

**JILL SUZANNE MILLER**  
**Curriculum Vitae**

**CURRENT ADDRESS**

Department of Biology  
Amherst College  
Amherst, Massachusetts 01002  
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Laboratory: 413-542-8323  
Facsimile: 413-542-7955  
Email: [jsmiller@amherst.edu](mailto:jsmiller@amherst.edu)  
Web: [www.amherst.edu/~jsmiller](http://www.amherst.edu/~jsmiller)

**ACADEMIC DEGREES**

Ph.D., Ecology and Evolutionary Biology, University of Arizona, Tucson, Arizona 2000  
Committee: Dr. D. Lawrence Venable (advisor), Dr. Lucinda McDade,  
Dr. Michael Nachman, Dr. Judith Bronstein, Dr. Robert Robichaux

M.Sc., Ecology and Evolutionary Biology, University of Arizona, Tucson, Arizona 1997  
Advisor: Dr. D. L. Venable

B.A., Department of Biology, Colorado College, Colorado Springs, Colorado 1992  
Advisor: Sylvia Kelso

**POSITIONS**

Associate Professor, Department of Biology, Amherst College July 2010-present

Assistant Professor, Department of Biology, Amherst College 2003-2010

Faculty, Program in Environmental Studies, Amherst College 2007-present

Five College Faculty Member, Graduate Program in Organismic  
and Evolutionary Biology, University of Massachusetts, Amherst 2003-present

Five College Faculty Member, Graduate Program in Plant Biology,  
University of Massachusetts, Amherst 2003-present

Postdoctoral Research Associate, University of Colorado at Boulder,  
Boulder, Colorado; Sponsor: Dr. Pamela K. Diggle 2000-2002

Visiting Professor, Department of Biology, Colorado College,  
Colorado Springs, Colorado 2000

**ACADEMIC HONORS**

Elected Full member, Sigma Xi, Amherst College Chapter 2007  
Trustee Faculty Fellowship, Amherst College 2006  
Elected Associate member, Sigma Xi 1992

**RESEARCH FUNDING**

National Science Foundation \$400,000 2009-2014  
*Fine scale phylogenetic relationships in Lycieae (Solanaceae): a multilocus approach for understanding  
biogeography, polyploidy, and reproductive evolution*

Faculty Research Award Program, Amherst College <i>Species-level evolutionary relationships in Old World Lycium (Solanaceae) using multiple nuclear COSII markers</i> (Amherst College large grant, \$15,000 returned)	\$30,000	2009
Faculty Research Award Program, Amherst College <i>Species-level evolutionary relationships in Old World Lycium (Solanaceae) using multiple nuclear COSII markers</i> (Amherst College large grant, withdrawn on request)	\$30,000	2008
National Science Foundation <i>Supplement for travel to China: Phylogenetic relationships and character evolution in tribe Lycieae (Solanaceae)</i>	\$11,500	2008
National Science Foundation <i>Research Experience for Undergraduates Supplement, Phylogenetic relationships and character evolution in tribe Lycieae (Solanaceae)</i>	\$6,333	2007
Faculty Research Award Program, Amherst College <i>A tale of two continents: Long-distance dispersal of Lycium – an empirical test of Baker’s Law</i>	\$6,000	2007
Faculty Research Award Program, Amherst College <i>Phylogeography of southwestern US and Mexican Lycium californicum (Solanaceae)</i>	\$6,000	2006
National Science Foundation <i>Research Experience for Undergraduates Supplement, Phylogenetic relationships and character evolution in tribe Lycieae (Solanaceae)</i>	\$6,947	2005
Faculty Research Award Program, Amherst College <i>Too much of a good thing – redundancy and the evolution of separate sexes in Lycium (Solanaceae)</i>	\$6,000	2005
National Science Foundation <i>Phylogenetic relationships and character evolution in tribe Lycieae (Solanaceae)</i>	\$313,851	2004
National Science Foundation <i>Architectural effects and the analysis of sexual size dimorphism</i>	\$87,000	2004
Research Training Group in Biological Diversification Fellowship, University of Arizona	\$8,100	1999
Graduate College Fellowship, University of Arizona	\$5,000	1999
National Science Foundation Doctoral Dissertation Improvement Grant: <i>Selective forces in the evolution of gender dimorphism</i>	\$10,000	1998

