J M Budke

University of Tennessee – Knoxville

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FIELDS OF EXPERTISE

Evolutionary Developmental Biology, Structure-Function Relationships, Comparative Morphology, Phylogenetics, Taxonomy, Physiology, Botany, Bryology, Science Communication.

ACADEMIC APPOINTMENTS

Starting August 2016: **Assistant Professor & Herbarium Director, Univ. of Tennessee, Knoxville, TN**

June - July 2016: **Research Assistant Professor, University of Tennessee, Knoxville, TN**

POSTDOCTORAL EXPERIENCE

2013 - 2016: **Katherine Esau Postdoctoral Research Fellow, University of California - Davis**
Faculty Sponsor: Dr. Neelima R. Sinha

2011 - 2012: **Postdoctoral Researcher, University of Connecticut, Storrs, CT**
NSF Grant, Dr. B. Goffinet: Rapid radiation and sporophyte evolution in the Funariaceae.

EDUCATION

2011 **Ph.D. Ecology and Evolutionary Biology, University of Connecticut, Storrs, CT**
"Examining the gametophytic calyptra and its role in sporophyte development of the moss *Funaria hygrometrica* Hedw." Advisors: Dr. Bernard Goffinet & Dr. Cynthia S. Jones

2005 **M.S. Botany, University of Connecticut, Storrs, CT**
"Phylogenetic analysis of the Timmiaceae (Bryophyta: Musci) inferred from sequence data and a developmental study of the peristome-forming region of *Timmia megapolitana* (Timmiaceae)" Advisors: Dr. Bernard Goffinet & Dr. Cynthia S. Jones

2003 **B.S. Botany, Miami University, Oxford, OH**

PUBLICATIONS

Peer Reviewed (17)

In review Ranjan A[1], **Budke JM[1]**, Rowland SD[1], Chitwood DH, Kumar R, Ichihashi Y, Zumstein K, Maloof JN, Sinha NR. eQTL in a precisely defined tomato introgression population reveal genetic regulation of gene expression patterns related to physiological and developmental pathways. *Plant Physiology* ([1] equal co-first authors)

Accepted **Budke JM,** Goffinet B. Comparative cuticle development reveals taller sporophyte offspring are protected by thicker maternal calyptra cuticles in mosses. *Frontiers in Plant Science*

Accepted Busta L, **Budke JM,** Jetter R. Cuticular waxes from the gametophyte, sporophyte, and calyptra of the moss *Funaria hygrometrica. Annals of Botany*

2016 Busta L, **Budke JM,** Jetter R. Identification of β-hydroxy fatty acid esters and primary, secondary-alkanediol esters in cuticular waxes of the moss *Funaria hygrometrica. Phytochemistry* 121: 38-49.

2013 **Budke JM**, Goffinet B, Jones CS. Dehydration protection provided by a maternal cuticle improves offspring fitness in the moss *Funaria hygrometrica. Annals of Botany* 111: 781-789.

2013 Liu Y, Forrest LL, Bainard JD, **Budke JM**, Goffinet B. Organellar genome, nuclear ribosomal DNA repeat unit, and microsatellites isolated from a small-scale of 454 GS FLX sequencing on two mosses. *Molecular Phylogenetics and Evolution* 66: 1089-1094.

2012 Wynne MA*****, **Budke JM.** Examining the ability of calyptrae to produce protonema in *Funaria hygrometrica*. *Evansia* 29: 61-64. (***** undergraduate student collaborator)

2012 **Budke JM**, Goffinet B, Jones CS. The cuticle on the gametophyte calyptra matures before the sporophyte cuticle in the moss *Funaria hygrometrica* (Funariaceae)*. American Journal of Botany* 99: 14-22. **Winner of the 2013 Grady L. Webster Publication Award**

2012 Liu Y, **Budke JM**, Goffinet B. Phylogenetic inference rejects sporophyte based classification of the Funariaceae (Bryophyta): rapid radiation suggests rampant homoplasy in sporophyte evolution. *Molecular Phylogenetics and Evolution* 62: 130-145.

2011 **Budke JM**, Goffinet B, Jones CS. A hundred-year-old question: is the moss calyptra covered by a cuticle? A case study of *Funaria hygrometrica. Annals of Botany* 107: 1259-1277.

