

Christine M. Palmer, Ph.D.

Department of Natural Sciences
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EDUCATION

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|------|----------------------------------|--|
| 2011 | Ph.D., Biology | Dartmouth College, Hanover, NH |
| 2006 | M.S., Cell and Molecular Biology | University of Pennsylvania, Philadelphia, PA |
| 2002 | B.A., Biology | Williams College, Williamstown, MA |

RESEARCH EXPERIENCE

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| 2014-present | Assistant Professor of Biology, Castleton College, Castleton, VT | |
| 2011-2014 | Postdoctoral Researcher, University of California, Davis, CA
Advisor: Dr. Julin Maloof
Research: <i>Quantitative genetics of shade avoidance in plants</i> | |
| 2013 | Field Research Leader, White Mountain Research Station, White Mountains, CA
GLORIA project, Global Observation Research Initiative in Alpine Environments
Research: <i>Climate change impacts on the ecology of high mountain plants</i> | |
| 2013 | Field Researcher, U.S. Forest Service
Investigator: Dr. Malcolm North
Research: <i>Effect of fire on forest understory herb and shrub communities</i> | |
| 2006-2011 | Graduate Student, Dartmouth College, Hanover, NH
Advisor: Dr. Mary Lou Guerinot
Ph.D. Thesis: <i>Regulation of the iron deficiency response in Arabidopsis</i> | |
| 2003-2006 | Graduate Student, University of Pennsylvania, Philadelphia, PA
Advisor: Dr. Mitchell Lazar
M.S. Thesis: <i>A novel interaction between the mammalian corepressor SMRT and the DNA-dependent protein kinase</i> | |
| 2002-2003 | Research Assistant, Arizona State University, Tempe, AZ
Advisors: Dr. Stanley Faeth, Dr. Lokesh Joshi
Research: <i>Ecology of native bunchgrass and endophytic fungus</i>
<i>Production of therapeutic compounds in Nicotiana sp.</i> | |
| 2001-2002 | Undergraduate Honors Thesis, Williams College, Williamstown, MA
Advisor: Dr. Marta Laskowski
Thesis: <i>Characterization of an auxin-induced F-box protein in Arabidopsis</i> | |
| 2000-2001 | Undergraduate Research, Williams College, Williamstown, MA
Advisor: Dr. Joan Edwards
Research: <i>Impact of the invasive species Alliaria petiolata on native plants</i>
<i>Influence of self- and cross-fertilization on pollen tube development</i> | |

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TEACHING AND MENTORING EXPERIENCE

2014-present	Assistant Professor of Biology, Castleton College, Castleton, VT	
2012-present	Science Mentor <i>Master Plant Science Team</i>	American Society of Plant Biologists <i>Various high schools nationwide (online)</i>
2013-2014	Research Mentor <i>Plant Biology</i> <i>Young Scholar Program</i>	University of California, Davis <i>Undergraduate: Megan Choi and Edna Chen</i> <i>High School: Kisha Thayapran</i>
2013-2014	Guest Lecturer <i>Plant Developmental Biology</i> <i>Comparative Genomics</i>	University of California, Davis <i>Graduate and undergraduate students</i> <i>Undergraduate students</i>
2013-2014	Science Mentor <i>Environmental Science</i>	Da Vinci Charter Academy <i>High school students</i>
2013-2014	Mentor <i>Habitat restoration</i>	Center for Land Based Learning-SLEWS <i>Multiple local high schools</i>
2012-2014	Instructor <i>Techniques in proteins</i>	University of California, Davis <i>Summer College Intern Program</i>
2012-2014	Instructor <i>Methods in DNA</i>	Pioneer High School, Woodland, CA <i>AP Biology high school students</i>
2012-2013	Professors For The Future Training, University of California, Davis	
2012	Seminar on College Teaching Course, University of California, Davis	
2008-2011	Research Mentor <i>MCB Program</i> <i>Women in Science</i> <i>Presidential Scholars</i> <i>Honors Program</i> <i>SURF Program</i>	Dartmouth College <i>Graduate: Maria Hindt and Jessica Weng</i> <i>Undergraduate: Tara Henn</i> <i>Undergraduates: Zieanna Chang and Adi Rattner</i> <i>Undergraduate: Ilda Bajraktari</i> <i>Undergraduate: Sean Beckwith (Carleton College)</i>
2009	Teacher Training Workshop Series, Dartmouth College	
2007	Teaching Assistant <i>Genetics</i>	Dartmouth College <i>Supervisor: Dr. Patrick Dolph</i>
2005	Teaching Assistant <i>Genetics (Postbacc)</i>	University of Pennsylvania <i>Supervisor: Dr. Jean Labriola Scholz</i>
2000-2001	Teaching Assistant <i>Genetics</i> <i>Ecology</i>	Williams College <i>Supervisor: Dr. Marsha Altschuler</i> <i>Supervisor: Dr. Joan Edwards</i>

