

Five Year Curriculum Vitae

Kevin M. Folta

Horticultural Sciences Department and the Graduate Program in Plant Molecular and Cellular Biology,
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Degrees Earned

University of Illinois at Chicago	Chicago, IL	Mol. Biology	Ph.D.	1998
Northern Illinois University	DeKalb, IL	Biology	M.S.	1992
Northern Illinois University	DeKalb, IL	Biology	B.S.	1989

Professional Experience

2008-Present Associate Professor, Horticultural Sciences Department, University of Florida

2002- 2008 Assistant Professor, Horticultural Sciences Department, University of Florida

Professional Activities and Service (selected activities from last five years)

Chair- Genomics of Horticultural Crops, International Society of Horticultural Sciences Conference,
Lisbon Portugal, August 24-28, 2010.

Chair, US Rosaceae Genetics, Genomics and Breeding Executive Committee, 2007

Vice Chair, US Rosaceae Genetics, Genomics and Breeding Executive Committee, 2006

Member, US Rosaceae Genetics, Genomics and Breeding Executive Committee 2005-2008; 2010.

National Science Foundation proposal review panelist, 2008; USDA proposal review panelist, 2007, 2008

Ad hoc reviewer of 100 manuscripts for 31 journals over last seven years

Ad hoc reviewer for 30 research grants from NSF, USDA, DOE, Academy of Finland, Binational
Agricultural Research and Development Fund

Associate Editor, *Plant Signaling and Behavior*, 2005-present

Associate Editor, *BMC-Research Notes*, 2007-present

Organizing Committee – USDA Rosaceae Specialty Crops Planning Workshop, Michigan State
University, East Lansing, MI. June 21-22, 2007.

Member, Rosaceae Microarray Development Committee, 2006

Panelist, Global Strategy for Conservation of Strawberry Genetic Resources, 2006

Host of 9 research appointments for international scholars

Professional Memberhip: American Society of Plant Biology, American Society of Horticultural
Sciences, North American Strawberry Association, Gamma Sigma Delta- Honors Society of Agriculture,
National Center for Science Education, Florida Citizens for Science

Associate Editor, *Plant Signaling and Behavior*, 2005-present

Associate Editor, *BMC-Research Notes*, 2007-present

Associate Editor, *The Berry Research Journal*, 2009 organization and publication in 2010

Editor, *Florida Science Matters* (Science resource newsletter for teachers) debut April 2010.

Current Research Grants

CAREER: Analysis of a Novel Aspect of Photomorphogenic Development and its Application to
Graduate Student Training. National Science Foundation (2008 – 2013). PI, \$985,985

Characterization of Novel Expressed Transcripts in the Rosaceae. National Science Foundation (2007-
2010) PI, \$1,005,585.

Improving Strawberry Germplasm via Targeted Introgression of Genetic Diversity and Characterization
of Flavor Genes. Plant Molecular Breeding Initiative (2010-2014). Co-PI, \$180,000.

Previous Research Grants (5 years)

Selecting a sunn hemp cover crop genotype for weed suppression and seed production. USDA/SARE. (2008-2009) Co-PI, \$200,000.

Material support for visiting scientists. North American Strawberry Growers & California Strawberry Growers. (2007-2008) PI, \$4000

Funding for strawberry researchers to attend the NASS/NASGA symposium. USDA (2007) PI \$10,000
Bioengineering Strawberries for Nematode Resistance in Sub-Tropical and Tropical Environments.
USDA (2006-2009) PI, \$100,000

Implementation of high-throughput amplicon sequencing to obtain chloroplast sequence. NSF / Research Experience for Undergraduates (REU) (2007-2008) Co-PI, \$17,000

The role of green light in combinatorial light treatments. NSF/Research Opportunity Award. (2006-2007) PI, \$20,782

Pilot high throughput strawberry gene sequencing using 454 technology. North American Strawberry Growers Association (2006) PI, \$4700

Identification of Fruit-Specific Promoters in Strawberry. Florida Strawberry Growers Association. 2005-2006. PI, \$6270

Gene Pair Haplotypes and Sequence Samples from Strawberry (Rosaceae), Multi-Purpose, Transferable Resources for Genomics and Variety Improvement. USDA (2005-2008). Co-PI, \$330,000.