2011 Goffinet B, **Budke JM,** Newman LC*****. Micromitriaceae: A new family of highly reduced mosses. *Taxon* 60: 1245-1254. (***** undergraduate student collaborator)

2011 Wickett NJ, Forrest LL, **Budke JM**, Shaw B, Goffinet B. Frequent pseudogenization and loss of the plastid-encoded, sulfate transport gene *cys*A throughout the evolution of liverworts. *American Journal of Botany* 98: 1263-1275.

2009 Larraín J, Herrera F, **Budke JM**, Goffinet B. Phylogenetic affinities and conservation status of the Chilean endemic *Costesia spongiosa* (Bryophyta: Gigaspermaceae). *The Bryologist* 112: 279-286.

2007 **Budke JM**, Jones CS, Goffinet B. Development of the enigmatic peristome of *Timmia megapolitana* (Timmiaceae; Bryophyta). *American Journal of Botany* 94: 460-467.

2006 **Budke JM**, Goffinet B. Phylogenetic analysis of Timmiaceae (Bryophyta: Musci) based on nuclear and chloroplast sequence data. *Systematic Botany* 31: 633-641.

2005 **Budke JM,** Hickey RJ, Heafner KD. Analysis of morphological and anatomical characteristics of *Isoetes* using *Isoetes tennesseensis*. *Brittonia* 57: 167-182.

2003 Luebke NT, **Budke JM.** *Isoëtes tennesseensis* (Isoëtaceae), an Octoploid Quillwort from Tennessee. *American Fern Journal* 93: 184-190.

Book Review (1)

2013 **Budke JM.** Common Mosses of the Northeast and Appalachians *Plant Science Bulletin* 59(3): 131-132.

Point of View (2)

2015 **Budke JM.** Postdocs: Improving our Visibility in the Research Workforce. *Plant Science Bulletin* 61(2): 40-44.

2014 Cain B[1], **Budke JM[1]**, Wood KJ, Sweeney NT, Schwessinger B. How postdocs benefit from building a union. *eLife* 3: e05614. ([1] equal co-first authors)

RESEARCH GRANTS & FELLOWSHIPS (TOTAL $174,974)

2015 Startup Allocation of 130,000 SUs of computing time & 1,500 GB of storage for "Identification and elucidation of gene regulatory networks influencing sporophyte development in the non-model moss *Physcomitrium pyriforme*." from the Extreme Science & Engineering Discovery Environment (XSEDE) supported by the National Science Foundation.

2013 Katherine Esau Postdoctoral Research Fellowship, Univ. of Calif. – Davis ($151,181)

2011 Graduate Summer Research Fellowship, Univ. of Conn. Graduate School ($2,274)

2010 Doctoral Dissertation Fellowship Award, Univ. of Conn. Graduate School ($2,000)

2009 International Association of Bryologists: Stanley Greene Award ($1,100)
Botanical Society of America: Graduate Student Research Award ($500)
American Microscopical Society: Graduate Student Research Award ($700)
Henry N. Andrews Endowment Fund: University of Connecticut EEB ($1,000)

2008 East Asia Pacific Summer Institute Fellowship - EAPSI, NSF ($10,000)
NIBB, Okazaki, Japan - *Hosts:* Dr. M. Hasebe and Dr. Y. Hiwatashi

2007 Ronald Bamford Endowment Fund: University of Connecticut EEB ($800)

2006 Ronald Bamford Endowment Fund: University of Connecticut EEB ($1,100)

2004 Ronald Bamford Endowment Fund: University of Connecticut EEB ($1,275)

2002 Academic Challenge Fund: Miami University Botany ($1,030)
W. S. Turrell Travel Grant: MU Herbarium, #181 *co-author C. Craig* ($1,319)

2001 W. S. Turrell Travel Grant: MU Herbarium, #179 *co-author K. Gustafson* ($695)

AWARDS (TOTAL $2,800)

2014 Postdoctoral Scholar Association Travel Award to International Association of Bryology World Conference in Cape Horn Biosphere Reserve, Chile ($400)

2013 Grady L. Webster Structural Botany Publication Award - "For the most outstanding paper published in the *American Journal of Botany* in the field of structural and developmental botany over the two-year period prior to the award year." ($1,000)

2011 Vernon I. Cheadle Student Travel Award, Botanical Society of America ($500)

2010 Katherine Esau Award for the Best Student Paper in Developmental & Structural Botany, Botanical Society of America: *Beneath the calyptra's veil: Exploring cuticle anatomy during moss sporophyte development* ($500)

