MARNEY C. PRATT

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PROFESSIONAL PREPARATION

Bowdoin College, Brunswick, ME. August 2003 – July 2004.
Post Doctoral Researcher at the Coastal Studies Center (http://academic.bowdoin.edu/csc/)
Duke University, Durham, NC. September 1997 – September 2003.
Ph.D. candidate in Biology, minor in Engineering
Teaching Certificate in College Biology, Duke University, Durham, NC. April 2003.
Bowdoin College, Brunswick, ME. September 1993-December 1996.
A.B. in Biology, *Summa Cum Laude* with Honors in Biology

TEACHING AND RESEARCH POSITIONS

•Scholar-in-Residence, Coastal Studies Center, Bowdoin College, August 2003 – July 2004.
I am currently conducting postdoctoral research on an invasive species in the Gulf of Maine, and will teach an upper-level course (Intertidal Ecology) in the spring semester (2004).
•Adjunct Instructor, Guilford College: General Zoology, Summer 2003.
Taught a summer course for the Continuing Education Program at Guilford College. This course met twice a week for 10 weeks and included both lectures and laboratories.
•Teaching Assistant, Duke University: Introductory Biology, Spring 2001; Biodiversity, Fall 2000; Biomechanics, Spring 1998; Physiology, Fall 1997.
Introductory Biology: Ran a lab and seminar section, graded papers, assignments and exams
Biodiversity: Ran lab section, wrote quizzes, graded exams, wrote an additional lab exercise (on bryozoans).
Biomechanics: Ran recitation to help students with weekly problem sets and graded the problem sets.
Physiology: Ran an entire lab section, included supervising group independent projects, writing and grading lab quizzes, and grading lab reports.
•Teaching Assistant, Friday Harbor Laboratories, University of Washington: Marine Invertebrate Zoology, Summer 2000.
Helped teach intensive five-week course: assisted students in lab and on field trips, gave a lecture, and assisted in writing and grading exams. A set of web pages was developed as a part of a class project and can be viewed at the following link: http://depts.washington.edu/fhl/zoo432/indexframes.htm.
•Teaching Assistant, Bowdoin College: Introductory Biology, Spring 1997.
Howard Hughes Medical Institute Bowdoin Biology Fellow: Ran two lab sections, included grading of weekly problem sets.
•Research assistant, Dr. Zoe G. Cardon, Bowdoin College, Spring 1997.
Assisted in research on plant physiological ecology.
•Lab assistant, Bowdoin College: Comparative Neurobiology, Fall 1996.
Assisted before and during lab, included making up saline solutions before lab and helping students during lab by answer questions and assisting in dissections.

FELLOWSHIPS AND GRANTS

Funds to buy equipment and cover costs of Ph.D. dissertation research:
•Doctoral Dissertation Improvement Grant. National Science Foundation. June 2002-May 2003. ($7500)
•Biology Dissertation Improvement Grant. Duke University. Spring 2001. ($7000)
•Wainwright Fellowship. Friday Harbor Laboratories. Summer 2001, 2002. ($5000 each)

•Project AWARE Foundation Grant. PADI. Summer 2001. ($1000)
•Zoology Grant-in-Aid of Research. Duke University. Summer 2000. ($1000)
•Grant-in-Aid of Research. Sigma Xi. Summer 2000, 1999. ($700 each)

Fellowships to cover stipend and/or tuition during dissertation research:
•American Fellowship. American Association of University Women. July 2002-June 2003. ($20,000)
•Graduate Research Fellowship. National Science Foundation. Three years. ($80,000)
•Friday Harbor Laboratories Scholarship. University of Washington. Summer 1998. ($1200)

Funds to cover undergraduate research:
•Surdna Foundation Undergraduate Research Fellowship. Bowdoin College, Summer 1996. ($2400)
•Merk Grant. Bowdoin College, Summer 1996. ($1000)
•Hughes Grant. Bowdoin College, December 1996. ($300)

HONORS OR OTHER AWARDS

•Sumner Increase Kimball Prize. Bowdoin College, 1997.
Book prize awarded to the member of the senior class who has shown the most ability and originality in the field of the Natural Sciences.
•Copeland-Gross Biology Prize. Bowdoin College, 1997.
Book prize awarded by the Biology Department to the graduating senior who best exemplifies the idea of a liberal arts education.
•*Phi Beta Kappa*. Bowdoin College, 1997.
•James Malcom Moulton Prize in Biology. Bowdoin College, 1996.
Award for outstanding junior majoring in biology.
•CRC Press Freshman Chemistry Award. Bowdoin College, 1994.
Award for outstanding first year student in chemistry.
•James Bowdoin Scholar. Bowdoin College, 1993-94, 1994-95, 1995-96.
Awarded for academic excellence in the previous school year.

PUBLICATIONS

Pratt, M.C. and Johnson, A.S. (2002). Strength, drag, and dislodgement of two competing intertidal algae from two wave exposures and four seasons. J. Exp. Mar. Biol. Ecol. 272:71-101.

