CURRICULUM VITAE MARK WILSON

PROFESSIONAL EXPERIENCE:

9/14-current	Associate Professor, Dept. of Organismal Biology and Ecology, The Colorado College
9/03-05/14	Associate Professor, Biology Department, The Colorado College, Colorado Springs, CO 80903
9/98-9/03	Assistant Professor, Biology Department, The Colorado College, Colorado Springs, CO 80903
2/94-8/98	Assistant Professor, Dept. of Plant Pathology, Auburn University, Auburn, AL 36849-5409
9/91-2/94	Post-Doctoral Research Assistant., Dept. of ESPM, University of California, Berkeley, CA 94720
9/89-9/91	Miller Post-Doctoral Fellow, Dept. of Plant Pathology, University of California, Berkeley, CA 94720
1/89-9/89	Visiting Post-Doctoral Fellow, Dept. of Plant Pathology, Univ. of California, Berkeley, CA 94720

EDUCATION:

9/85-1/89 Ph.D. University of Manchester, U.K.

9/82-6/85 B.Sc. University of Bristol, U.K. Major: Botany, B.Sc. (Honours), First Class.

HONORS AND AWARDS:

1989-1991 Miller Post-Doctoral Fellowship (Miller Institute, U.C., Berkeley, U.S.A.).

CLASSES:

Current:

BE100 "Studies in Biology: Plants and People"

BE240 "Human Impacts on Biodiversity and the Environment"

BE107 "Biology of Microbes"

BE309/409 "Research Problems in Biology"
BE475 "Techniques in Molecular Ecology"

BE499 "Senior thesis"

Taught Previously:

BY131 "Introduction to Molecular and Cellular Biology" (replaced BY210)

BY210 "Cell Biology"

BY231 "Genetics" (replaced BY361)
BY361 "Classical and Molecular Genetics"
BY464 "Molecular Biology: Microbial"

DEPARTMENTAL SERVICE:

Acting Chair of OBE (block 5, 2018-2019); Greenhouse Coordinator (2017-2018; 2018-2019); Lab and classroom safety; Assessment coordinator (ETS analyses, capstone assessment and Assessment Report preparation); Screening of Barnes scholarship applicants; Participation in ongoing MCB and OEE curriculum meetings; Preliminary screening committee for faculty hire (Killian); Participation in all departmental curricular revision meetings leading to MCB and OEE tracks; Assistant Chair (one year only); Bio Majors' Handbook co-ordinator; Biology contribution to Catalog of Courses coordinator; Departmental safety officer; BioDay co-ordinator; Biology of Microbes (BY107)-bypass administrator; University of Arizona research experience coordinator; Greenhouse use coordinator; Cell Biology (BY210)-bypass coordinator; Seminar co-ordinator

COLLEGE SERVICE:

Ad hoc Olin Replacement Building Committee; Ad hoc Tree Advisory Committee; Certificate Advisory Committee; Greening the Sciences Subcommittee of Campus Sustainability Council; Steering Committee for Campus Sustainability Council (2012-2013, 2013-2014; 2014-2015 and fall semester 2015-2016); Campus Sustainability Council; Assistant Chair of Biology (one year only); ADA Compliance Representative in Biology; Ad Hoc Health Professions Advisor Assessment Committee; Ad Hoc Emerging Infectious Diseases Task Force; Faculty Representative to Endowed Lecture Series; NIH-Oxford/Cambridge scholarship coordinator; Marshall Scholarship coordinator; Biochemistry Steering Committee; Ad hoc committee to assess the case for terminating a Professor in Romance Languages; Natural Sciences Executive Committee (1 year appointment); Working Group on Campus Sustainability; DRB representative on Tutt Program Committee; Design Review Board.

PROFESSIONAL SERVICE (Current):

Manuscript Review:

Annales Botanici Fennici; Lankesteriana; Phytochemistry Letters

PROFESSIONAL SERVICE (Previous):

Committees/Review Panels: USDA - NRICGP - Plant Pathology Panel Member (1996); APS Bacteriology Committee (1993-1997), Chair (1997); NCR-178 Biology and Detection of Plant-Associated Bacteria (1995, 1996, 1997); USDA-SBIR Panel Member (2002).

Grant Reviews (since starting at Colorado College): USDA/NSF – Microbial Genomes Program; USDA – Biotechnology Risk Assessment Program; USDA – National Research Initiative Competitive Grants Program (NRICGP); Israeli Science Foundation

Manuscript Reviews (since starting at Colorado College): Biological Control; European Journal of Plant Pathology; FEMS Microbiology Letters; International Microbiology; Journal of Phytopathology; Letters in Applied Microbiology; Microbial Ecology; Molecular Plant-Microbe Interactions; Physiological and Molecular Plant Pathology; Phytopathology (Associate Editor, 1997-1999); Phytoparasitica; Proc. National Academy of Sciences; The ISME Journal

PROFESSIONAL DEVELOPMENT:

Cold Spring Harbor Laboratory "Advanced Bacterial Genetics" course. CSHL, summer 2003. New England Biolabs "Molecular Biology and PCR" summer workshop. Smith College, summer 2002. NSF Chautauqua "Evolutionary Bioinformatics Education" short course. Clark University, summer 2002. ASM Undergraduate Education Conf. "Teaching Bioinformatics to Undergraduates". Univ. Utah, summer 2002. CNR Biological Imaging Facility, U.C., Berkeley – trained on Zeiss 510 confocal laser scanning microscope.

RESEARCH INTERESTS:

Phylogenetics, biogeography, systematics, DNA barcoding, floral morphology, pollination biology and evolution of pollination by sexual deception in the orchid genera *Pleurothallis* and *Andinia*.