**PEER-REVIEWED SCIENTIFIC PAPERS (Student co-authors are underlined)**

Levin, R. A., G. Bernardello, C. Whiting<sup>2010</sup> and J. S. Miller. In Press, *Taxon*. A new generic circumscription in tribe Lycieae (Solanaceae).

Miller J. S. and J. L. Kostyun<sup>2009</sup>. In Press, *Heredity*. Functional self-incompatibility in a peripheral population of *Solanum peruvianum* (Solanaceae).

Miller, J. S., A. Kamath<sup>2011</sup>, J. Damashek<sup>2009</sup>, and R. A. Levin. 2011. Out of America to Africa or Asia: Inference of dispersal histories using nuclear and plastid DNA and the S-RNase self-incompatibility locus. *Molecular Biology and Evolution* 28:793-801.

Stiefkens, L., M. Las Peñas, G. Bernardello, R. A. Levin, and **J. S. Miller**. 2010. Karyotypes and fluorescent chromosome banding patterns in southern African *Lycium* (Solanaceae). *Caryologia*, **63**, 50-61.

Temeles, E. J., **J. S. Miller**, and **J. R. Rifkin**<sup>2009</sup>. 2010. Evolution of sexual dimorphism in bill size and shape of hermit hummingbirds (Phaethornithinae): A role for ecological causation? *Philosophical Transactions of the Royal Society B: Biological Sciences*, 365, 1053-1063.

Levin, R. A., **A. P. Whelan**<sup>2008</sup>, and **J. S. Miller**. 2009. The utility of nuclear conserved ortholog set II (COSII) genomic regions for species-level phylogenetic inference in *Lycium* (Solanaceae). *Molecular Phylogenetics and Evolution*, **53**, 881-890.

**Miller, J. S.**, **A. Kamath**<sup>2011</sup>, and R. A. Levin. 2009. Do multiple tortoises equal a hare? The utility of nine noncoding plastid regions for species-level phylogenetics in tribe Lycieae (Solanaceae). *Systematic Botany*, **34**, 796-804.

Levin, R. A., **J. M. Blanton**<sup>2006E</sup>, and **J. S. Miller**. 2009. Phylogenetic utility of nuclear NIA: A multi-locus comparison of nuclear and chloroplast sequence data for inference of relationships among American Lycieae (Solanaceae). *Molecular Phylogenetics and Evolution*, **50**, 608-617.

**Miller, J. S.**, R. A. Levin, and **N. M. Feliciano**<sup>2008</sup>. 2008. A tale of two continents: Baker's rule and the maintenance of self-incompatibility in *Lycium* (Solanaceae). *Evolution*, **62**, 1052-1065.

**Miller, J. S.** and **J. L. Stanton-Geddes**<sup>2004</sup>. 2007. Gynodioecy in *Lobelia siphilitica* and *L. spicata* (Lobeliaceae) from western Massachusetts. *Journal of the Torrey Botanical Society*, **134**, 349-361.

**Miller, J. S.** and P. K. Diggle. 2007. Correlated evolution of fruit size and sexual expression in andromonoecious *Solanum* sections *Acanthophora* and *Lasiocarpa* (Solanaceae). *American Journal of Botany*, **94**, 1706-1715.

Levin, R. A., G. Bernardello, A. M. Venter, **J. R. Shak**<sup>2006</sup>, and **J. S. Miller**. 2007. Evolutionary relationships in tribe Lycieae (Solanaceae). *Acta Horticulturae*, **745**, 225-239.

**Savage, A. E.**<sup>2004</sup> and **J. S. Miller**. 2006. Gametophytic self-incompatibility in *Lycium parishii* (Solanaceae): Allelic diversity, genealogical structure, and patterns of molecular evolution. *Heredity*, **96**, 434-444.