2010 Developmental & Structural Section Student Travel Award, BSA ($150)

2007 Conant Botanical Images Student Travel Award: Second Place ($250)

2005 Graduate Research Fellowship, National Science Foundation: Honorable Mention

2003 Young Botanist Award, Botanical Society of America: Special Achievement
Outstanding Woman Senior in Science, Engineering, and Technology, Miami Valley Association for Women in Science (AWIS)

COLLABORATIVE PROJECTS

K. Khuu* (University of California - Davis) – Using herbarium specimens for molecular phylogenetic analyses to examine morphological evolution in the Fissidentaceae. (*undergraduate student collaborator)

J. D. Bainard (University of Saskatchewan) – Phylogenetic analysis of moss genome evolution.

R. Jetter & L. Busta (University of British Columbia) – Analyzing cuticle wax chemistry in mosses.

SOFTWARE & COMPUTATIONAL SKILLS

R (statistical computing & graphics) – MrBayes – Mesquite – Geneious – DNA Subway

RESEARCH EXPERIENCE

2015 – 2016: Curatorial Assistant, University of California – Davis, JM Tucker & B Crampton Herbaria
- Identifying bryophyte collections of ecologist Dr. Jack Major from AK, CA, CO, OR, & UT.
- Identifying moss collections of KM Stevenson from the Center for Ecological Health Research's plant diversity surveys of the Lake Tahoe Basin, CA.

2015, Spring: mRNAseq workshop for non-model organisms, University of California – Davis
Denovo transcriptome assembly on the Amazon Cloud.

2014, Summer: DNA Subway Workshop at the Botany 2014 annual meeting, Boise, ID
Genomics, DNA barcoding, and RNA-seq. Bringing cutting-edge biology into the classroom.

2009 – 2011: Research Assistant, University of Connecticut
Culturing Funariaceae for DNA extraction and morphological character scoring.
NSF Grant, B. Goffinet and C. S. Jones: Reduction and reversal in the Funariaceae

2008, Summer**:** Laboratory Workshop on *Physcomitrella patens*, NIBB, Okazaki, Japan
Developmental processes, gene targeting, bioimaging, and bioinformatics.

2008, Spring: *Physcomitrella* Genome Workshop, University of Freiburg, Germany
Sequence analysis using the *Physcomitrella* genome browser and BLAST tools.

2007, Spring: Research Assistant, University of Connecticut
Surveying for the presence/absence of of cysA and cysT across liverworts.
NSF Grant (ATOL), B. Goffinet: Assembling the Liverwort Tree of Life

2004, Summer: Research Assistant, University of Connecticut
Establishing a protocol to grow dung moss (Splachnaceae) from spore isolates.
NSF Grant, B. Goffinet: Phylogenetic and geographic patterns in moss diversity

2002 - 2003: Dean's Scholar in the College of Arts and Science, Miami University
Screening ISSR markers to examine population genetics in *Isoetes canadensis.*
Advisors: Dr. Linda E. Watson and Dr. R. James Hickey

2002, Summer: Howard Hughes Internship, Miami University
Using PCR to isolate a single copy gene (cycloidea) across the Asteraceae.
Advisor: Dr. Linda E. Watson

2001, Summer: Undergraduate Summer Scholar, Miami University
Quantification and assessment of variation in anatomical leaf characteristics in *Isoetes tennesseensis.* Advisor: Dr. R. James Hickey

1998, Summer: Howard Hughes Internship, University of Cincinnati, Cincinnati Zoo and Botanical Gardens, Center for Conservation and Research of Endangered Wildlife (CREW)
Tissue culture and cryopreservation of tropical herbs for the frozen garden.
Advisors: Dr. Valerie C. Pence and Bernadette L. Plair

INVITED PRESENTATIONS

2016 **Seminar – Department of Plant Biology, University of Minnesota**

2016 **Seminar – Department of Ecology and Evolutionary Biology, Univ. of Tennessee**

2016 **Seminar – Department of Biology, University of West Georgia**

2015 **Lester Newman Seminar Series – Department of Biology, Portland State University**

2013 **Postdoctoral Research Seminar Series – University of California, Davis**

2008 **Connecticut Outdoor Environmental Education Association Annual Conference**

Miniature Mosses Workshop: Teaching environmental educators how to integrate moss biology into their outdoor education programs.