PUBLICATIONS:

Peer-reviewed Orchid Publications (in preparation):

(underlining indicates undergraduate student co-authors)

- Wilson, M., Diaz, A., Posada, J.F., Pinnix, W., and Krogsgaard, E. A new species of *Pleurothallis* (Orchidaceae: Pleurothallidinae) in subgenus *Elongatia* from Antioquia, Colombia related to *Pleurothallis restrepioides*. Orquideología (in preparation).
- Wilson, M., Arbildo Lopez, G., Dominguez Vargas, E., Edquen Oblitas, J.D., Haelterman, D., Larsen, B., Moreno, S., Riksen, J. and Zhao, K. A taxonomic synopsis of the *Pleurothallis lilijae-P. cardiostola* complex (Orchidaceae, Pleurothallidinae) and xxx new species. Lankesteriana (in preparation).
- Wilson, M., Moreno, J.S., Larsen, B., <u>Zhao, K.</u>, Garza, Arciniegas, A., López Toscano, H., Uribe Vélez, C., Holcomb, K. and Aguirre, Gustavo. Taxonomic history, nature, and identity of *Pleurothallis crocodiliceps* (Orchidaceae, Pleurothallidinae) and a closely related new species. Phytotaxa (submitted).

Peer-reviewed Orchid Publications:

(underlining indicates undergraduate student co-authors)

Wilson, M., Larsen, B.T., Zhao, K., Posada, J.F., Aguirre, G., and Uribe Vélez, C. A beautiful new species of *Pleurothallis* (Orchidaceae, Pleurothallidinae) in the *P. crocodiliceps* complex from Colombia. Orquideología 36(2): 111-126.

- Wilson, M., Zhao, K., Hampson, H., Chang, M., Reina-Rodríguez, G.A., and Niessen, A. Hidden in plain sight: A new species of *Pleurothallis* (Orchidaceae: Pleurothallidinae) from Colombia previously misidentified as *P. luctuosa*. Lankesteriana 19(2): 771-91. https://doi.org/10.15517/lank.v19i2.38584
- Wilson, M., Zhao, K., Hampson, H., Frank, G., Romelroux, K., Jiménez, M.M., Tobar, F., Larsen, B. and Perez, A. A new species of *Pleurothallis* (Orchidaceae: Pleurothallidinae) in subsection *Macrophyllae-Fasciculatae* with a unique, highly reduced, morphologically distinct labellum. Lankesteriana 18(3): 217-230. https://doi.org/10.15517/lank.v18i3.35495
- Jiménez, M.M., Baquero, L.E., **Wilson, M.,** and Iturralde, G.A. *Pleurothallis chicalensis*, a new species in subsection *Macrophyllae-Fasciculatae* (Orchidaceae, Pleurothallidinae) from northwestern Ecuador. Lankesteriana 18(2): 103-109. https://doi.org/10.15517/lank.v18i2.34050
- Diaz Hernández, A.G., Ocupa Horna, L.A., Yupanqui Godo, L.E. and **Wilson, M.** A new species of *Andinia* (Orchidaceae, Pleurothallidinae) from Huánuco, Peru, and the first Peruvian locality for *Andinia schizopogon*. Phytotaxa 361(2): 222-232. https://doi.org/10.11646/phytotaxa.361.2.7
- Wilson, M. Pleurothallis gracilicolumna (Orchidaceae, Pleurothallidinae), a new species from Colombia related to *P. talpinaria*, *P. trimeroglossa* and *P. jostii*. Orquideología 35(1): 31-51.
- Wilson, M. Jimenez, M.M., Jost, L., Kay, A., <u>Frank, G.</u>, and Baquero R., L.E. A new species of *Pleurothallis* (Pleurothallidinae, Orchidaceae) from northwestern Ecuador with affinities to both subgenus *Ancipitia* and *Scopula*. Phytotaxa 343(3): 249-258. http://dx.doi.org/10.11646/phytotaxa.343.3.5
- Wilson, M., Vieira-Uribe, S., Aguirre, G., Posada, J.F., and <u>Dupree, K.</u> Two new species of *Pleurothallis* (Pleurothallidinae, Orchidaceae) in subgenus *Ancipitia* from Colombia. Orquideología 34(1): 34-51.
- Wilson, M., Baquero R., L., Driessen, W., <u>Dupree, K.</u>, Gil, K., Portilla, J. and Salas Guerrero, M. A clarification of the distinction between *Pleurothallis talpinaria* and *Pleurothallis trimeroglossa* (Orchidaceae: Pleurothallidinae) and an allied new species from Ecuador. Lankesteriana 17(2): 133-151. http://dx.doi.org/10.15517/lank.v17i2.29803
- Wilson, M., <u>Dupree, K.</u>, Driessen, W., Larsen, B.T., Löckher, A., Niessen, A., Portilla, J., Salas Guerrero, M., Suarez, M.A., and Tobar Suárez, F. A clarification of the taxonomy of *Pleurothallis crocodiliceps* Rchb.f. (Pleurothallidinae, Orchidaceae) and four new species of *Pleurothallis* in subgenus *Ancipitia*. Lankesteriana 17(2): 165-191. http://dx.doi.org/10.15517/lank.v17i2.29911
- Wilson, M., <u>Dupree, K.</u>, Garcia Lopera. D., Haelterman, D., Kay, A., Mesa Londoño, C., Niessen, A., Pinnix, W., Portilla, J. and Werner, J. A new species of *Pleurothallis* (Orchidaceae: Pleurothallidinae) from Valle del Cauca, Colombia and a note on the relationship between subsections Macrophyllae-Racemosae and Antenniferae. Lankesteriana 17(2): 119-131. http://dx.doi.org/10.15517/lank.v17i2.29804
- Zambrano Romero, B.J., Solano-Gomez, R., and **Wilson, M.** A new species of *Pleurothallis* (Orchidaceae: Pleurothallidinae) from Southwestern Ecuador: *Pleurothallis marioi*. Phytotaxa 308(1): 080-088. https://doi.org/10.11646/phytotaxa.308.1.6
- Wilson, M., Frank, G.S., Jost, L., Pridgeon, A., Vieira-Uribe, S., and Karremans, A. Phylogenetic analysis of *Andinia* (Orchidaceae: Pleurothallidinae) and a systematic re-circumscription of the genus. Phytotaxa 295(2): 101-131. https://doi.org/10.11646/phytotaxa.295.2.1
- Wilson, M., Baquero, L., <u>Dupree, K.</u>, Jimenez, M., LeBlanc, C., Merino, G., Portilla, J., Salas Guerrero, M., Tobar Suarez, F. and Werner, J. Three new species of *Pleurothallis* (Pleurothallidinae; Orchidaceae) in subsection *Macrophyllae-Fasciculatae* from northern South America. Lankesteriana 16(3): 349-366. http://dx.doi.org/10.15517/lank.v16i3.27314
- Doucette, A., **Wilson, M.**, Portilla, J., Kay, A., Moreno, J.S. and Cameron, K.M. Two new species of *Pleurothallis* and a new name for *Acronia rinkei*. Orquideología 23(2): 123-139.

