2008. Sinauer Associates

WORKSHOPS GIVEN

- Sigma-Xi annual meeting, Nov 2010 Raleigh, NC – Successful Grant Writing: Using GIAR as a model
- Sigma-Xi annual meeting, Nov 2007 Orlando, FL – series of workshops explaining the role of GIAR to the different constituencies
- North American AEE conference workshop – Adventure Bellydancing, April 11-13th, 2008
- Inland Hospital Wellness, Waterville February 19th, 2008
- Two sessions on in-service day March 19th, 2007; Fryeburg
- Health and Wellness Presentation May 19th, 2007

SENIOR THESES

- *Butterfly Diversity*; Russell, Aubrie; 2009
- *Morphological Differentiation of Disjunct Quercus macrocarpa Populations in Waldo and Kennebec Counties, Maine*; Coolbeth, Suzanne; 2008
- *Comparative Frequency of Black Bears*; Hunt, Jessica; 2008
- *Inventory of Wood Burrowing Insects*; O'Brien, Brent; 2008
- *Asterias forbesi and "taste-choice testing" sensing Umami*; Romney, Chanel; 2008
- *Is Amphibian Biodiversity in Wetlands declining due to urbanization?*; French, Nicole; December 2006
- *Iridovirus Outbreak In Eastern Box Turtles*; Snyder, Sarah; 2007
- *Domestic Cat Predation on Wildlife*; Haverly, Jayme; May 2006
- *Plant Hormone Effects on Earthworm Size And Biomass*; Poulin, Hana; May 2006
- *Correlation of dominant tree species to root restrictive horizons on Northern Pond Property: Monroe, Maine* Beasley, Lorie; April 2002
- *Investigating the effects of plant spatial arrangement and color on the frequency of bee pollination visits to Trifolium pretense and Prunella vulgaris*; Twombly, Erin; December 2003
- *Effects of wave action on Nucella lapillus along the coast of Maine*; Bannister, Rebecca; May 2005
- *Management techniques for common loon (Galvia immer) nests subject to human disturbance, on lakes and ponds in new Hampshire*; Colligan, Gregory M.; May 2003
- *Phenotypic plasticity in the common periwinkle (Littorina littorea) observed in the Gulf of Maine.*; Devlin, Shawn P.; May 2003
- *Physiology of Limpets*; Gagne, Priscilla; May 2003
- *The Psychology and Behavior of Dolphins*; Girard, Kristen; May 2003
- *Hatching success of laughing gulls (Larus atricilla) in relation to vegetative cover and inter- and intraspecific nest placement.*; Nagy, Jennifer; 2002
- *Rodent Population Study in Response to a Clear Cut Northern Hardwood Mixed Forest*; Mace, Michael C.; May 2002
- *Histology of Beroë cucumis, a ctenophore.*; Miller, Jennifer; May 2001
- *Tubefoot morphology of Ophiopholis aculeata*. Weiss, Perry; 2001
- *A Comparative study of sediment contamination in three Maine estuaries: Belfast Bay, the Penobscot River Estuary in Bucksport, and the Back Cove in Casco Bay, Portland*; Hill, Laura; 2001

ACHIEVEMENTS AND AFFILIATIONS

Colleagues on a Mission award, Unity College	Fall 2006
Co-Chair, BRLI Fundraising Committee	2007-present
Member of the Sigma Xi Executive Director Hiring Committee	2007
Chair, Grants in Aid of Research Committee, Sigma-Xi	2007-present
Consultant, Moosehead Lake Fisheries Coalition	2000-2007
Member of Sigma-Xi (Member at large) on Grants in aid of Research Committee	2000-2004; 2006-present
Guest reader for Sigma-Xi (Member at large) on Grants in aid of Research Committee	2004-2005
Member of Sigma-Xi (Member at large)	2000-present
Member of the American Microscopical Society	1998- 2000
Outstanding Teaching Assistant Award, Dept. of Biology, University of South Florida	1992-2003
Organizer of Fourth North American Echinoderm Conference	August 2001
Graduate of Bangor Region Leadership institute	2001

FACULTY COMMITTEES

Member, Cell Biology Search Committee	2010-2011
Academic Regulations Committee member	2008-present
Chair Computing and GIS Search Committee	2008-2009
Faculty Moderator	2005-2007
Member, President's Council	2005-2007
Chair, Chemistry Search Committee	2005-2006
Information Technology Committee	2004-2009

Chair, NEASC Five Year Report Committee

As chair of this committee, I was the primary author of the five year report to maintain our Accreditation.