ORAL AND POSTER PRESENTATIONS

• University of New Hampshire, Invited Speaker, October 2003
• Ecological Society of America, Annual Meeting, Savannah, Georgia, August 2003
• American Association of University Women, Chapel Hill Chapter, Chapel Hill, April 2003
• American Association of University Women, Wilmington Chapter, Wilmington, March 2003
• Society for Integrative and Comparative Biology, Annual Meeting, Toronto, Canada, January 2003
• University of Washington, Friday Harbor Laboratories, Invited Speaker, July 2002
• Society for Integrative and Comparative Biology, Annual Meeting, Anaheim, January 2002
• University of Washington, Friday Harbor Laboratories, Friday Harbor, August 2001
• International Bryozoology Association, Tri-annual Meeting, Dublin, Ireland, July 2001
• UNC-Duke Biology Graduate Student Symposium, Chapel Hill, April 2001
• Society for Integrative and Comparative Biology, Annual Meeting, Chicago, January 2001
• Benthic Ecology Meetings, Wilmington, March 2000
• Society for Integrative and Comparative Biology, Annual Meeting, Atlanta, January 2000
• Benthic Ecology Meetings, Portland, March 1997
• Society for Integrative and Comparative Biology, Annual Meeting, December 1996

PROFESSIONAL ASSOCIATIONS

Ecological Society of America, Spring 2003-present.
Association of Women in Science, Spring 2000-present.
International Bryozoology Association, Summer 1999-present.
Society of Integrative and Comparative Biology, Fall 1996-present.

RESEARCH EXPERIENCE

FLOW, FEEDING, AND FORM: CONSEQUENCES OF COLONIALITY IN BRYOZOANS

•PhD thesis research with Dr. S. Vogel, Duke University, Fall 1998 – Fall 2003.

I spent several summers (1999-2002) collecting data at the Friday Harbor Laboratories investigating how water velocity affects feeding success, growth, and survival in erect and encrusting marine bryozoans. Results suggest that an encrusting species (*Membranipora membranacea*) seems to be able to capture more food, grow faster, and survive longer than other species. One reason why *Membranipora* has such a high ingestion rate may be due to the dense arrangement of zooids and highly efficient coordinated filtering techniques.

RISK OF DISLODGEMENT IN TWO INTERTIDAL SEAWEEDS

•Senior honors thesis with Dr. A.S. Johnson, Bowdoin College, January 1996 – May 1997.

This study investigated the seasonal and site-specific effects on the material properties of two co-dominant low intertidal red algae. We examined the ratio between breaking force and drag for two species of co-dominant, red algae, *Chondrus crispus* and *Mastocarpus stellatus*, in four seasons at two wave exposures. Despite differences in material properties and drag forces, these two species had a similar size-specific risk of dislodgment.

DISTRIBUTION AND ABUNDANCE OF INTERTIDAL ALGAE

•Self-designed project with E.A. Archie, Kent Island, Bowdoin Scientific Station, NB Canada, Summer 1995.

Self-designed independent project conducted with fellow student. Mapped distributions and relative abundances of the dominant algae in the intertidal zone surrounding Kent Island. Also compiled a list of all intertidal organisms found around the island. (http://academic.bowdoin.edu/kent_island/marine.shtml)

LEADERSHIP AND COMMITTEES

•Certificate in Teaching College Biology Committee, Duke University, Fall 2001-Summer 2003.

Serve as one of three graduate student representatives on the committee. The Certificate in Teaching College Biology aims to enhance the overall professional development of future biologists by preparing graduate students to teach biological sciences. The committee's responsibilities include furthering program development, awarding the certificate to participants who satisfactorily complete all the requirements, assessing program effectiveness, and organizing program functions. (http://www.biology.duke.edu/teachcert/)

•WiSE Panning Committee, Duke University, Spring 2002-Summer 2003.

Women in Science and Engineering (WiSE) is an organization comprised of women graduate students and post-doctoral associates who work to improve the climate for women in sciences and engineering at Duke. WiSE sponsors events through which women faculty members, administrators, post-doctoral associates, and graduate students can come together to share experiences and ideas for change.

•UNC-Duke Biology Graduate Student Symposium, University of North Carolina Chapel Hill, April 28, 2001.

Served as the Duke contact and helped coordinate the symposium. The intent of the symposium was to increase awareness of graduate student research and promote the exchange of ideas between the biology departments at Duke University and University of North Carolina at Chapel Hill.

•Zoology Graduate Student Steering Committee, Duke University, Summer 1999-Spring 2000.
The Graduate Student Steering Committee serves as the graduate student voice to the department and administration and also organizes activities for graduate students (including new student orientation). The biggest challenges that we faced while I was on the committee dealt with graduate student concerns over the merger of the Zoology and Botany departments into a single Biology department.

•BLIMP Coordinator, Duke University, Fall 1998-Spring 1999.
The BLIMP coordinator organizes the weekly meetings of the Biomechanical Laboratory of Integrative Morphology & Physiology (BLIMP). BLIMP is a forum where students and faculty from Duke University and University of North Carolina at Chapel Hill meet to give oral presentations and exchange ideas about current research in the field of comparative biomechanics.

•Coastal Studies Committee, Bowdoin College, Fall 1995-Spring 1997.
Served as the student representative on the committee to design Bowdoin College's Coastal Studies Center. (http://academic.bowdoin.edu/csc/)

OTHER ACADEMIC SERVICE

• Reviewer for *Invertebrate Biology* and *American Naturalist*
• Moderator for Panel Discussion at 8th Annual Ph.D. Career Symposium, Duke University, February 2003
• Gave speech as the Graduate Student Representative at Board of Trustees Meeting, February 2003