Non-peer-reviewed Orchid Publications:

- Villalba Vargas, D., Moya Huanca, L., Zenteno-Ruiz, F.S., Damian, A., Ayala, E.S., Hágsater, E. and **M. Wilson**. Orquídeas del Madidi (Parque Nacional Madidi, La Paz, Bolivia). Field Guide # xxx, Field Museum, Chicago.
- 2019 Moreno, J.S. and Wilson, M. Pleurothallis anceps Luer. Species Orchidacearum Icones Colombianae 3.

Peer-reviewed Microbial Publications:

- Zhang, Y., <u>Callaway, E.M.</u>, Jones, J.B., and **Wilson, M.** Visualization of *hrp* gene expression in *Xanthomonas euvesicatoria* in the tomato phyllosphere. European Journal of Plant Pathology 124: 379-390. http://dx.doi.org/10.1007/s10658-008-9423-x
- 2007 Moss, W.P., Byrne, J.M, Campbell, H.L, Ji, P., Bonas, U., Jones, J.B., and **Wilson, M.** Biological control of bacterial spot of tomato using *hrp* mutants of *Xanthomonas campestris* pv. *vesicatoria*. Biological Control 41:199-206. http://dx.doi.org/10.1016/j.biocontrol.2007.01.008
- 2007 Iriarte, F.B., Balogh, B., Momol, M.T., Smith, L.M., Wilson, M., and Jones, J.B. Factors affecting survival of bacteriophage on tomato leaf surfaces. Applied and Environmental Microbiology 73:1704-1711. http://dx.doi.org/10.1128/AEM.02118-06
- Ji, P., Campbell, H.L., Kloepper, J.W., Jones, J.B., Suslow, T.V. and **Wilson, M.** Integrated biological control of bacterial speck and spot of tomato using foliar biological control agents and plant growth-promoting rhizobacteria. Biological Control 36: 358-367. http://dx.doi.org/10.1016/j.biocontrol.2005.09.003
- Byrne, J.M., Campbell, H.L., Dianese, A.C., Ji, P., Cuppels, D.A., Louws, F.J., Miller, S.A., Jones, J.B., and **Wilson, M.** Biological control of bacterial spot of tomato under field conditions at multiple locations in North America. Biological Control 32: 408-418. http://dx.doi.org/10.1016/j.biocontrol.2004.12.001
- Dianese, A.C., Ji, P., and **Wilson, M.** Nutritional similarity between nonpathogenic bacteria and the pathogen is not predictive of efficacy in biological control of bacterial spot of tomato. Applied and Environmental Microbiology 69: 3484-3491.
- Ji, P., Lindow, S.E., and **Wilson, M.** Enhancement of population size of a biological control agent and efficacy in control of bacterial speck of tomato through salicylate and ammonium sulfate amendments. Applied and Environmental Microbiology 69:1290-1294.
- Yan, Z., Reddy, M.S., Ryu, C.-M., McInroy, J.A., **Wilson, M.,** and Kloepper, J.W. Induced systemic protection against tomato late blight elicited by plant growth-promoting rhizobacteria. Phytopathology 92:1329-1333.
- Wilson, M., Campbell, H.L., Ji, P., Jones, J.B., and Cuppels, D.A. Biological control of bacterial speck of tomato under field conditions at several locations in North America. Phytopathology 92:1284-1292.
- Ji, P., and **Wilson, M.** Assessment of the importance of similarity in carbon source utilization profiles between the biological control agent and pathogen in biological control of bacterial speck of tomato. Applied and Environmental Microbiology 68: 4383-4389.
- Louws, F.J., **Wilson, M.**, Campbell, H.L., Cuppels, D.A., Jones, J.B., Shoemaker, P.B., Sahin, F., and Miller, S.A. Field control of bacterial spot and bacterial speck of tomato using a plant activator. Plant Disease 85: 481-488.
- 2000 Kinkel, L.L., **Wilson, M.**, and Lindow, S.E. Plant species and plant incubation conditions influence variability in epiphytic bacterial population size. Microbial Ecology 39: 1-11.
- 1999 **Wilson, M.**, Hirano, S.S., and Lindow, S.E. Location and survival of leaf-associated bacteria in relation to pathogenicity and potential for growth within the leaf. Applied and Environmental Microbiology 65: 1435-1443.
- 1998 Raineri, D.M., Roine, E., Romantschuk,, M., **Wilson, M.**, and Nunn, D.N. Characterization of type IV pilus genes in *Pseudomonas syringae* pv. tomato DC3000. Molecular Plant Microbe Interactions 11: 1048-1056.