Levin, R. A. and **J. S. Miller**. 2005. Relationships within tribe Lycieae (Solanaceae): paraphyly of *Lycium* and multiple origins of gender dimorphism. *American Journal of Botany*, **92**, 2044-2053.

Yeung, K., **J. S. Miller**, **A. E. Savage**<sup>2004</sup>, B. C. Husband, B. Igic, and J. R. Kohn. 2005. Association of ploidy and sexual system in *Lycium californicum* (Solanaceae). *Evolution*, **59**, 2048-2055.

Diggle, P. K. and **J. S. Miller**. 2004. Architectural effects mimic floral sexual dimorphism in *Solanum* (Solanaceae). *American Journal of Botany*, **91**, 2030-40.

**Miller, J. S.** and P. K. Diggle. 2003. Diversification of andromonoecy in *Solanum* section *Lasiocarpa* (Solanaceae): the roles of phenotypic plasticity and architecture. *American Journal of Botany*, **90**, 707-715.

**Miller, J. S.** and D. L. Venable. 2003. Floral morphometrics and the evolution of sexual dimorphism in *Lycium* (Solanaceae). *Evolution*, **57**, 74-86.

**Miller, J. S.** and D. L. Venable. 2002. The transition to gender dimorphism on an evolutionary background of self-incompatibility: an example from *Lycium* (Solanaceae). *American Journal of Botany*, **89**, 1907-1915.

**Miller, J. S.** 2002. Phylogenetic relationships and the evolution of gender dimorphism in *Lycium* (Solanaceae). *Systematic Botany*, **27**, 416-428.

Brunet, J., A. Liston, **J. S. Miller**, and D. L. Venable. 2001. Polyploidy and gender dimorphism. *Science*, **291**, 1441a.

**Miller, J. S.** and D. L. Venable. 2000. Polyploidy and the evolution of gender dimorphism in plants. *Science*, **289**, 2335-2338.

**Miller, J. S.**, Kelso, S., Litvak, M., & A. Vargo. 1994. Comparative reproductive biology of two alpine species of primrose. *Arctic and Alpine Research*, **26**, 297-303.

#### MANUSCRIPTS IN PREPARATION (Student co-authors are underlined)

**Miller, J. S.**, J. R. Shak<sup>2006</sup>, and R.A. Levin. In preparation. Reticulate evolution in southern African *Lycium* inferred using chloroplast (*trnT-trnF* and *trnD-trnT*) and nuclear (GBSSI) gene regions.

**Miller J. S.**, M. Dhond<sup>2009</sup>, and J. L. Kostyun<sup>2009</sup>. In preparation. Breakdown of self-incompatibility in polyploid plants: evidence from the *S-RNase* locus.

#### INVITED PRESENTATIONS

- |   |      |
|---|------|
| Charles Darwin Research Station<br>Santa Cruz, Galapagos, Ecuador<br><i>Lycium minimum</i> (Solanaceae), an endemic Galápagos shrub...<br><i>Phylogeography of a widespread species and characterization of its sexual system</i> | 2011 |
| Department of Ecology and Evolutionary Biology, University of Connecticut, Storrs, CT<br><i>Patterns of reproduction in flowering plants: the evolution of sex and mate choice in Lycium</i> (Solanaceae)                         | 2009 |
| Department of Biology, Colorado College, Colorado Springs, CO<br>Keynote address, 22nd Annual Biology Day<br><i>Evolutionary patterns of reproduction in flowering plants: the evolution of sex and mate choice</i>               | 2009 |
| Schupf Scholar Program, Amherst College, Amherst, MA<br><i>Evolutionary patterns of reproduction: the evolution of sex &amp; mate choice in plants</i>  | 2008 |
| Frontiers in Plant Sexual Reproduction III, Tucson, AZ (declined)   | 2008 |
| Department of Plant Sciences, University of Arizona, Tucson, AZ<br><i>Reproductive strategies in Lycium</i> (Solanaceae)... <i>the evolution of separate sexes and self-incompatibility systems</i>                               | 2008 |
| Department of Organismic and Evolutionary Biology, Harvard Herbarium Series<br>Harvard University, Cambridge, MA<br><i>Baker's rule and the maintenance of self-incompatibility in Lycium</i> (Solanaceae)                        | 2007 |
| Department of Biology, University of Massachusetts, Boston, MA<br><i>A tale of two continents: Baker's rule and the maintenance of self-incompatibility in Lycium</i> (Solanaceae)  | 2007 |
| Department of Plant Sciences, University of the Free State, Bloemfontein, South Africa<br><i>Reproductive strategies in Lycium</i> (Solanaceae)... <i>the evolution of self-incompatibility systems</i>                           | 2006 |