Chloroplast transformation in cereals. Ohio Biotechnology Research Consortium. (2005-2006) Co-PI, \$40,000

Green Light Sensing, Integration and Response During Photomorphogenic Development. National Science Foundation (2004-2007). PI, \$318,845.

Awards and Distinctions

University of Florida Research Foundation Professor, 2010

Northern Illinois University LA&S Golden Anniversary Award, Top 50 Distinguished Alumni - 2009

National Science Foundation Young Faculty CAREER Award - 2008

Howard Hughes Medical Institute Distinguished Mentor -2007

University of Florida Superior Accomplishment Award, Academic Staff- 2006

Recognized as "Outstanding Teacher" at CLAS Fall 2006 Convocation

Selected as U.S. American Society of Plant Biologists representative/speaker to the *Congresso Fisiologia Vegetal de Argentina*, 2006

Invited as Distinguished Alumnus to address the Laboratory for Molecular Biology, University of Illinois at Chicago, April, 2007

GRADUATE EDUCATION AND INSTRUCTION

Graduate Committee Chair (Current)

Tingting Zhang (Ph.D.), Yihai Wang (Ph.D.), Colleen Kennedy (Co-Chair, Ph.D.), Jiao Wu (Co-Chair, Ph.D.), Fadhli Mad Atari (M.S). Dissertation referee for a student in Pakistan and Colombia.

Graduate Committee Chair (Past)

Philip Stewart (Ph.D. 2007), Stefanie Maruhnich (Ph.D. 2007), Denise Tombolato (Ph.D. 2007), Thelma Madzima (Ph.D. 2008), Stephanie Halbig (M.S. 2008)

Current Graduate Committee Activity

Eduardo Chica (HOS), Melissa Hamner (PMCB), Omar Carillo-Mendoza (HOS)

Past Graduate Committee Activity (Ph.D. except where specified)

Rick Dexter, John Mayfield, Jon Martin, Rebecca Schnelle, Xu Zhang, Tariq Akhtar, Thomas Colquhoun, Li Li (MS)

Graduate Teaching (Evaluations = 4.70/5.00, range 4.25-5.00)

PCB5330- Plant Molecular and Cellular Biology (25% of lectures), annually, spring semester

PCB7922- Journal Colloquium. Annual discussion of the current literature. Latest versions incorporate student outreach presentations in YouTube format (Search PlantMolCellBio)

Undergraduate Training (Classroom)

HOS4331 – Advanced Horticultural Physiology (Spring 2006)

FRC1010 – Growing Fruit for Fun and Profit (1-3 annual lectures)

Undergraduate Training (Laboratory)

Provided research experiences for over 40 undergraduates since 2002, at least eight that have co-authored peer-reviewed publications and almost all have submitted research abstracts to regional, national or international conferences.

SABBATICAL/PROFESSIONAL TRAINING HOST

Hosted seven international scholars for 3 months to one year for research experiences. Scholars represented Argentina, Iran, Romania, England, China (2), and Finland.

INVITED SPEAKER FOR ORAL PRESENTATIONS

(select dates not including state or local presentations; 5 years)

Rutgers University, Biology Department, September 18, 2010

Keynote Speaker in Translational Genomics, International Hort Congress 2010, Lisbon. August 24, 2010

Rockefeller University, Biological Sciences Department, April 5, 2010

Michigan State University, Plant Science Department, April 1, 2010

Duke University, Biology Department, February 18, 2010

University of Pittsburgh, Department of Biology, October 2009

National Science Foundation Awardees Meeting, September 5, 2009

Northern Illinois University, Biological Sciences Department, September 25, 2009

Rutgers University, September 2009

Mid-Atlantic Plant Physiology Conference, Keynote Speaker, August, 2009

Cold Spring Harbor Laboratories, Cold Spring Harbor, NY; Plant Molecular Biology Short Course, July 12, 2009

International Strawberry School, Marche Polytechnic University, Ancona, Italy, May 21-24, 2009

Foodomics Conference, University of Bologna, Cesena, Italy May 25, 2009

University of Arizona, April 23, 2009

Euroberry COST Meeting, Zurich, Switzerland, December 5-8, 2008.