- Zhang, D., Shelby, R., Savka, M.A., Dessaux, Y. and Wilson, M. Separation, detection, and quantification of imine-linked opines in plant tissues by high performance liquid chromatography. Journal of Chromatography A 813: 247-253.
- 1997 Press, C.M., **Wilson, M.**, Tuzun, S., and Kloepper, J.W. Salicylic acid produced by *Serratia marcescens* 90-166 is not the primary determinant of induced systemic resistance in cucumber and tobacco. Molecular Plant Microbe Interactions 10: 761-768.
- Kinkel, L.L., **Wilson, M.**, and Lindow, S.E. Utility of microcosm studies for predicting phylloplane bacterium population sizes in the field. Applied and Environmental Microbiology 62: 3413-3423.
- 1995 Kinkel, L.L., **Wilson, M.**, and Lindow, S.E. Effect of sampling scale on the assessment of epiphytic bacterial populations. Microbial Ecology 29: 283-297.
- Wilson, M., Savka, M.A., Hwang, I., Farrand, S.K., and Lindow, S.E. Altered epiphytic colonization of mannityl opine-producing transgenic tobacco plants by a mannityl opine-catabolizing strain of *Pseudomonas syringae*. Applied and Environmental Microbiology 61: 2151-2158.
- **Wilson, M.**, and Lindow, S.E. Enhanced epiphytic coexistence of near-isogenic salicylate-catabolizing and non-salicylate-catabolizing *Pseudomonas putida* strains after exogenous salicylate application. Applied and Environmental Microbiology 61: 1073-1076.
- **Wilson, M.**, and Lindow, S.E. Coexistence among epiphytic bacterial populations mediated through nutritional resource partitioning. Applied and Environmental Microbiology 60: 4468-4477.
- **Wilson, M.**, and Lindow, S.E. Ecological similarity and coexistence of epiphytic ice-nucleating (Ice⁺) *Pseudomonas syringae* strains and a non-ice-nucleating (Ice⁻) biological control agent. Applied and Environmental Microbiology 60: 3128-3137.
- **Wilson, M.**, and Lindow, S.E. Inoculum density-dependent mortality and colonization of the phyllosphere by *Pseudomonas syringae*. Applied and Environmental Microbiology 60: 2232-2237.
- 1993 **Wilson, M.**, and Lindow, S.E. Effect of phenotypic plasticity on epiphytic survival and colonization by *Pseudomonas syringae*. Applied and Environmental Microbiology 59: 410-416.
- 1993 **Wilson, M.**, and Lindow, S.E. Interactions between the biological control agent *Pseudomonas fluorescens* A506 and *Erwinia amylovora* in pear blossoms. Phytopathology 83: 117-123.
- **Wilson, M.**, and Lindow, S.E. Relationship of total viable and culturable cells in epiphytic populations of *Pseudomonas syringae*. Applied and Environmental Microbiology 58: 3908-3913.
- **Wilson, M.**, Epton, H.A.S., and Sigee, D.C. Biological control of fire blight of hawthorn (*Crataegus monogyna*) with fluorescent *Pseudomonas* spp. under protected conditions. Journal of Phytopathology 136: 16-26.
- 1992 **Wilson, M.**, Epton, H.A.S., and Sigee, D.C. Interactions between *Erwinia herbicola* and *Erwinia amylovora* on the stigma of hawthorn. Phytopathology 82: 914-918.
- **Wilson, M.**, Epton, H.A.S., and Sigee, D.C. Biological control of fire blight of hawthorn (*Crataegus monogyna*) with *Erwinia herbicola* under protected conditions. Plant Pathology 39: 301-308.
- 1990 **Wilson, M.**, Sigee, D.C., and Epton, H.A.S. *Erwinia amylovora* infection of hawthorn blossom: III. The nectary. Journal of Phytopathology 128: 62-74.
- 1989 **Wilson, M.**, Epton, H.A.S., and Sigee, D.C. *Erwinia amylovora* infection of hawthorn blossom: II. The stigma. Journal of Phytopathology 127: 15-28.
- 1989 **Wilson, M.**, Sigee, D.C., and Epton, H.A.S. *Erwinia amylovora* infection of hawthorn blossom: I. The anther. Journal of Phytopathology 127: 1-14.

1988 **Wilson, M.**, Crawford, E.K., and Campbell, R. Biological control by *Trichoderma harzianum* of damping-off of lettuce caused by *Rhizoctonia solani*. European Plant Protection Organization (EPPO) Bulletin 18: 83-89.

Educational Publications:

Savka, M.A., Wang, S.-Y., and **Wilson, M.** An instructional unit for undergraduate students on the production and characterization of transgenic plants. American Biology Teacher 64: 286-300.

Review Articles:

- Wilson, M., Moss, W.P., Ji, P., Wang, S.-Y., Dianese, A.C., Zhang, D., and Campbell, H.L. Molecular approaches in the development of biocontrol agents of foliar and floral bacterial pathogens. pp. 247-255. In: B.K. Duffy, U. Rosenberger, and G. Defago (ed). Molecular Approaches in Biological Control, IOBC/wprs Bulletin no 21(9).
- 1997 **Wilson, M.** Biocontrol of aerial plant diseases in agriculture and horticulture: current approaches and future prospects. Journal of Industrial Microbiology and Biotechnology 19:188-191.
- 1993 Wilson, M., and Lindow, S.E. Release of recombinant microorganisms. Annu. Rev. Microbiol. 47:913-944.

Book Chapters:

- Wilson, M., Moss, W., Zhang, Y., and Jones, J. Molecular interactions at the Leaf Surface: *Xanthomonas* and its host. Chapter 12. pp. 181-190. *In* Microbial Ecology of Aerial Plant Surfaces ed. M.J. Bailey, A.K. Lilley, T.M. Timms-Wilson and P.T.N. Spencer-Phillips. CABI, Wallingford, UK.
- Wilson, M. Management of bacterial diseases of plants: Biological control. *In* Encyclopedia of Plant and Crop Science. Ed. R.M. Goodman. Marcel Dekker, New York. http://www.dekker.com/sdek/contents~db=enc~content=q713261519
- Wilson, M., and Lindow, S.E. Viable but nonculturable cells in plant-associated bacterial populations. Chapter 13. pp. 229-241. *In* Non-culturable Microorganisms in the Environment. Ed. R.R. Colwell and D.J. Grimes. ASM Press, Washington, DC.
- Lindow, S.E., and **Wilson, M.** Biological control of foliar pathogens and pests with bacterial biocontrol agents. Chapter 53. pp. 642-650. *In* Manual of Industrial Microbiology and Biotechnology, 2nd Edition. Vol. VI. Environmental Biotechnology. Ed. J. Davies and R. Atlas.
- 1999 Wilson, M., and Backman, P.A. Biological control of plant pathogens. Chapter 12. pp. 309-335. *In* Handbook of Pest Management, Ed. J.R. Ruberson. Marcel Dekker.
- Backman, P.A., **Wilson, M.**, and Murphy, J.F. Bacteria for biological control of plant diseases. Chapter 4. pp. 95-109. *In* Environmentally Safe Approaches to Crop Disease Control, Ed. J.E. Rechcigl and N.A. Rechcigl. Agriculture and Environment Series, CRC Press, Inc.
- Epton, H.A.S., **Wilson, M.**, Nicholson, S., and Sigee, D.C. Biological control of *Erwinia amylovora* with *Erwinia herbicola*. pp. 335-352. *In* Ecology of Plant Pathogens, Ed. J.P. Blakeman and B. Williamson. CAB Int., Surrey, U.K.