CONFERENCE PRESENTATIONS

2015 **Budke JM**. Comparative cuticle development in morphologically divergent mosses of the Funariaceae. Botanical Society of America (BSA) Annual Meeting

Budke JM, Busta L, Jones CS, Goffinet B. Beneath the veil of the calyptra: exploring cuticle anatomy during moss sporophyte development in the Funariaceae. International Association of Bryologists Conference

2012 **Budke JM**, Jones CS, Goffinet B. Sporophyte development and calyptra cuticle function in *Funaria hygrometrica*. MOSS 2012

2011 **Budke JM**, Goffinet B, Jones CS. Experimental manipulation of the moss calyptra: The effect of cuticle removal and desiccation on sporophyte development in *Funaria hygrometrica*. BSA Annual Meeting

Liu Y, **Budke JM,** Goffinet B. Phylogenetic inference rejects sporophyte-based classification of the Funariaceae (Bryophyta): a rapid radiation suggests rampant homoplasy in sporophyte evolution. BSA Annual Meeting

2010 **Budke JM.** Examining the gametophytic calyptra and its role in moss sporophyte development using the cord moss (*Funaria hygrometrica*). Society for Integrative and Comparative Biology Annual Meeting

Budke JM, Goffinet B, Jones CS. Beneath the calyptra's veil: Exploring cuticle anatomy during moss sporophyte development. BSA Annual Meeting

2007 **Budke JM**, Wickett NJ, Goffinet B. Multiple losses of the *cysA* gene from the chloroplast genome of liverworts (Marchantiophyta). BSA Annual Meeting

2006 **Budke JM**, Goffinet B. Phylogenetic analyses of Timmiaceae (Bryophyta: Musci) inferred from nuclear and chloroplast sequence data. BSA Annual Meeting

2005 **Budke JM**, Jones CS, Goffinet B. Peristome development in *Timmia megapolitana* in relation to systematics and evolution of the Bryophyta. BSA Annual Meeting

2004 **Budke JM**. Peristome development in *Timmia megapolitana.* Northeast Ecology and Evolution Conference

2003 **Budke JM,** Hickey RJ, Heafner KD. Morphological characterization of North America's first octoploid *Isoetes*. BSA Annual Meeting

2002 **Budke JM,** Hickey RJ, Heafner KD. Morphological characterization of North America's first octoploid quillwort. Association of Southeastern Biologists Annual Meeting

TRAINING IN EDUCATION

College Teaching Seminar Winter 2014

University of California - Davis, Center for Excellence in Teaching and Learning

TEACHING EXPERIENCE

Adjunct Lecturer: *University of California - Davis*

Everybody Eats: Threats to Your Favorite Foods Fall 2014 & Spring 2015

Designed and taught an original course as instructor of record for ACCESS-R.
A UC Davis program to improve retention of first-generation to college and students from underrepresented groups in the sciences. Team-taught with Dr. H. Atamian, Spring 2015.
Awarded a $500 mini-grant for supplies, both quarters.

Guest Lectures

University of California - Davis

Graduate Seminar – Topic: Preparing for the NSF GRFP Fall 2014 & 2015
Graduate Course in Plant Development – Topic: Moss Developmental Genetics Winter 2015
iAMSTEM summer orientation program – Topic: Science Communication Summer 2014

Western Connecticut State University, Biological and Environmental Sciences

Genetics – Topic: Transformation of Non-Model Species Spring 2014

University of Connecticut, Cooperative Extension Center, Master Gardener Program

Biology and Identification of Mosses and Liverworts Oct 2012

University of Connecticut, Ecology and Evolutionary Biology

The Summer Flora – Topic: Bryophytes Summer 2011
Plant Anatomy – Topic: Shoot apical meristems Fall 2010
Bryology and Lichenology – Topic: Morphogenesis Spring 2006

Teaching Assistant: *University of Connecticut, Ecology and Evolutionary Biology*

Advanced Courses

Phylogenetics Spring 2009
Plant Anatomy Fall 2008
Evolution of Green Plants Spring 2008
Developmental Plant Morphology Fall 2007
Bryology and Lichenology Spring 2006

Introductory Courses

Biology II (for majors) Fall 2003 – Fall 2006 (5 semesters)
Introduction to Botany Fall 2004

TEACHING MATERIALS

Peer reviewed brochure to teach plant biology concepts to students using mosses.

Swanson J, **Budke JM**, and Goffinet B. 2012. A visit to the miniature forest: insights into the biology and evolution of bryophytes in Northeastern Connecticut. Available through the *PlantED Digital Library*.

