Robert L. Baker

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1000 E. University Ave	fax: 307.766.2851 (Attn: Rob Baker)	tel: 307.766.6378
University of Wyoming	e-mail: robert.baker@uwyo.edu	fax: 307.766.2851 (Attn: Dr. Weinig)
Laramie, WY 82071	url: http://www.robertlbaker.org	e-mail: cweinig@uwyo.edu

EDUCATION

University of Colorado, Ph.D. Ecology and Evolutionary Biology 2012

Dissertation: "The molecular and morphological microevolution and development of *Mimulus guttatus* (Phrymaceae) shoot architecture" (Advisor Dr. Pamela Diggle)

Reed College, B.A. Biology 2002

PEER REVIEWED PUBLICATIONS

Baker, R. L., L. C. Hileman and P. K. Diggle. *In review*. Patterns of shoot architecture in locally adapted populations are linked to intraspecific differences in gene regulation.

Baker, R. L. and P.K. Diggle. 2011. Node-specific branching and heterochronic changes determine population level differences in *Mimulus guttatus* (Phrymaceae) shoot architecture. American Journal of Botany 98(12): 1924–1934.

Diggle, P. K., N. J. Abrahamson, **R. Baker**, M. G. Barnes, T. L. Koontz, C. Lay, J. S. Medeiros, J. Murgel, M. G. M. Shaner, H. L. Simpson, C. C. Wu and D. L. Marshall. Dynamics of maternal and paternal effects on embryo and seed development in wild radish (*Raphanus sativus*). Annals of Botany 106(2):309-313. doi: 10.1093/aob/mcq110

Noyes, R.D., **R. Baker,** and B. Mai. 2007. Mendelian segregation for two-factor apomixis in *Erigeron annuus* (Asteraceae). Heredity 98:92-98.

TECHNICAL WRITING

Baker, R. L. 2010. Use of the Scanning Electron Microscope. In P. Diggle, Plant Eco-Evo-Devo (pp 54-56).

GRANTS AND FELLOWSHIPS

University of Colorado Graduate Student Travel Grant ($300)	2011
Botanical Society of America Structural Section Travel Grant ($200)	2011
C.U. Ecology and Evolutionary Biology Department Research Grant ($1700)	2011
Beverly Sears Graduate Student Grant ($1000)	2011
United Government of Graduate Students, UCB Travel Grant ($300)	2011
Sigma-Xi Grants-in-Aid of Research ($995)	2010
California Native Plants Society ($500)	2010
C.U. Ecology and Evolutionary Biology Department Research Grant ($2000)	2010
Beverly Sears Graduate Student Grant ($1000)	2010
C.U. Ecology and Evolutionary Biology Summer Fellowship ($6000)	2009
Beverly Sears Graduate Student Grant ($1000)	2008
University of Colorado Natural History Museum's Walker van Riper Fund ($1500)	2008
C.U. Ecology and Evolutionary Biology Departmental Research Grant ($2500)	2008
Botanical Society of America Graduate Student Research Award ($500)	2007
C.U. Ecology and Evolutionary Biology Department Research Grant ($2500)	2007
University of Colorado Natural History Museum's Walker van Riper Fund ($1500)	2007
C.U. Ecology and Evolutionary Biology Department Research Grant ($2500)	2006
NSF Molecular and Organismic Research in Plant History (MORPH) ($3000)	2006

C.U. Ecology and Evolutionary Biology Department Training Grant ($3300)	2005
Cold Spring Harbor Laboratories ($1990)	2005
Hughes Undergraduate Research Project ($430)	2002
Hughes Undergraduate Research Project	2001

HONORS AND AWARDS

Certificate of Meritorious Service: Master Plant Science Team, Planting Science	2011
Certificate of Meritorious Service: Master Plant Science Team, Planting Science	2010
Teaching Excellence Award, C.U. Boulder	2010
Certificate of Meritorious Service: Master Plant Science Team, Planting Science	2009
Certificate of Meritorious Service: Science Mentor, Planting Science	2009
Commended For Excellence in Teaching, C.U. Boulder	2006
Commended For Excellence in Teaching, C.U. Boulder	2005
Commended For Excellence in Scholarship, Reed College	2002
National Merit Scholar	1998

CONTRIBUTED TALKS AND PRESENTATIONS

Baker, R. L. 2011. Department of Ecology and Evolutionary Biology, University of Colorado at Boulder. "Microevolution and Development in *Mimulus*: Monkeying with meristems explains Intraspecific Changes in Shoot Architecture and Life History"

Baker, R. L. 2011. Arnold Arboretum of Harvard University, Boston, Massachusetts. "Microevolution and development in *Mimulus*: Monkeying with meristem dynamics and heterochrony explains intraspecific changes in shoot architecture and life history"

Baker, R. L. 2011. Department of Plant Sciences, University of Arizona, Tucson. "Monkeying with Life history: Intraspecific evolution and development of shoot architecture in *Mimulus guttatus*"

Baker, R. L. and P. K. Diggle. 2011. Botanical Society of America, St. Louis, Missouri. "Making branches in *Mimulus*: Intraspecific developmental variation in shoot architecture"

Baker, R. L. 2011. *Mimulus* Meeting held at Duke University, Durham, North Carolina. "Phenotyping"

Baker, R. L. 2011**.** Microevolution of Development: processes within populations and species, a microMORPH workshop held at the University of Colorado at Boulder. "Intraspecific evolution and development of shoot architecture"

Baker, R. L. and P. K. Diggle. 2010. Evolution June 25-29; Portland State University, Portland, OR. A developmental analysis of shoot architecture in two populations of *Mimulus guttatus* (Phrymaceae). Poster no. P2157.