Symposium Papers:

- Yan, Z., Ryu, C.M., McInroy, J., Reddy, M.S., Woods, F., **Wilson, M**., and Kloepper, J.W. Induction of systemic resistance against tomato late blight by PGPR.
 Online: http://www.ag.auburn.edu/argentina/pdfmanuscripts/yan2.pdf
- Wilson, M. Mechanisms of antagonism and strategies of biological control of plant diseases by *P. fluorescens* A506. pp. 78-80. *In* Innovations in Biological Control Research. Ed. M.S. Hoddle. (Proceedings of the First California Conference on Biological Control, Berkeley, CA).
- Ji, P., **Wilson, M.**, Campbell, H.L., and Kloepper, J.W. Rhizobacterial-mediated induced systemic resistance for the control of bacterial speck of fresh-market tomato. pp. 273-276. *In* Plant Growth-Promoting Rhizobacteria: Present Status and Future Prospects. Ed. A. Ogoshi, K. Kobayashi, Y. Homma, F. Kodama, N. Kondo, and S, Akino, Sapporo, Japan.

- Ji, P., **Wilson, M.**, Dianese, A.C., Campbell, H.L., and Moss, W.P. Characteristics determining the effectiveness of nonpathogenic bacteria as pre-emptive biocontrol agents of epiphytic phytopathogenic bacteria. pp. 361-363. *In* Advances in Biological Control of Plant Diseases. Ed. T. Wenhua, R.J. Cook, and A. Rovira. China Agricultural University Press, Beijing, China.
- Wilson, M., Ji, P., Campbell, H.L., and Kloepper, J.W. Development of an integrated biological control strategy for bacterial speck of tomato caused by *Pseudomonas syringae* pv. tomato. *In* Advances in Biological Control of Plant Diseases. Ed. T. Wenhua, R.J. Cook, and A. Rovira. China Agricultural University Press, Beijing.
- Farrand, S.K., **Wilson, M.**, Lindow, S.E., and Savka, M.A. Modulating colonization by plant-associated microbes. Third International PGPR Workshop, Adelaide, Australia, March 7-11, 1994. pp. 233-237. *In* Improving Plant Productivity with Rhizosphere Bacteria. Ed. M.H. Ryder, P.M. Stephens, and G.D. Bowen.
- 1993 **Wilson, M.**, and Lindow, S.E. Population dynamics of *Pseudomonas fluorescens* strain A506 in pear flowers following inoculation in relation to strategies of biological control of fire blight and frost injury. Sixth International Workshop on Fire Blight, Athens, Greece, Oct. 20-23, 1992. Acta Horticulturae 338:331-332.
- 1993 **Wilson, M.**, and Lindow, S.E. Interactions between the biological control agent *Pseudomonas fluorescens* A506 and *Erwinia amylovora* in pear blossom. Sixth International Workshop on Fire Blight, Athens, Greece, Oct. 20-23, 1992. Acta Horticulturae 338:329-330.
- Lindow, S.E., Andersen, G., **Wilson, M**., and Panopoulos, N.J. Characterization of epiphytic fitness genes. pp. 122-124. *In* Review of Progress in the Biotechnology-Microbial Pest Control Agent Risk Assessment Program. EPA, Office of Pesticides and Toxic Substances.
- 1990 **Wilson, M.**, Epton, H.A.S., and Sigee, D.C. Biological control of fire blight of hawthorn. Fifth International Workshop on Fire Blight, Diepenbeek, Belgium, June 19-22, 1989. Acta Horticulturae 273:363-365.
- 1990 **Wilson, M.**, Epton, H.A.S., and Sigee, D.C. *Erwinia amylovora* infection of hawthorn blossom. Fifth International Workshop on Fire Blight, Belgium, June 19-22, 1989. Acta Horticulturae 273:207-210.
- 1987 **Wilson, M.**, Epton, H.A.S., and Sigee, D.C. Ultrastructural studies on fire blight of hawthorn flowers. Fourth International Workshop on Fire Blight, Ithaca, New York, June 22-26, 1986. Acta Horticulturae 217: 189-194.

Extension Publications:

- 1998 Campbell, H.L. and **Wilson, M.** The Good, The Bad, and The Ugly: Biocontrol of Bacterial Spot of Tomato. AAES, Highlights of Agricultural Research.
- **Wilson, M.**, Ji, P., Campbell, H.L., Kloepper, J.W., Jones, J.B. and Suslow, T. Integrated biological control of bacterial speck and bacterial spot. 13th Ann. Tomato Disease Workshop, Indianapolis, IN, December 1997.
- 1997 Campbell, H. L., Moss, W. P., Pitts, J., Boozer, R., Bannon, J. and **Wilson, M.** New chemical may provide answer to control of bacterial spot of peach. AAES, Highlights of Agricultural Research 44:8-19.
- 1997 Campbell, H.L., **Wilson, M.**, and Byrne, J.M. Novel chemicals control bacterial spot and may reduce copper contamination problems. AAES, Highlights of Agricultural Research, 44:10-11.
- Byrne, J.M., Dianese, A.C., Campbell, H.L., Jones, J.B., El-Morsy, G., Cuppels, D.A., and **Wilson, M.** Biological control of bacterial spot of tomato in Alabama, Florida, and Ontario, Canada. 12th Annual Tomato Disease Workshop, Columbus, Ohio, December 1997.

Abstracts since arrival at Colorado College in 1998 (underlining indicates undergraduate student co-authors):

2016 <u>Dupree, K.</u> and **Wilson, M.** Floral micromorphology and evolution of pollination by sexual deceit in *Pleurothallis* R.Br. (Orchidaceae; Pleurothallidinae) subgenera *Ancipitia* and *Scopula*. Abstract of poster presented at Botany 2016, the annual meeting of the Botanical Society of America.