Peer reviewed laboratory exercises to teach the concept of chemical competition in plants.

Swanson J, **Budke JM**, and Goffinet B. 2012. Chemical competition in plants using the moss *Sphagnum. PlantED Digital Library*. http://planted.botany.org/ Featured in the *Plant Science Bulletin* 60(4): 198, 2014.

Moss Culturing Protocol for high school teacher workshop at MOSS 2012 conference.

Mosses and the Plant Life Cycle by LE Parker*, **JM Budke**, and B Goffinet. (* undergraduate collaborator)

Biology Textbook Image - Invited

Scanning electron micrograph of moss peristome teeth by **JM Budke**, in *Introduction to Plant Biology,* 4th and 5th editions by JD Mauseth, non-vascular plants chapter.

UNDERGRADUATE STUDENT MENTORING

University of California, Davis

Kristina Khuu - Major: Plant Biology — June 2015 – Dec 2015
Using herbarium specimens for molecular phylogenetic analyses of the Fissidentaceae.

Sinja Taavitsainen - Major: Microbiology — Apr 2014 – Dec 2015
Analyzing reproductive resource allocation in *Timmia megapolitana.*
Subsequently: Master's Student in Bioinformatics, University of Tampere, Finland

Eunice Magat - Major: Genetics — Apr 2014 – Dec 2015
Creating DNA constructs for studying polar auxin transport in non-model mosses.

Stefanie Komar - Major: Biological Sciences, emphasis in Plant Biology — Feb 2013 – Jul 2014
Creating DNA constructs for genetic transformation of non-model mosses.
Stanley and Jacqueline Schilling Award, College of Biological Sciences ($2000)
Subsequently: Research Technician, Arcadia Biosciences

PLANTS program - Botanical Society of America (Preparing Leaders and Nurturing Tomorrow's Scientists: Enhancing Diversity in Plant Science), Junior Mentor – 2012

University of Connecticut

Lindsey Parker - Major: Biology — Jan – Dec 2012
Culturing Funariaceae mosses and stimulating laboratory-grown hybrid sporophytes
Subsequently: Doctor of Pharmacy Professional Program, University of Connecticut

Xing Chen - Major: Pre-Pharmacy — Jan – Dec 2012
Optimizing lab protocols for analyzing moss genomes using flow cytometry.
Subsequently: Doctor of Pharmacy Professional Program, University of Connecticut

Deborah Lee - Major: Physiology and Neurobiology — Jan – Dec 2012
Examining anatomical differences between polyploid races in the Funariaceae.

Pavitri Dwivedi - Major: Molecular Cellular Biology — May 2010 – May 2012
Culturing Funariaceae mosses and meiotic chromosome staining.
Subsequently: Master's Student in Epidemiology, Boston University

Melissa Wynne - Major: Allied Health Sciences — Aug 2008 – Dec 2011
Examining calyptra senescence in *Funaria hygrometrica*.
Office of Undergraduate Research Grant ($500)
2010 Frontiers in Undergraduate Research: Poster presentation
Subsequently: Cytogenetic Technologist, Sloan Kettering Cancer Center

Leah Newman - Major: Biological Sciences — Aug 2008 – May 2010
Studying *Micromitrium* using DNA sequence data.
Summer Undergraduate Research Fellowship ($3500)
2009 Frontiers in Undergraduate Research: Poster presentation
Subsequently: Master's Student in Applied Genomics, University of Connecticut

Lauren Hensley - Major: Biological Sciences — Jan – May 2008
Culturing Funariaceae mosses using sterile techniques.

FIELD BOTANY EXPERIENCE

Botanical Outreach

Spring Wildflower Pilgrimage April 2016
Great Smoky Mountains National Park: Walk Leader

Outdoor Presentations on Mosses (12 total) and Ferns (1) Summers 2005 – 2012
Leading botanical explorations at local nature centers and state parks in Connecticut.

Connecticut Bioblitz Summers 2005, 2007, 2009
24-hour biological survey of a park with scientists, students, and the public.

All Taxa Biodiversity Inventory (ATBI) Summers 2001 – 2003
Great Smoky Mountains National Park: Fern Foray Participant

Plant Collection Trips

Multiple locations in eastern Kansas and central Missouri, USA Mar 12-16, 2012
Collecting developing sporophytes of ephemeral mosses with B Allen & J Atwood.

