

Jessica M. Budke

- CONTACT INFORMATION** University of Connecticut jessica.budke@uconn.edu, (860) 486-6306
Storrs, CT USA <http://hydrodictyon.eeb.uconn.edu/people/jbudke>
- EDUCATION** 2006 – Present, Ph.D. Candidate, University of Connecticut,
Dept. of Ecology and Evolutionary Biology, Storrs, CT USA
Advisors: Bernard Goffinet and Cynthia S. Jones
2005, M.S. Botany, University of Connecticut
Dept. of Ecology and Evolutionary Biology, Storrs, CT USA
2003, B.S. Botany, Miami University, Department of Botany, Oxford, OH, USA
- RESEARCH INTERESTS** Bryophytes (Mosses); Developmental Morphology; Anatomy; Systematics; Evolution.
- PUBLICATIONS** Larraín J., Herrera F., **Budke J. M.** and B. Goffinet. 2009. Phylogenetic affinities and conservation status of the Chilean endemic *Costesia spongiosa* (Bryophyta: Gigaspermaceae). *The Bryologist* 112(2): 279-286.
Budke J. M., Jones C. S. and B. Goffinet. 2007. Development of the enigmatic peristome of *Timmia megapolitana* (Timmiaceae; Bryophyta). *American Journal of Botany* 94(3): 460-467.
Budke J. M. and B. Goffinet. 2006. Phylogenetic analysis of Timmiaceae (Bryophyta: Musci) based on nuclear and chloroplast sequence data. *Systematic Botany* 31(4): 633-641.
Budke J. M., Hickey R. J. and K. D. Heafner 2005. Analysis of morphological and anatomical characteristics of *Isoetes* using *Isoetes tennesseensis*. *Brittonia* 57(2): 167-182.
Luebke N. T. and **J. M. Budke** 2003. *Isoëtes tennesseensis* (Isoëtaceae), an Octoploid Quillwort from Tennessee. *American Fern Journal* 93(4): 184-190.
- AWARDS FELLOWSHIPS** 2008 East Asia Pacific Summer Institute Fellowship (National Science Foundation)
National Institute for Basic Biology, Okazaki, Japan
Host Researchers: Dr. M. Hasebe and Dr. Y. Hiwatashi
2007 Conant "Botanical Images" Student Travel Award: Second Place
2005 Graduate Research Fellowship: Honorable Mention (NSF)
2003 Young Botanist Award: Special Achievement (Botanical Society of America)
2003 Outstanding Woman Senior in Science, Engineering, and Technology
Miami Valley Association for Women in Science (AWIS)
- RESEARCH GRANTS** 2009 International Association of Bryologists: Stanley Greene Award (\$1100)
2009 Botanical Society of America: Graduate Student Research Award (\$500)
2009 American Microscopical Society: Graduate Student Research Award (\$700)
2009 Henry N. Andrews Endowment Fund: UConn EEB (\$1000)
2007, 2006, 2004 Ronald Bamford Endowment Fund: UConn EEB (\$800, \$1100, \$1275)
2002 Academic Challenge Fund: MU Botany (\$1030)
2002, 2001 W. S. Turrell Travel Grant: MU Herbarium
(#181, \$1319, co-author C. Craig; #179, \$695, co-author K. Gustafson)