- Wilson, M., Canty, C., Cully, M., Dupree, K., Fatt, K., Hernandez, K., Kumagai, A., McMahon, J.M., Nakamura, N., and Smith, M. Phylogenetics and circumscription of the genus *Pleurothallis*. Poster presented at V Conferencia Científica de Orquideas Andinas, Cali, Colombia, Nov 2015.
- Wilson, M., Pupulin, F., Archila-Morales, F., Damon, A., and Solano-Gomez, R. A newly recognized clade of *Pleurothallis* with Mesoamerican distribution. Lankesteriana 13(1-2): 138. [Poster presented at IV Conferencia Científica de Orquideas Andinas, Guayaquil, Ecuador, Nov 2012.]
- Wilson, M., Belle, C., Dang, A., Hannan, P., Kellogg, L., Kenyon, C., Low, H., Mochizuki, A., Nguyen, A., Sheade, N., Shan, L., Shum, A., Stayton, T., Volz, C., Vosburgh, B., Wellman, H., and Woolley, M. A preliminary phylogenetic analysis of *Pleurothallis sensu lato* based upon nuclear and plastid sequences. Lankesteriana 13(1-2): 139. [Poster presented at IV Conferencia Científica de Orquideas Andinas, Guayaquil, Ecuador, Nov 2012.]
- Wilson, M. Barcoding the species of *Pleurothallis* subsection Macrophyllae-Fasciculatae. Lankesteriana 11(3): 371. [Poster presented at III Conferencia Científica de Orquideas Andinas, Quito, Ecuador, Feb 2009.]
- Wilson, M., and Jost, L. Phylogenetic analysis of the Andean genus *Brachycladium* Luer (syn. *Oreophilus* Higgins & Archila) and closely related genera based on nuclear ITS sequencing. Lankesteriana 11(3): 370. [Poster presented at III Conferencia Cientíifica de Orquideas Andinas, Quito, Ecuador, Feb 2009.]
- Wilson, M., Belle, C., Dang, A., Hannan, P., Kenyon, C., Low, H., Stayton, T., and Woolley, M. A phylogenetic analysis of the genus *Pleurothallis*, with emphasis on *Pleurothallis* subsection Macrophyllae-Fasciculatae, using nuclear ITS and chloroplast DNA sequencing. Lankesteriana 11(3): 369. [Poster presented at III Conferencia Científica de Orquideas Andinas, Quito, Ecuador, Feb 2009.]
- Wilson, M., and Jost, L. Evidence from DNA and sympatry resolves *Andinia* (*Brachycladium*) "*nummularia*" into four biological species. Proc. 2nd Scientific Conference on Andean Orchids. Ed. A.M. Pridgeon and J.P. Suarez. p. 247. [Poster presented at II Conferencia Científica de Orquideas Andinas, Loja, Ecuador, Nov 2007.].
- Wilson, M., Belle, C., Kenyon, C., Hannan, P., Stayton, T., and Woolley, M. A more detailed phylogenetic analysis of the *Pleurothallis* clade from Pridgeon and Chase (2001), with emphasis on *Pleurothallis* subsection Macrophyllae-Fasciculatae, using nuclear ITS DNA sequencing. Poster presented at the World Orchid Conference, Miami, Florida.
- Wilson, M. Molecular interactions between *Xanthomonas* and its host. Phyllosphere 2005, 8th International Symposium on the Microbiology of Aerial Plant Surfaces, Oxford University, Oxford, U.K., July 2005.
- Cubero, J., Graham, J., Redondo, A., Dekkers, M., Zhang, Y., Jones, J., **Wilson, M.** Use of the green fluorescent protein (gfp) to study survival of *Xanthomonas axonopodis* on citrus plant surfaces. Abstract. International Citrus Canker and Huanglongbing Workshop, Orlando FL, November 7-11, 2005.
- Cubero, J., Graham, J.H., Zhang, Y., Jones, J.B., and Wilson, M. Unstable variants of the green fluorescent protein (GFP) for study of bacterial survival on citrus. IUMS 2005, 11th International Congress of Bacteriology and Applied Microbiology, San Francisco, CA, July 2005.
- Wilson, M., Rademaker, J.L.W., Lindow, S.E., Hendson, M., Boyle, B., Engels, M., Pugh, B., Sosa, S. and Treat, E. Genetic variability among isolates of *Pseudomonas fluorescens* strain A506 recalled from laboratories around the world. The World of Microbes, 10th International Congress of Bacteriology and Applied Microbiology, Paris, France, July 27- Aug 2nd, 2002.
- Wilson, M., Callaway, E.M., Zhang, Y., and Jones, J.B. Induction of *Xanthomonas campestris* pv. vesicatoria *hrp* genes on the Tomato Leaf Surface. Abstract #B258. American Society for Microbiology 102nd General Meeting, Salt Lake City, UT, May 2002.
- 2001 <u>Bussey, M., Callaway, E., Zhang, Y., Jones, J.B., and **Wilson, M.** Host-pathogen interactions between *Xanthomonas campestris* pv. *vesicatoria* and tomato. 10th International Congress on Molecular Plant-Microbe Interactions, Madison, WI. July 10-14, 2001.</u>