University of Florida Genetics Institute, October 30, 2008

Indiana University, Bloomington, IN, October 13, 2008

Cornell University, Ithaca NY, September 26, 2008

Cold Spring Harbor Laboratories, Cold Spring Harbor, NY; Plant Molecular Biology Short Course, July 12, 2008

Ohio State University, Columbus OH, March 23, 2008

Ohio State University Agricultural and Biological Research Center, Wooster, OH; March 24, 2008

Rosaceae Genomics Conference 4, Pucon Chile, March 16-19 2008 (2 Oral Presentations)

International Plant Photobiology Meeting, University of Missouri, Columbia, MO; May 28-31, 2008.

Department of Horticulture and Landscape Architecture, Purdue University. October 11, 2007.

University of Cambridge, Cambridge UK. October 4, 2007.

East Malling Research, Kent UK. October 2, 2007

Washington State University, Pullman, WA. September 28, 2007. (two presentations)

Molecular Techniques in Plant Science, Cold Spring Harbor Laboratory Series, July 6, 2007.

American Society of Plant Biologists, Chicago, IL, July 7-11, 2007.

Society for Experimental Biology, Glasgow, Scotland, March 31-April 2, 2007.

North American Strawberry Symposium, Ventura, CA, February 9-12, 2007 (Two presentations)

Plant Animal Genome XV. San Diego, CA, January 13-17, 2007.

Argentina Plant Physiology Conference, Chascomús, Argentina, October 4-6, 2006. (ASPB Sponsored Speaker)

University of Illinois, Chicago, April 19-20 2006.

Gordon Conference. Plant Molecular Biology, July 24, 2006.

American Society of Plant Biologists, Boston MA, August 3-7.2006

San Diego State University/Salk Institute, La Jolla, CA, October 19, 2005.

Department of Plant Biology, University of Missouri, August 21, 2005. (Grad student invited)

PUBLICATIONS (Selected peer-reviewed works over five years)

Books

Folta, K.M., Gardiner, S.E. Eds. (2009) *Genetics and Genomics of the Rosaceae*. Rich Jorgensen, series ed. Springer, New York, 644 pp.

Folta, K.M. (2010) *Berries*. Genomics of Crop Plants (Series). C. Kole, series ed. Science Publishers, Manchester, New Hampshire, 300 pp. 2010 anticipated publication date.

Book Chapters

Chandler, C.K., Folta, K.M., Dale A.M. (2009) Strawberry. In *Breeding of Fruit and Nut Crops*. D. Byrne and M. Badeness Eds. Springer, New York

Folta, K.M., Gardiner, S.E. (2009) Genomics opportunities in apricot. *Genetics and Genomics of Rosaceae*. Folta and Gardiner Eds. Richard Jorgensen, Series Ed. Pp. 321-351.

Piqueras, A., Alburquerque, N., Folta, K.M. (2009) Explants used in the generation of transgenic plants. In: *Development and Deployment of Transgenic Plants*. C. Kole Ed. Springer, New York.

Dhingra, A., James, V.A., Koop, H.U., Mok, M.C., DePaepe, R., Gallo, M., Folta, K.M. (2007) Transgenic Tobacco - Lighting Cellular Function. In *A Compendium of transgenic crop plants*, Kole C and Hall TC (EdS). Blackwell Publishing.