2006-2007

Marine Biology Coordinator

I researched, designed and proposed new major in Marine Biology, which following a reexamination by a committee was approved by the Faculty in November 2005. Since then I have been working with admissions and corresponding with prospective students.

2005-

Member of Sabbatical and Professional Development Committee

2005-2009

Chair of Sabbatical and Professional Development Committee

2004-2005, 2007-2009

Member of Outdoor Recreation Search Committee

2004-2005

Faculty Planning Committee Chair,

2003

During my chairmanship we undertook and successfully completed a major redesign of all of the majors. This entailed a huge amount of paperwork and consolidation and tracking of data during this highly accelerated process. This included presenting all completed versions of the new majors to the faculty for their approval, and also compiling a list of all courses that the college offers with all the changes resulting from the program review and other decisions regarding offering frequency.

Member Faculty Planning Committee

2002

Director of Teacher Education Program

Fall 2002 - 2003

The first job upon appointment was to find out where we were in the process of establishing the program. I found the last submitted transcript analysis application and set about meeting the deficits in our application to the state. With the help of an excellent committee, we quickly met the deficits and had the faculty approve the necessary new courses. We then hired an assistant director and have been working very hard to establish the field experience component of the program, and to write the student handbook and the assessment criteria.

Computer and GIS Search Committee, Chair

2008-2009

Environmental Biology Coordinator

1998-2005

Faculty Academic Committee Chair

2001-2002

Dean Search Committee

2001-2002

Food Task Force	2001
Urban and Community Forestry Review Committee	2001
Wildlife Review Committee	2000-2001
Director of Institutional Advancement Search Committee	2000, 2001
Writing Task Group	2000
Faculty Policies and Procedures Committee	1998-2000
General Education Committee	1998-2000
Biology Task Group	1999-2000
Philosophy Search Committee	1999
Biology Search Committee, Chair	1998-9

PROFESSIONAL DEVELOPMENT

Collaborated with Dr. A. Yezerski at King's College to update molecular techniques	2009
North American Echinoderm Conference, Florida	2008
Chataqua Marine Field course development, Maui	2007
Attended Fish Otolith Mark Detection Training Session held at IF&W, Augusta Maine	September 2006
Council for Undergraduate Research Conference	2000, 2002, 2006
Attended Bioquest Workshop: Mammalian Bioinformatics, As part of this workshop I authored, together with Sarah Kenick, an exploratory module on Leptin called 'LIMPET: Leptin, an insular molecule physiologically investigates evolutionary theory.'	2004
Faculty Development Workshops every fall and spring	1999-present
Attended Science Education Workshop for Life Science and Chemistry, Boston College Sessions: Hands-On Biology <i>Labs</i> Online, Incorporating Original Research, Science Assessment Strategies	2002
Bangor Region Leadership Institute	2001
NSF workshop on Curriculum Development, Implementation and Support	2001
Went with student Mark Huard to Posters on the Hill Conference, Washington, DC	2001
Assisted Mike Horst teaching "Molecular Approaches to Marine Invertebrate Zoology" Darling Marine Center, University of Maine	2000, 2001
Molecular Approaches to Marine Invertebrate Zoology short course	1998,1999

COMMUNITY MEMBERSHIPS

Co-Chair, BRLI Fundraising Committee	2007-2009
BRLI Fundraising Committee member	2006
Member of Nominating Committee, Abnaki Girl Scout Council, Maine	2004-8
Soprano, St. John's Episcopal Church Choir, Bangor	1997-present
Alumni Association, Bangor Region Leadership Institute	2002-present
Junior Warden, St John's Episcopal Church, Bangor	2001 – 2004
Co-organizer "Sing with Joy" tour of England by the Choir (Included St. Paul's Cathedral)	2001
Sunday School Teacher, St. John's Episcopal Church	2000-2001
Assistant Stage Manager, Lighting Director and chorus member of: "Joseph and his Technicolor Dreamcoat"	2000
"Godspell"	2001
University of Maine Oratorio Society (<i>Beethoven's Mass in C Major, Vivaldi's Magnificat, War Requiem, St. Nicholas Cantata, Carmina Burana</i>)	1999-2001