Limestone Rise Nature Preserve, Knox, New York, USA 2004 – 2005
Visited every two weeks to collect phenology data for the moss *Timmia megapolitana.*

Vermont, New York, USA & Quebec, Canada Oct 19-28, 2003
Collecting *Timmia megapolitana* for systematic analyses of the Timmiaceae.

PowWow Pond, East Kingston, New Hampshire, USA May 3-8 & Jun 27-29, 2002
Collecting *Isoëtes canadensis* for population genetic analysis with M Barker & C Craig.

Hiwassee River, Polk Co., Tennessee, USA Three weekends in Jun & Jul 2001
Collecting new species of aquatic quillwort *Isoëtes tennesseensis* Luebke & **Budke**
with P Cox, J Shaw, E Lickey, K Gustafson, K Heafner.

Bryology Forays

SoBeFree: Spring Outing; Botanical Excursion; Foray, Retreat, & Escape to the Environment
Sonoma County, California Mar 18-21, 2016
San Bernardino Mountains, California Mar 27-30, 2015
Santa Cruz County, California Mar 28-31, 2014

A. Leroy Andrews Foray, Woodstock Valley, Connecticut Sept 18-20, 2009

Blomquist Foray, Haywood County, North Carolina Oct 4-6, 2002

Field Course Participation

Ecotourism with a Hand Lens in the Cape Horn Biosphere Reserve Jan 10, 2015
Explorings ways of defining, studying, communicating, and conserving both botanical and biocultural diversity in the Omora Ethnobotanical Park.

Tropical Ferns and Lycophytes, Organization for Tropical Studies Jan 10-23, 2008
Intensive, field introduction designed to build the diverse skills needed for floristic, taxonomic, phylogenetic, and ecological research on tropical ferns and lycophytes.

Tropical Flora of the Bahamas, Miami University May 11-23, 2002
Exploring local plants from ecological & evolutionary perspectives.

PUBLIC AND COMMUNITY OUTREACH

Moss Plants and More: Commentary on All Things Bryological Oct 2007 – Present

Monthly updated online bryology blog. Communicating science to the public.
http://mossplants.fieldofscience.com

Featured in Plant Cuttings: News in Botany. *Annals of Botany* 10: iv-vi, 2012.

Statistics as of 8 June 2016: Average visits per day = 34

On *Twitter* @MossPlants = 717 followers

University of California – Davis, Biodiversity Museum Day Feb 13, 2016

In collaboration with four undergraduate students, we led members of the public through four hands-on activities exploring mosses using herbarium specimens.

Kindergarten class at American Lakes School, Sacramento, California Apr 10, 2014

In collaboration with S. Komar, we designed and led students through two hands-on classroom activities exploring the relationships between plant structures & functions.

Discovery Museum Science & Space Center – Volunteer with AWIS Feb 22, 2014

Helping families navigate activities about dinosaurs, fossils, rocks, and crystals.

PROFESSIONAL SERVICE

Manuscript Reviewer: *American Fern Journal, American Journal of Botany, Annals of Botany, Cryptogamie-Bryologie, Journal of Biogeography, Plant Biology, Plant Physiology, Protoplasma, The Bryologist*.

Review Editor: *Frontiers in Plant Science - Plant Evolution and Development*

Panel Discussion Participant:

Postdoctoral Fellowship Writing: Learning from Colleagues Feb 25, 2014

Sponsored by the postdoc union (UAW 5810) at the University of California - Davis

Academic Service:

2013 - Present	American Bryological and Lichenological Society: Member-at-Large
2015 - 2016	Postdoctoral Union - UAW 5810: Sergeant-At-Arms, Executive Board Member
2015	Judging Committee - Grady L. Webster Award, Botanical Society of America
2013 - 2015	Judging Committee - Esau Award (Chair in 2015), BSA Conference
2013 - 2015	Postdoctoral Union - UAW 5810: UC Davis Campus Unit Chair
2014	Botanical Society of America, Strategic Planning Committee: Participant
2013	Judge - Triarch Botanical Images student travel award, BSA Conference
2010	Local Representative for the American Fern Society, BSA Conference
2004 - 2011	EEB Graduate Student Association at the University of Connecticut

Member: Botanical Society of America, Association for Women in Science, Microscopy Society of America, American Society of Plant Taxonomists, International Association for Plant Taxonomy, American Bryological and Lichenological Society, International Association of Bryologists.