- Sixth International Solanaceae Conference, 23-27 July 2006, Madison, WI. 2006  
*Relationships within tribe Lycieae: paraphyly, gender dimorphism, fruit evolution and biogeography.*
- Department of Biological Sciences, Smith College, Northampton, MA 2005  
*Too much of a good thing – redundancy and the evolution of sexual systems in the plant genus Lycium (Solanaceae)*
- Plant Biology Graduate Program, University of Massachusetts, Amherst, MA 2004  
 Annual Plant Biology Graduate Program Colloquium  
*The development and evolution of gender and sexual dimorphism in Solanaceae*
- Organismic and Evolutionary Biology, University of Massachusetts, Amherst, MA 2003  
*Floral morphometrics and the evolution of gender & sexual dimorphism in Lycium (Solanaceae)*
- Department of Biology, Colorado College, Colorado Springs, CO 2002  
*The evolution of separate sexes in the plant genus Lycium (Solanaceae)*
- Department of Biology, Amherst College, Amherst, MA 2002  
*Mating system evolution in Wolfberry (Solanaceae): a novel scenario for the evolution of gender dimorphism*
- Department of Environmental, Population, and Organismic Biology, 2001  
 University of Colorado, Boulder, CO  
*Selective Forces in the Evolution of Gender Dimorphism in Lycium (Solanaceae)*
- Department of Ecology & Evolutionary Biology, University of Arizona, Tucson, AZ 1999  
*Gender dimorphism in Lycium (Solanaceae): a novel pathway for the evolution of separate sexes*

**ORAL PAPERS PRESENTED (Student co-authors are underlined)**

- Jamie L. Kostyun<sup>2009</sup> and **J. S. Miller**. Allelic diversity and segregation at the *S-RNase* locus in wild tomato, *Solanum peruvianum* (Solanaceae). Society for the Study of Evolution, 25-29 June 2010, Portland, OR.
- R. A. Levin, J. Damashek<sup>2009</sup>, and **J. S. Miller**. Out of America to Asia or Africa? Relationships among Old World *Lycium* (Solanaceae). Botanical Society of America, 25-29 July 2009, Snowbird, UT.
- R. A. Levin, A. P. Whelan<sup>2008</sup>, and **J. S. Miller**. The utility of nuclear conserved ortholog set II (COSII) genomic markers for species-level phylogenetics in *Lycium* (Solanaceae). Botanical Society of America, 26-30 July 2008, Vancouver, Canada.
- J. S. Miller**, R. A. Levin, and N. M. Feliciano<sup>2008</sup>. A tale of two continents: Baker's rule and the maintenance of self-incompatibility in *Lycium* (Solanaceae) following long distance dispersal. Botanical Society of America, 7-11 July 2007, Chicago, IL.
- P. K. Diggle and **J. S. Miller**. Correlated evolution of fruit size and sexual expression in andromonoecious *Solanum* sections *Acanthophora* and *Lasiocarpa* (Solanaceae). Botanical Society of America, 7-11 July 2007, Chicago, IL.
- R. A. Levin and **J. S. Miller**. Molecular systematics of tribe Lycieae (Solanaceae). Botanical Society of America, 28 July-2 August 2006, Chico, CA.
- J. S. Miller** and A. E. Savage<sup>2004</sup>. Gametophytic self-incompatibility in *Lycium parishii* (Solanaceae): allelic diversity and molecular evolution of the *S-RNase* gene. Botanical Society of America, 28 July-2 August 2006, Chico, CA.