- Wilson, M., Bussey, M., Garton, R., Moss, W.P., and Jones, J.B. Response of tomato (cv. Agriset) to inoculation with wild-type or *hrp* mutants of *Xanthomonas campestris* pv. vesicatoria 75-3. Phyllosphere 2000, 7th International Symposium on the Microbiology of Aerial Plant Surfaces, University of California, Berkeley, Aug. 3-8, 2000.
- Wilson, M., Moss, W.P., <u>Garton, R.</u>, Zhang, Y. and Jones, J.B. Induction of a local defense response in tomato by a *hrpG* mutant of *Xanthomonas campestris* pv. vesicatoria. 10th International Conference on Plant Pathogenic Bacteria, Prince Edward Island, Canada, July 2000.
- Zhang, Y., Jones, J.B., and **Wilson, M.** Use of green fluorescent protein to monitor gene expression and colonization by *Xanthomonas campestris* pv. vesicatoria. Phytopathology 89: S89 http://www.apsnet.org/meetings/abstract/1999/p99ma642.htm
- Zhang, Y., Jones, J.B., Wilson, M., and Bonas, U. Over expression of a truncated hrpG reduces virulence and population size of a wild-type strain of Xanthomonas campestris pv. vesicatoria. 10th International Congress on Molecular Plant-Microbe Interactions, Amsterdam, The Netherlands 1999.
- Campbell, H.L. and **Wilson, M.** Evaluation of Actigard (CGA-245704) for the control of bacterial spot of peach. Phytopathology 89: S11. http://www.apsnet.org/meetings/abstract/1999/p99ma074.htm
- 1999 Moss, W.P., Jones, J.B., and **Wilson, M.** Differential induction or suppression of host defense responses by *Xanthomonas campestris* pv. vesicatoria. 10th International Congress on Molecular Plant-Microbe Interactions, Amsterdam, The Netherlands, 1999.
- Ji, P., **Wilson, M.** and Campbell, H.L. Molecular approaches to determine the role of pre-emptive carbon source use in the biocontrol of bacterial speck. p. 71. *In*: B.K. Duffy, U. Rosenberger, and G. Defago (ed). Molecular Approaches in Biological Control, IOBC/wprs Bulletin no 21(9).
- Moss, W.P., Bonas, U., Jones, J.B., and **Wilson, M.** Interactions of *Xanthomonas axonopodis* pv. vesicatoria 75-3*hrp* mutants, the pathogenic parent, and the host plant. ICPP 98, 7th International Congress of Plant Pathology, Edinburgh, Scotland, August 1998. http://www.bspp.org.uk/icpp98/1.7/2.html
- 1998 Wang, S.-Y., Moyne, A.L., Savka, M.A., Klee, H.J., **Wilson, M.** Opine-producing tomato: one component of a binary plant-microbe combination developed for control of foliar bacterial diseases. Plant Biology '98, American Society of Plant Biologists, Annual Meeting, Madison, Wisconsin. http://abstracts.aspb.org/pb1998/49/0313.shtml
- 1998 Kilduff, P.D., Wang, S.-Y., **Wilson, M.**, and Savka, M.A. Production and characterization of transgenic plants in an undergraduate plant physiology course. Plant Biology '98, American Society of Plant Biologists, Annual Meeting, Madison, Wisconsin. http://abstracts.aspb.org/pb1998/47/0173.shtml
- Ji, P., Lindow, S.E., and **Wilson, M.** Role of nutritional similarity and population size of *Pseudomonas syringae* TLP2 mutants in pre-emptive exclusion of *Pseudomonas syringae* pv. tomato. Abstract #N40. American Society for Microbiology, 98th General Meeting, Atlanta, GA.
- Moss, W.P., Bonas, U., Jones, J.B., and **Wilson, M**. Interactions of *Xanthomonas axonopodis* pv. vesicatoria 75-3*hrp* mutants, the pathogenic parent, and the host plant. Abstract #N29. American Society for Microbiology, 98th General Meeting, Atlanta, GA.

INVITED PARTICIPATION AT NATIONAL OR INTERNATIONAL MEETINGS:

- Wilson, M. Molecular interactions between *Xanthomonas* and its host. Phyllosphere 2005, 8th International Symposium on the Microbiology of Aerial Plant Surfaces, Oxford University, Oxford, U.K., July 2005. Invited by Dr. Mark Bailey.
- 2000 Invited to chair session on "Genetics of Pathogenicity" at the International Conference on Plant Pathogenic Bacteria, Prince Edward Island, Canada, 2000.

- Wilson, M. Mechanisms of antagonism and strategies of biological control of plant diseases by *P. fluorescens* A506. Section. Systems of augmentation: Biological control and frost injury with the competitive bacterium *Pseudomonas fluorescens* A506. Berkeley, CA. June 10th, 1998. Invited by Dr. S.E. Lindow.
- Wilson, M. Molecular approaches involved in the development of biocontrol agents of bacterial speck and spot of tomato. IOBC/EFPP Workshop, Molecular Approaches in Biological Control. Delemont, Switzerland, September 15-18, 1997. Invited by Dr. G. Defago.
- 1996 **Wilson, M.** Ecological basis for the use of natural antagonists to control postharvest diseases. International Conference on Technology Transfer in Biological Control: From Research to Practice. Montpellier, France, September 9-11, 1996. Invited by Dr. C. Wilson.
- 1996 **Wilson, M.** An integrated biological control strategy for foliar bacterial diseases of tomato. International Conference on Technology Transfer in Biological Control: From Research to Practice. Montpellier, France, September 9-11, 1996. Invited by Dr. N. Fokkema.
- 1996 **Wilson, M.** Biological control of aerial plant diseases. Society for Industrial Microbiology, Research Triangle Park, Durham, NC, August 4-9, 1996. Invited by Dr. C. Wilson.
- 1995 **Wilson, M.** The role of host plant products in biological control in the phyllosphere. Colloquium: Influence of the plant on biological control agents. APS, Pittsburgh, PA, August 12-16, 1995.
- 1995 Invited to chair session "Biological and Chemical Control of Fire Blight", Seventh International Workshop on Fire Blight, Ontario, Canada, August 7-10, 1995.
- 1992 Co-chair of session "Biological and Chemical Control of Fire Blight", Sixth International Workshop on Fire Blight, Athens, Greece, October 20-23, 1992.
- 1992 **Wilson, M.** Intra- and interspecific variability in competitiveness of *Pseudomonas syringae* and other phyllosphere bacteria. APS Colloquium: Variability in Bacterial Pathogens Significance and Implications. Portland, Oregon, August 8-12, 1992. Invited by Dr. S. Hirano.

INVITED ORAL PRESENTATIONS AT U.S. UNIVERSITIES OR INSTITUTIONS:

- **Wilson, M.** Host-pathogen interactions in the *Xanthomonas campestris* pv. *tomato* tomato pathosystem. Texas A&M University, March 5th, 2003. Invited by Dr. Karen-Beth Scholthoff.
- Wilson, M. Host-pathogen interactions between *Xanthomonas campestris* pv. *vesicatoria* and tomato. Colorado State University. November 29th, 2001. Invited by Dr. C. Lawrence.
- Wilson, M. Suppression of bacterial diseases with nonpathogens and *hrp* mutants. Dept. of Plant Pathology, Kansas State University, Manhattan, KS. February 26th, 1998. Invited by Dr. J.E. Leach.
- Wilson, M. Novel approaches in the development of biological control agents for speck and spot of tomato. Dept. of Biology, University of West Florida, Pensacola, FL, November 18th, 1997. Invited by Dr. M.A. Savka.
- Wilson, M. Novel approaches in the development of biological control agents for speck and spot of tomato. Dept. of Plant Pathology, University of California, Davis, October 14, 1997. Invited by Dr. B. Kirkpatrick.
- 1997 **Wilson, M.** Biotechnology and ecology in the development of foliar bacterial diseases of tomato. Microbial Ecology Seminar Series, Dept. of Plant Pathology, University of Minnesota, St. Paul, MN, May 22, 1997. Invited by Dr. L.L. Kinkel.
- 1997 **Wilson, M.** Biotechnology and ecology in the development of foliar bacterial diseases of tomato. Gulf Coast Research and Education Center, University of Florida, Bradenton, FL. April 8, 1997. Invited by Dr. J.B. Jones.
- 1997 **Wilson, M.** Biotechnology and ecology in the development of foliar bacterial diseases of tomato. MSU-DOE Plant Research Laboratory, Michigan State University, East Lansing, MI. March 20, 1997. Invited by Dr. F.J. de Bruijn.