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AWARDS AND HONORS

2016	Vermont Genetics Network Small Grant, \$5,000
2015	American Society for Plant Biologists Travel Grant, \$500
2015	Vermont Genetics Network Pilot Grant, \$25,000
2014, 2015	Castleton Faculty Student Research Grant \$1076, \$1000
2014, 2016	Castleton Advanced Study Grant, \$4,750, \$1,311
2013	UC Davis Postdoctoral Scholars Association Travel Grant, \$500
2012	Professors For The Future Fellowship, University of California, \$3,000
2011	Sigma Xi Full Membership
2010	Dartmouth College Arts and Sciences Graduate Travel Award, \$1,000
2007-2009	Ruth L. Kirschstein NRSA Biochemistry Training Grant T32-GM008704
2007-2010	Outstanding Graduate Student Teacher Award, Dartmouth College (3 awards)
2006-2007	GAANN Fellowship, U.S. Department of Education
2005-2006	Ruth L. Kirschstein NRSA Genetics Training Grant T32-GM07229
2003-2005	Cell and Molecular Biology Training Grant, University of Pennsylvania
2002	Sigma Xi Associate Membership
2001	Nathaniel Lawrence Travel Fellowship, Williams College, \$2000
2000	Howard Hughes Medical Institute Undergraduate Research Fellowship

INVITED REVIEWER AND PROFESSIONAL SOCIETIES

American Journal of Botany
American Society for Plant Biologists
Physiologia Plantarum
Sigma Xi
National Science Foundation (IOS Panel)

PEER-REVIEWED PUBLICATIONS

- Müller-Moulé P, Nozue K, Pytlak ML, **Palmer CM**, Covington MF, Wallace AD, Harmer SL, Maloof JN. 2016. *YUCCA* auxin biosynthetic genes are required for Arabidopsis shade avoidance. *PeerJ*. Oct 13;4:e2574. PMID: 27761349
- An N, **Palmer CM**, Baker RL, Markelz RJC, Ta J, Covington MF, Maloof JN, Welch SM, Weinig C. 2016. Plant High-Throughput Phenotyping Using Photogrammetry and Imaging Techniques to Measure Leaf Length and Rosette Area. *Computers and Electronics in Agriculture*. 127:376-394.
- Corwin JA, Copeland D, Feusier J, Subedy A, Eshbaugh R, **Palmer C**, Maloof J, Kliebenstein DJ. 2016. The Quantitative Basis of the Arabidopsis Innate Immune System to Endemic Pathogens Depends on Pathogen Genetics. *PLoS Genetics* 12(2):e1005789. PMID: 26866607
- Palmer CM**, Hindt MN, Schmidt H, Clemens S, Guerinot ML. 2013. MYB10 and MYB72 are required for growth under iron-limiting conditions. *PLoS Genetics* 9(11):e1003953. PMID: 24278034
- Maloof JN, Nozue K, Mumbach MR*, **Palmer CM**. 2013. LeafJ: an ImageJ plugin for semi-automated leaf shape measurements. *Journal of Visualized Experiments* (71). PMID: 23380664
- Palmer CM**¹, Bush SM¹, Maloof JN. 2012. Phenotypic and developmental plasticity in plants. In: eLS 2012. John Wiley & Sons Ltd, Chichester. ¹co-first authors
- Palmer CM**, Guerinot ML. 2009. Facing the challenges of Cu, Fe and Zn homeostasis in plants. *Nature Chemical Biology* (5): 333-40. PMID: 19377460

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- Argyros RD, Mathews DE, Chiang YH, **Palmer CM**, Thibault DM*, Etheridge N, Argyros DA, Mason MG, Kieber JJ, Schaller GE. 2008. Type B response regulators of Arabidopsis play key roles in cytokinin signaling and plant development. *Plant Cell* (8): 2102-16. PMID: 18723577
- Yu J, **Palmer C**, Alenghat T, Li Y, Kao G, Lazar MA. 2006. The corepressor silencing mediator for retinoid and thyroid hormone receptor facilitates cellular recovery from DNA double-strand breaks. *Cancer Research* (18): 9316-22. PMID: 16982777

POSTERS AND INVITED TALKS

- Palmer CM**. The genetics of shade avoidance in plants. 2016. UVM Plant Seminar Series. Burlington, VT.
- Palmer CM**. Plants and the environment. 2015. Green Mountain Power Energy Series. Rutland, VT.
- Palmer CM**. GMOs in society. 2015. Science Pub Series. Castleton, VT.
- Palmer CM**. New perspectives on shade avoidance. 2014. International Plant and Animal Genome Conference. San Diego, CA.
- Palmer CM**, Choi M*, Maloof JN. Identifying Causal Genes from Genome Wide Association Studies of Shade Avoidance in Plants. 2014. International Plant and Animal Genome Conference. San Diego, CA.
- Palmer CM**, Chao D, Salt DE, Guerinot ML. Natural genetic variation in selected populations of *Arabidopsis thaliana* is associated with differences in arsenic accumulation. 2010. Superfund Research Conference. Portland, OR.
- Palmer CM**, Guerinot ML. MYB10 and MYB72 are required for survival under iron deficiency. 2010. FASEB Conference: Trace Elements in Biology and Medicine. Snowmass, CO.
2009. Dartmouth Molecular and Cellular Biology Graduate Program Retreat. Whitefield, NH.
- Palmer CM**, Lahner B, Salt DE, Guerinot ML. MYB10 and MYB72 play a redundant role in the iron deficiency response. 2008. Gordon Conference: Plant Molecular Biology. Holderness, NH., 2008. Dartmouth Molecular and Cellular Biology Graduate Program Retreat. Whitefield, NH.
- Yu J, **Palmer C**, Alenghat T, Li Y, Kao G, Lazar MA. The corepressor silencing mediator for retinoid and thyroid hormone receptor facilitates cellular recovery from DNA double-strand breaks. 2006. Keystone Symposia: Nuclear Receptors. Banff, Alberta.

* Undergraduate author