Folta, K.M. (2005) Green light signals and plant development. In *Light Signaling in Plants*, M. Wada, K. Shimizaki and M. Iino eds. Springer-Verlag Publishing, Tokyo

Refereed Journal Publications (* denotes undergraduate author; seven currently in review)

Hamner Mageroy, M, E.H. Kowalik, K.M. Folta, J. Shinkle (2010) Evidence of physiological Phototropin1 (phot1) action in response to UV-C illumination. *Plant Signaling and Behavior* (in press)

Davis, T.M., Shields, M.E., Zhang, Q., Tomblato-Terzic, D., Bennetzen, J.L., Pontaroli, A.C., Wang, H., Yao, Q., SanMiguel, P., Folta, K.M. (2010) An examination of targeted gene neighborhoods in strawberry. *BMC Plant Biology*, 10:81+

Folta, K.M., Clancy, M.A., Chamala, S., Dhingra, A., Brunings, A.M., Gomide, L., Kulathinal, R.L., Peres, N.A., Davis, T.M., Barbazuk, W.B. (2010) A transcript accounting from diverse tissues of a cultivated strawberry (*Fragaria ×ananassa*). *Plant Genome* (in press)

Brunings, A., Moyer, C., Peres, N., Folta, K.M. (2010) Implementation of simple sequence repeat markers to genotype Florida strawberry varieties. *Euphytica* 173:63-65.

Stewart, P.J., Folta, K.M. (2010) Photoperiodic flowering in strawberry (*Fragaria spp.*). *Crit Rev Plant Sci.* 5:15.

Mouhu K, Hytonen T, Folta K, Rantanen M, Paulin L, Auvinen P, Elomaa (2009) Identification of flowering genes in strawberry, a perennial SD plant. *BMC- Plant Biology* 9:122

Slovin, J.P., Schmitt, K.*, Folta, K.M. (2009) An inbred line of the diploid strawberry *Fragaria vesca* f. *semperflorens* for testing gene function. *BMC-Plant Methods* 5:15.

Pontaroli, A.M., Rodgers, R., Zhang, Q., Davis, T.M., Folta, K.M., San Muigel, P., Bennetzen, J.L. (2009) Gene Content and Distribution in the Nuclear Genome of *Fragaria vesca*. *Plant Genome*. 2:93-101.

Folta, K.M., Childers, K.S.* (2008) Light as a growth regulator; controlling plant biology with narrow-bandwidth solid state lighting systems. *Hortscience* 43:1957-1964.

Shulaev V, Korban S.S., Sosinski B, Abbott A.G., Aldwinckle H.S., Folta K.M, Iezzoni A, Main D, Arus P, Dandekar A.M., Lewers K, Brown S.K., Davis T.M., Gardiner S.E, Potter D, Veilleux R.E. (2008) Multiple models for Rosaceae genomics. *Plant Physiol.* 147: 985.

Paul, A.L., Folta, K.M, Ferl, R.J. (2008) 14-3-3 proteins, phytochrome and photoperiodic flowering- a point of connection? *Plant Signaling and Behavior* 511-515.

Folta, K.M., Paul, A.L., Mayfield, J.M., Ferl, R.J. (2008) 14-3-3 Isoforms participate in red light signaling and photoperiodic flowering. *Plant Signaling and Behavior* 3:304-306.