J. R. Kohn, K. Yeung, B. Igic, A. E. Savage<sup>2004</sup>, B. C. Husband, **J. S. Miller**. Ploidy, gender, and self-incompatibility in *Lycium californicum* (Solanaceae). Society for the Study of Evolution, 10–14 June 2005, Fairbanks, AK.

J. R. Kohn, B. Igic, K. Yeung, A. E. Savage<sup>2004</sup>, **J. S. Miller**, and B. C. Husband. Frontiers in Sexual Plant Reproduction, 15-17 October 2004, Albany, NY.

K. R. Ryerson<sup>2003</sup>, **J. S. Miller** and P. K. Diggle. Andromonoecy in *Solanum palinacanthum*: the emergence of variation in the pattern of staminate flower production. Botanical Society of America, 31 July-5 August 2003, Mobile, AL.

P. K. Diggle and **J. S. Miller**. Floral size dimorphism in taxa with unisexual flowers: a search for underlying causes. Botanical Society of America, 31 July-5 August 2003, Mobile, AL.

**J. S. Miller** and P. K. Diggle. Evolution of developmental plasticity: a case study of sex expression in *Solanum*. Society for the Study of Evolution, 28 June-2 July 2002, Champaign, IL.

**J. S. Miller** and P. K. Diggle. Evolutionary Diversification of Plastic Sex Expression in Andromonoecious *Solanum* section *Lasiocarpa*. Guild of Rocky Mountain Population Biologists, November 2001, Abiquiu, NM.

**J. S. Miller** and P. K. Diggle. Evolutionary diversification of plastic sex expression in andromonoecious *Solanum* sect. *Lasiocarpa*. Botanical Society of America, 12-16 August 2001, Albuquerque, NM.

**J. S. Miller** and D. L. Venable. Floral morphometrics and the evolution of sexual dimorphism in *Lycium* (Solanaceae). Botanical Society of America, 12-16 August 2001, Albuquerque, NM.

**J. S. Miller** and D. L. Venable. Polyploidy and the evolution of gynodioecy: an example from *Lycium* (Solanaceae). Society for the Study of Evolution, 23-27 June 2000, Bloomington, IN.

#### **POSTER PAPERS PRESENTED (Student co-authors are underlined)**

**J. S. Miller**, A. Kamath<sup>2011</sup>, J. Damashek<sup>2009</sup>, and R. A. Levin. Out of Africa and into Asia: integrating phylogenetic and population genetic approaches in unraveling the dispersal of the plant genus *Lycium*. Society for the Study of Evolution, 12–16 June 2009, Moscow, ID.

**J. S. Miller**, A. Kamath<sup>2011</sup>, and R. A. Levin. Comparison of nine chloroplast non-coding regions for phylogenetic inference at the infrageneric level. Botanical Society of America, 26-30 July 2008, Vancouver, Canada.

**J. S. Miller**, M. Dhond<sup>2009</sup>, N. M. Feliciano<sup>2008</sup>, and G. Bernardello. Allelic diversity at a gametophytic self-incompatibility locus (S-RNase) in a South American species of *Lycium* (Solanaceae). Botanical Society of America, 7-11 July 2007, Chicago, IL.

**J. S. Miller** and J. L. Stanton-Geddes<sup>2004</sup>. Gynodioecy in *Lobelia siphilitica* and *L. spicata* (Lobeliaceae) in Massachusetts. Botanical Society of America, 7-11 July 2007, Chicago, IL.

N. M. Feliciano<sup>2008</sup> and **J. S. Miller**. Highly similar *S-RNase* alleles among *Lycium* (Solanaceae) species. Botanical Society of America, 7-11 July 2007, Chicago, IL.