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| RESEARCH EXPERIENCE | <p>2007, Spring <i>Research Assistant: University of Connecticut</i> Examining the evolution of <i>cysA</i> and <i>cysT</i> across liverworts. NSF Grant to B. Goffinet: Assembling the Liverwort Tree of Life</p> <p>2004, Summer <i>Research Assistant: University of Connecticut</i> Establishing a protocol for growing mosses from single spore isolates. NSF Grant to B. Goffinet: Phylogenetic and geographic patterns in moss diversity</p> <p>2002-2003 <i>Dean's Scholar in the College of Arts and Science: Miami University</i> Using ISSR markers to examine population genetics in <i>Isoetes canadensis</i>. Advisors: R. James Hickey and Linda Watson</p> <p>2002, Summer <i>Howard Hughes Internship: Miami University</i> Using PCR to isolate a single copy gene (<i>cycloidea</i>) across the Asteraceae. Advisor: Linda Watson</p> <p>2001, Summer <i>Undergraduate Summer Scholar: Miami University</i> Anatomical examination of leaf characters in <i>Isoetes tennesseensis</i>. Advisor: R. James Hickey</p> <p>1998, Summer <i>Howard Hughes Internship: University of Cincinnati</i> Center for the Research of Endangered Wildlife (CREW) Cincinnati Zoo and Botanical Gardens Tissue culture and cryopreservation of tropical herbs for propagation. Advisors: Valerie C. Pence and Bernadette L. Plair</p> |
| CONFERENCE PRESENTATIONS | <p>Connecticut Outdoor Environmental Education Association Annual Conference 2008</p> <p>Invited Presentation: Miniature Mosses Outdoor Workshop</p> <p>Botanical Society of America Annual Meeting, Oral Presentation 2003, 2005, 2006, 2007</p> <p>Northeast Ecology and Evolution Conference, Oral Presentation 2004</p> <p>Association of Southeastern Biologist's Annual Meeting, Oral Presentation 2002</p> |
| ACADEMIC EXPERIENCE AND SERVICE | <p><i>Teaching Assistant: University of Connecticut</i></p> <p><i>Introductory Courses</i></p> <p>Biology II (for majors) - BIO 108 Fall 2003, 2005, 2006 & Spring 2004, 2005</p> <p>Introduction to Botany - BIO 110 Fall 2004</p> <p><i>Advanced Courses</i></p> <p>Phylogenetics – EEB 5349 Spring 2009</p> <p>Plant Anatomy – EEB 4276 Fall 2008</p> <p>Evolution of Green Plants – EEB 291 / 391 Spring 2008</p> <p>Developmental Plant Morphology – EEB 203 / 303 Fall 2007</p> <p>Bryology and Lichenology – EEB 240 / 340 Spring 2006</p> <p><i>International Experience</i></p> <p>Laboratory Workshop on <i>Physcomitrella patens</i>: Okazaki, Japan June 30-July 4, 2008 Developmental processes, gene targeting, bioimaging, and bioinformatics. Hosted by the National Institute for Basic Biology</p> <p><i>Physcomitrella</i> Genome Workshop: Freiburg, Germany March 17-18, 2008 Sequence analysis using the <i>Physcomitrella</i> genome browser and BLAST tools. Hosted by the University of Freiburg, Plant Biotechnology</p> |

Tropical Ferns and Lycophytes, Specialty Course: Costa Rica January 8-24, 2008
 Floristic, taxonomic, phylogenetic and ecological research on tropical ferns.
 Organization for Tropical Studies at Las Cruces and La Selva Biological Station

Undergraduate Student Advising

Leah Newman (Major: Biological Sciences) Fall 2008-Present
 Studying *Micromitrium* using DNA sequence data.
 Melissa Wynne (Major: Allied Health Sciences) Fall 2008-Present
 Examining calyptra senescence in *Funaria hygrometrica*.
 Lauren Hensley (Major: Biological Sciences) Spring 2008
 Culturing mosses of the Funariaceae using sterile techniques.

Reviewer: Journal of Biogeography

Member: American Bryological and Lichenological Society, American Fern Society,
 American Microscopical Society, American Society of Plant Taxonomists,
 Association for Women in Science, Botanical Society of America, International
 Association for Plant Taxonomy, Society for Integrative and Comparative Biology

Academic Service: Ecology and Evolutionary Biology Graduate Student Association
 (University of Connecticut): President (2006 – 2007), Treasurer (2004 – 2006);
 NEEC (Northeast Ecology and Evolution Conference): Housing and Recruitment
 Committees (2004); Botany Department Chair Search Committee (Miami University),
 Undergraduate Representative (2003).

**COMMUNITY
 OUTREACH**

Moss Plants and More: Commentary on All Things Bryological October 2007 - Present
 Weekly updated online bryology blog. Communicating science to the public.
www.mossplants.blogspot.com

Outdoor Presentation Leader: Moss Walks

New Pond Farm, West Redding, CT May 30, 2009
 White Memorial Nature Preserve, Litchfield, CT October 18, 2008
 Denison Pequotsepos Nature Center, Mystic, CT September 27, 2008
 Edwin Way Teale Memorial Sanctuary at Trail Wood Hampton, CT June 16, 2007
 James T. Goodwin Conservation Center, Hampton, CT July 2005, 2006, 2007

Outdoor Presentation Leader: Fern Walks

James T. Goodwin Conservation Center, Hampton, CT August 26, 2006
 Sponsored by the Connecticut Dept. of Environmental Protection

Bioblitz: 24-hour biological survey of a Connecticut park with scientists, students and the public.

Goodwin College, Hartford, CT June 12-13, 2009
 Wilbert Snow School, Middletown, CT June 8-9, 2007
 Two Rivers Magnet School, East Hartford, CT June 3-4, 2005

All Taxa Biodiversity Inventory (ATBI) Summer 2001, 2002, 2003
 Great Smoky Mountains National Park: Fern Foray Participant