- Mayfield, J.M., Folta, K.M., Paul, A-L, Ferl, R.J.** (2007) The 14-3-3 proteins μ and ν influence transition to flowering and phytochrome response. *Plant Physiol.* 145:1692-702
- Chawla R, Nicholson SJ, Folta KM, Srivastava V.** (2007) Transgene-induced silencing of Arabidopsis phytochrome A gene via exonic methylation. *Plant J.* 52:1105-18
- Folta, K.M. and Maruhnich, S.A.** (2007) Green Light- a signal to stop or slow down. *J. Exp. Bot.* 58:3099-111
- Stewart, P.J., Winslow, A.R.* and Folta, K.M.** (2007) An Initial Characterization of *Fragaria CONSTANS* mRNA levels in Short-Day and Day-Neutral Cultivars. *Proc. N. Amer. Strawberry Symp* (refereed) pp 95-100
- Dhingra, A., Bies D.H., Lehner, K.R.* and Folta K.M.** (2006) Green Light Adjusts Plastid Transcript Accumulation during De-etiolation. *Plant Physiol.*, 142(3):1256-66
- Folta K.M., Dhingra, A.,** (2006) Transformation of Strawberry: The Basis for Translational Genomics in Rosaceae. *InVitro Cell. Dev. Biol.-- Plant* , 42:482-490
- Folta, K.M., Davis, T.M.** (2006) Strawberry genes and strawberry genomics. *Crit. Rev. Plant Sci.* 25:399-415.
- Folta, K.M., Howard, L.*, Dhingra, A., Stewart, P.J., Chandler, C.K.** (2006) Characterization of LF9, an octoploid strawberry genotype selected for rapid regeneration and transformation. *Planta* 224:1058-1067
- Sargent, D.J. J. Clarke, D.W. Simpson, K.R. Tobutt, P. Arus, A. Monfort, S. Vilanova, B. Denoyes-Rothan, M. Rousseau, K.M. Folta, N.V. Bassil, N.H. Battey** (2006) An enhanced microsatellite map of diploid *Fragaria*. *Theoret Appl Genet* 112:1349-59.
- Dhingra, A, K.M. Folta** (2005) ASAP: Amplification, sequencing, and annotation of plastomes. *BMC-Genomics*, 6:176.
- Folta, K.M., L. L. Koss, R. McMorrow*, H-H Kim, J. D. Kenitz, R. M*. Wheeler, J.C. Sager** (2005) Design and fabrication of adjustable red-green-blue LED light arrays for plant research *BMC Plant Biology* 5:17
- Folta, K.M., M. Staton, P.J. Stewart, S. Jung, D.H.Bies, C. Jesudurai, D. Main** (2005) Expressed sequence tags (ESTs) and simple sequence repeat (SSR) markers from octoploid strawberry (*Fragaria x ananassa*) *BMC Plant Biology*, 5:12.
- Spalding, E.P. and K.M. Folta** (2005) Illuminating Topics in Plant Photobiology. *Plant, Cell, Environ.* 28: 39-53.

SERVICE

University Service

University of Florida Superior Accomplishments Award Committee, 2009
 College of Agricultural and Life Sciences Commencement Marshal, 2008, 2009
 Institute for Food and Agricultural Sciences Superior Accomplishment Award Committee, Chair, 2006, 2007
 College of Agricultural and Life Sciences Curriculum Committee, 2005-2007
 University of Florida Minority Mentor Program 2003-2005
 University of Florida University Scholars Program Advisor 2002, 2004, 2005, 2008, 2009
 University of Florida Forensics (speech and debate) coach and tournament judge 2003-2008; 2010

Departmental Service

PMCB (Plant Molecular and Cellular Biology) Graduate Admissions Committee, 2004-2009
 Faculty Search Committee 2005, 2006, 2008; 2009; 2010
 PMCB Qualifying Exam Committee, 2006
 Organized PMCB Workshop 2005, Daytona Beach, FL.
 PMCB Award Committee (2003, 2004)
 Advisor and Committee chair to 8 Ph.D. students, 2 M.S.
 Committee member to 20 Ph.D. students, 1 M.S.

Research Advisor to 6 post-doctoral scientists

Research Advisor to 41 undergraduate students, 8 that have co-authored peer-reviewed publication, and co-authored over 40 conference abstracts.

Service to Schools

NSF-Sponsored outreach via www.respondingtotherainbow.com and www.plantingscience.org, over twenty K-12 classes and science fair projects served in 2009-2010.

Lecture and Laboratory Demonstration – CPET Summer Science Institute, Explorations in Life Science workshop for middle school and high school teachers. Design of LED based lighting regimes for classroom use; introduction to strawberry as a tool to teach plant tissue culture principles. 2006, 2007, 2008, 2009, 2010

Provided science fair support for 12 high school students as well as participated as a science mentor in the national Planting Science program. Science Fair Judge for Alachua County Middle and High Schools.

Forensics Coach – 2006 Coached Mackenzie Hellstrom, Eastside High School sophomore, in interpretive events for high school forensics competition. Mackenzie finished second in the State of Florida and will attend the High School National Tournament in Chicago, IL. She was the only student to place at the state tournament in her high school.

Community Interaction

Website designer and founding member of Helping Children Heal a 501c3 charity organization that raises funding for distinct medical needs of specific children in third-world countries (2008-2009). (Organization currently viable yet inactive)

Liaison for Operation Migration, providing Whooping Crane Conservation literature and information at Payne's Prairie State Park.