**J. S. Miller** and A. E. Savage<sup>2004</sup>. Gametophytic self-incompatibility in *Lycium parishii* (Solanaceae): allelic diversity and molecular evolution of the *S-RNase* gene. Sixth International Solanaceae Conference, 23-27 July 2006, Madison, WI.

J. R. Shak<sup>2006</sup>, R. A. Levin, and **J. S. Miller**. Phylogenetic relationships of Old World *Lycium* (Solanaceae): Reticulate evolution in the African taxa. Botanical Society of America, 28 July-2 August 2006, Chico, CA.

A. E. Savage<sup>2004</sup> and **J. S. Miller**. Molecular characterization of the S-locus in *Lycium* (Solanaceae). Society for the Study of Evolution, 26-30 June 2004, Fort Collins, CO.

## COURSES TAUGHT

### Amherst College

Biology 06, <i>Why Sex?</i> (non-majors)	Spring 2008, Fall 2009
Biology 18, <i>Adaptation and the Organism</i> lecture	Spring 2003-06, 2009
Biology 18, <i>Adaptation and the Organism</i> laboratory	Spring 2003-06, 2009
Biology 32, <i>Evolutionary Biology</i> lecture	Fall 2003-05, 2007-08, Spring 2010
Biology 32, <i>Evolutionary Biology</i> laboratory	Fall 2003-05, 2007-08
Biology 42, <i>Seminar in Evolution: Plant Sexual Diversity</i>	Spring 2008
Biology 77/78, <i>Senior Honors</i>	Fall, Spring & Summer, 2003-present
Biology 98, <i>Special Topics: the Evolution of Sex</i>	Spring 2003
Biology 98, <i>Special Topics: GIS and plant distributions</i>	Fall 2009
Pick 8, <i>Seminar: Invasive Species</i>	Spring 2005
Environmental Studies 70, <i>Senior Seminar</i>	Fall 2009

### Colorado College

Biology 208, <i>Principles of Ecology</i> lecture	Spring 2000
Biology 208, <i>Principles of Ecology</i> laboratory	Spring 2000
Full-time Teaching Assistant (Courses: <i>Genetics, Ecology, Winter Ecology, Introductory Botany, Vertebrate Zoology</i> )	1992-1994

### University of Arizona

Biology 302, Laboratory Coordinator, <i>Ecology</i>	Fall semesters 1996-98
Biology 302, Laboratory Instructor, <i>Ecology</i>	Fall semesters 1994-96
Biology 182, Laboratory Instructor, <i>Introductory Biology</i>	Spring semesters 1994-96

## PROFESSIONAL SERVICE

Invited participant, National Science Foundation workshop, *Systematics at undergraduate institutions*

Invited participant, National Science Foundation workshop, *Future directions in systematics and biodiversity research*

Panelist, National Science Foundation, Population and Evolutionary Processes Program

Panelist, National Science Foundation, Population Biology Program

Reviewer, National Science Foundation, Population Biology Program

Reviewer, National Science Foundation, Systematics Program

Reviewer, *American Journal of Botany, Ecology, Evolution, Evolutionary Ecology, Heredity, International Journal of Plant Sciences, Molecular Biology and Evolution, Molecular Phylogenetics and Evolution, Plant Cell Reports, Proceedings of the Royal Society, London B, Perspectives in Plant Ecology, Evolution, and Systematics, Rhodora, and Systematic Botany*

Textbook chapter reviewer, Sadava et al., *Life the Science of Biology*, Futuyma, *Evolution*, Alters and Alters, *Biology: Understanding Life*

## FIVE COLLEGES AND COMMUNITY SERVICE

Howard Hughes Medical Institute Summer Teacher's Workshop,

2009

Biology in the Genomic Age: *Evolutionary patterns of reproduction in flowering plants: the evolution of sex and mate choice*

Howard Hughes Medical Institute Summer Teacher's Workshop, 2007  
 Biology in the Genomic Age: *Molecular systematics in tribe Lycieae (Solanaceae)*  
 and *Sexual incompatibilities and the evolutionary genetics of mate choice in angiosperms*