Baker, R. L. 2008. Gallery Series talks at the University of Colorado Museum of Natural History, "The evolutionary and developmental basis of ecological adaptation"

Baker, R. L. 2007. Investigating the evolution of plant form: conceptual integration from the molecular to the ecological, a MORPH minicourse held at the University of Colorado at Boulder. "Microevolution and development of *Mimulus guttatus* shoot architecture"

Baker, R. L. 2007. Guild of Rocky Mountain Ecologists and Evolutionary Biologists (GREEBs) meeting at Ghost Ranch, Utah. "Microevolution of development: building branches in *Mimulus guttatus*"

Baker, R. L. 2007. Teaching Evolution Symposium, University of Colorado at Boulder. "Teaching macroevolution: Mutations of large effect"

WORKSHOP AND COURSE PARTICIPATION

Microevolution of Development: processes within populations and species. 2011. micro Molecular and Organismal Research in Plant History (microMORPH) NSF Research Coordination Network; University of Colorado, Boulder CO

Homology: Conceptual and Historical Integration from the Morphological to the Molecular. 2009. Molecular and Organismal Research in Plant History (MORPH) Research Coordination Network; University of Colorado, Boulder CO

Investigating the Evolution of Plant Form: Conceptual Integration from the Molecular to the Ecological. 2007. Molecular and Organismal Research in Plant History (MORPH) Research Coordination Network; University of Colorado, Boulder CO

Frontiers in Plant Science. 2005. Cold Spring Harbor Laboratory, Cold Spring Harbor, NY

RESEARCH EXPERIENCE

Research Associate. 2011-2012. The Arnold Arboretum of Harvard University, Boston, MA.
qPCR of candidate genes associated with branch outgrowth (PIs Drs. Ned Friedman & Pamela Diggle)

Research Assistant. 2005. University of Colorado, Boulder CO.
The evolution and development of apomixes (PI Dr. Richard Noyes)

Research Assistant. 2003-2004. University of Maryland, College Park MD
Molecular and morphological development and evolution of annelid regeneration and aasexual reproduction (PI Dr. Alexa Bely)

Research Assistant. 2002-2003. AgResearch, Ltd, Palmerston North, New Zealand
Developmental significance of the *Arabidopsis TERMINAL EAR1-like* gene (PI Dr. Bruce Veit)

Summer Internship. 2001. Reed College, Portland OR
Molecular Phylogeography of the endangered alpine lupine, *Lupinus Lepidus var. lobbii* (Fabaceae) (PI Dr. Keith Karoly)

Curriculum Vitae
Robert L. Baker

TEACHING EXPERIENCE

Graduate Teacher Certificate, College of Teaching and Professional Development, University of Colorado, Boulder CO. 2012. 20 hours of teaching workshops, 20 hours of discipline-specific workshops, two video tape consultations and observation and evaluation of teaching techniques and proficiency

Teaching Assistant, University of Colorado, Boulder CO
- Plant Eco-Evo-Devo. Spring 2010
- Plant Anatomy. Fall, 2006
- Genetics. Spring 2005 & 2009
- General Biology. Fall 2004

Teaching Assistant, Reed College, Portland OR
- Vascular Plant Diversity. Fall 2001

Tutor, Reed College, Portland OR
- Genetics & Gene Regulation. Spring 2000

ADDITIONAL PROFESSIONAL EXPERIENCE

Research Assistant. 2010-2012.
microMORPH: Microevolutionary Molecular and Organismic Research in Plant History, an NSF Research Coordination Network. http://www.colorado.edu/eeb/microMORPH (CO-PIs Drs. William Friedman and Pamela Diggle)

Research Assistant. 2006-2010.
Molecular and Organismic Research in Plant History (MORPH): An NSF Research Coordination Network. http://www.colorado.edu/eeb/MORPH (PI Dr. William Friedman)

SERVICE

Education Committee Member, Botanical Society of America	2011-2013.
Undergraduate Research Opportunities Program (UROP), Mentor	2009-2011
Mentor for Undergraduate Honors Thesis Project	2009-2010
Planting Science Master Plant Science Team	2007-2011
Graduate Student Working Group Committee, Chair	2007-2008
Evo-devo Job Search Committee, Graduate Rep	2007
Evo-devo Job Search Graduate Committee, Chair	2007
Planting Science Online Mentor	2006-present
Colloquium Committee Member	2005-2006
Dept. Rep. to the United Government of Graduate Students	2005-2006
Graduate Student Mentor	2005-2006

PROFESSIONAL SOCIETY MEMBERSHIP

Sigma Xi	2010-2011
Society for the Study of Evolution	2009-present
American Society of Plant Biologists	2008-2011
Botanical Society of America	2007-present