Howard Hughes Medical Institute Summer Teacher's Workshop, 2006  
 Biology in the Genomic Age: *Molecular systematics in tribe Lycieae (Solanaceae)*

Howard Hughes Medical Institute Summer Teacher's Workshop, 2005  
 Biology in the Genomic Age: *Learning from rejection: sexual incompatibilities*  
 and *the evolutionary genetics of mate choice in angiosperms*

#### COMMITTEE AND AD-HOC SERVICE

Copeland Colloquium Organizing Committee	2008-2010
Faculty Computing Committee	2004-2006, 2008-2010
Internet Strategy Group	2008-2010
Department of Biology 3+4 Committee	2003-2006, 2008-2010
Steering Committee, Graduate Program in Organismic and Evolutionary Biology, University of Massachusetts, Amherst	2004-present
Howard Hughes Medical Institute Fellows Committee	2007-2008
Environmental Studies Steering Committee	2006-2008
First-year student orientation advising	2005, 2007-2008, 2009
President's Initiative Fund (PIF) project to develop the Environmental Studies curriculum and major at Amherst College	2004-2007
Biology 4 <i>Food, Fiber, and Pharmaceuticals</i> ; Guest lecture	2009

#### STUDENTS ADVISED AND POSTDOCTORAL FELLOWS MENTORED

##### Senior honors thesis students (@ Amherst College, unless noted otherwise)

Ambika Kamath <i>Morphological investigation of male and female floral morphology</i> <i>in Lycium californicum</i>	2010-2011
Thomas R. Beck <i>Fine-scale nuclear and chloroplast DNA sequence variation in</i> <i>Lycium californicum</i>	2009-2010
Julian Damashek <i>Uncovering a tale of worldwide plant dispersal: evolutionary relationships</i> <i>of Chinese Lycium (Solanaceae)</i>	2008-2009
Mukta Dhond <i>Confirmation of a genetic bottleneck at the S-RNase locus in Old World</i> <i>Lycium (Solanaceae)</i>	2008-2009
Jamie L. Kostyun <i>Allelic diversity and segregation at the S-RNase locus in wild tomato,</i> <i>Solanum peruvianum (Solanaceae)</i>	2008-2009
Joanna L. Rifkin <i>Evidence for ecological causation of sexual dimorphism in the hermit</i> <i>hummingbirds (Phaethornithinae)</i>	2008-2009
Sara Barmettler <i>Phylogeography of Lycium californicum (Solanaceae) in the southwestern</i> <i>United States and Mexico</i>	2007-2008



Andrew P. Whelan	2007-2008
<i>The utility of nuclear conserved orthologous set II (COSII) markers for species-level phylogenetic resolution in Lycium (Solanaceae)</i>	
Caroli de Waal, University of the Free State, Bloemfontein, South Africa	2006-2007
<i>Breeding Systems in African Lycium (Solanaceae)</i>	
Ellen M. Leffler	2005-2006
<i>Ploidy level and self-incompatibility in five Lycium species (Solanaceae): evidence from the S-RNase locus</i>	
Joshua R. Shak	2005-2006
<i>Phylogenetic relationships of old world Lycium (Solanaceae): reticulate evolution in the African taxa</i>	
Min Wang	2005-2006
<i>Architectural effects and sexual dimorphism in Sagittaria latifolia and S. lancifolia (Alismataceae)</i>	
Jessica M. Blanton	2005
<i>Species-level phylogenetics for an American clade of Lycium (Solanaceae): exploring the utility of the genetic marker nitrate reductase</i>	
Alisa Neymark	2004-2005
<i>Characterization of the S-RNase mating gene in polyploid Lycium exsertum</i>	
Anna E. Savage	2003-2004
<i>Molecular characterization of the S-locus in Lycium: breakdown of gametophytic self-incompatibility and the evolution of gender dimorphism</i>	
John L. Stanton-Geddes	2003-2004
<i>Breeding systems and reproductive ecology of Lobelia spicata and Lobelia siphilitica (Lobeliaceae) in Massachusetts</i>	
<b>Summer Research Fellows</b>	
Cara J. Giaimo	2009
<i>Chloroplast sequence variation and plant barcoding</i>	
Ambika Kamath	2008
<i>S-RNase diversity in Chinese Lycium</i>	
Carolyn Whiting, Smith College	2008
<i>Does phylogenetic evidence support three species in Grabowskia?</i>	
Jamie L. Kostyun	2007
<i>Allele specific amplification of the self-incompatibility gene (S-RNase) in two species of Lycium (Solanaceae)</i>	
Wen Zhang	2007
<i>Variation in noncoding chloroplast regions of Lycium</i>	
Sara Barmettler	2006
<i>Development of a digital on-line database for genomic information</i> <a href="http://www3.amherst.edu/~jsmiller/LycieaeWeb/">http://www3.amherst.edu/~jsmiller/LycieaeWeb/</a>	
Mukta Dhond	2006
<i>Lycium cestroides: extraction and isolation of the S-RNase gene controlling gametophytic self-incompatibility</i>	
Alan C. Kwan	2005
<i>Lycium phylogenies: a study of the utility of nuclear and chloroplast gene regions</i>	
Shannon K. Rush	2005
<i>Estimation of plant size in Sagittaria species</i>	
Denise A. Twum	2004

*The utility of chloroplast and nuclear gene regions for inferring phylogenetic relationships among Lycium (Solanaceae)*  
 Allison R. Schroder 2003  
*The biogeography of Lycium (Wolfberry) based upon two chloroplast and one nuclear gene region*

**Graduate student mentoring**

Ian Gillis, Ph.D. candidate (laboratory rotation supervisor) 2010  
 Graduate Program in Plant Biology, University of Massachusetts, Amherst, MA

Natalie M. Feliciano, M.S. (advisor) 2006-2008  
 Graduate Program in Plant Biology, University of Massachusetts, Amherst, MA

Holly Bernardo, M.S. (committee member) 2009-2010  
 Graduate Program in Organismic and Evolutionary Biology,  
 University of Massachusetts, Amherst, MA

Maria Elizabeth Munoz Mendoza, Ph.D. (committee member) 2007  
 Department of Biology, University of Massachusetts, Boston, MA

Sydne Record, Ph.D. candidate (laboratory rotation supervisor) 2006  
 Graduate Program in Plant Biology, University of Massachusetts, Amherst, MA

**Laboratory research assistants (@ Amherst College, unless noted otherwise)**

Caroline Hu 2010-present  
 Edmund Keyes 2010-present  
 Geoff Giller 2009  
 Neta Ambar, Hampshire College 2009  
 Hollis Brashear, Amherst Regional High School 2009  
 Ambika Kamath 2007-present  
 Jamie L. Kostyun 2007-2008  
 Mukta Dhond 2007-2008  
 Andrew P. Whelan 2007  
 Shari Jainuddin, Ada Comstock Scholar, Smith College 2007  
 Peter W. Murphy 2005-2006  
 Jessica M. Blanton 2005  
 Jackie Eastman 2005  
 Anna E. Savage 2004-2005  
 Katelyn L. Gamson 2003-2005

**Greenhouse research assistants (@ Amherst College)**

Rose Abramoff 2009  
 Jamie E. Mattison 2007-2009  
 Shanwei Cao 2007-2008  
 Cara J. Giaimo 2007  
 Jennifer Suh 2007  
 Halimah B. Hamidu-Egiebor 2007  
 Shannon K. Rush 2005-2007

**Postdoctoral fellows or other professionals mentored**

Bethany A. Bradley 2009-2010  
 Copeland Fellow, Amherst College

**PROFESSIONAL AFFILIATIONS**

Society for the Study of Evolution, Botanical Society of America, Harvard University Herbarium, New England Botanical Club, Sigma Xi, National Association of Biology Teachers