- 1997 **Wilson, M.** Manipulation of epiphytic bacterial populations to achieve biocontrol of foliar bacterial diseases. Dept. of Biology, Western Michigan University, Kalamazoo, MI, March 19, 1997. Invited by Dr. S. Rossbach.
- Wilson, M. The role of ecology in the development of biocontrol of foliar bacterial pathogens. Dept. of Microbiology and Molecular Genetics, Oklahoma State Univ., Stillwater, OK, March 25, 1996. Invited by Dr. D. Demezas.
- 1994 **Wilson, M.** Modeling and manipulating nutritional relationships in epiphytic bacterial communities. MSU-DOE Plant Research Laboratory. Invited by Dr. F.J. de Bruijn and Dr. S. Rossbach.
- 1993 **Wilson, M.** Biological control of fire blight and frost injury in pear. Appalachian Fruit Research Station, Kearneysville, WV. Invited by Dr. T. Van Der Zwet.

PUBLISHED MICROGRAPHS:

- 2011 Scanning electron micrographs. Figs. 27-30, Chap. 10. pp. 158-159. *In* van der Zwet, Halbrendt and Zeller, Fire Blight: History, Biology and Management. APS Publishing.
- Scanning electron micrographs. Thomson, S.V. Epidemiology of Fire Blight. *In* Fire Blight: The Disease and its Causative Agent, *Erwinia amylovora*. Ed. J. Vanneste. CABI Publishing.
- 1995 Scanning electron micrographs Ch 2. Vanneste, J.L. *Erwinia amylovora. In* Pathogenesis and Host-Parasite Specificity in Plant Diseases: Vol. I. Ed. Singh, U.S., Singh, R.P., and Kohmoto, K. Pergamon Press, U.K.
- 1993 Scanning electron micrographs Ch. 4, p. 83. Sigee, D.C. Bacterial Plant Pathology: Cell and Molecular Aspects. Cambridge University Press.
- 1990 Immuno-gold labeled transmission electron micrograph, p. 37; scanning electron micrograph, p. 39. Sigee, D.C. Microscopical techniques for bacteria. Ch. 1.3. *In* Methods in Phytobacteriology. Ed. Z. Klement, K. Rudolph, and D.C. Sands. Akedimiai Kiado, Budapest.

COMPETITIVE FEDERAL FUNDING:

- NRICGP **Wilson, M**., and Jones, J.B. Interactions between *Xanthomonas campestris* pv. vesicatoria *hrp* mutants and the pathogenic parent. \$120,000. Two years: 1999-2001.
- SRIPM **Wilson, M.**, Jones, J.B., Sikora, E., and Louws, F.J. Integrated biological and chemical control of bacterial spot and speck of tomato. \$121,282. Two years: 1997-1999.
- NRICGP **Wilson, M.** Significance of resource limitation to biocontrol of epiphytic phytopathogenic bacteria. \$ 100,000. 1995-1998.
- NRICGP **Wilson, M.** Niche creation to improve efficacy of foliar biological control agents. \$100,000. 1995-1998.
- SRIPM **Wilson, M.**, Guertal, E.A., and Jones, J.B. Integrated approaches for control of foliar bacterial diseases of tomato and pepper. \$ 110,180. Two years: 1995-1997.
- NSF Lindow, S.E. (**Wilson** unlisted co-author). Resource partitioning among bacterial epiphytes in the phyllosphere. NSF BSR-9106782. \$247,476. 1991-1994.

NONCOMPETITIVE FUNDING:

Colorado College:

NSEC	2017: \$5,000
NSEC	2016: \$5,000
NSEC	2015: \$5,000

NSEC	2014: \$5,000
NSEC	2013: \$5,000
NSEC	2012: \$5,000
NSEC	2011: \$4,200
NSEC	2010: \$4,414
NSEC	2009: \$4,927
NSEC	2008: \$4,966
NSEC	2008: faculty-collaborative grant of \$2,500
NSEC	2007: two awards of \$2,546 and \$1,635
NSEC	2006: two awards of \$1,975 and \$2,606
NSEC	2004: three awards of \$2,920, \$1,430 and \$2,500
NSEC	2003: three awards of \$2,414, \$2,303, and \$2,352
NSEC	2002: two awards of \$2,561 and \$977.
NSEC	2001: two awards of \$2,000 each.

2000: one award of \$3,000 **NSEC**

Auburn University:

Equipment funds - Image Analysis System. 1995, \$4,100. AAES

Biological control frost injury/bacterial spot peaches. 1995, \$5,000; 1996, \$4,400; 1997, \$4,400; 1998, **AU Hort**

\$4,400.

AU IPM Use of BlightBan A506 as a biocontrol agent of frost injury in peaches. 1996, \$2,000; 1997, \$2,000.

AU IPM Integrated control of bacterial spot of peach. 1998, \$2,000.

AU RGIA Novel strategy for the manipulation of populations of biocontrol agents of foliar pathogens and pests.

1995, \$9,000.

Campbells Integrated biological and chemical control of bacterial diseases of tomato. 1995, \$5,000.

Coll.of Agric. Equipment funds - Image Analysis System. 1995, \$4,040.

Griffin Control of bacterial spot on tomato and pepper. 1994, \$2,000; 1995, \$3,500.

Gustafson Biological control of foliar tomato diseases. 1995, \$15,252; 1996, \$18,000; 1997, \$12,000. 1998,

\$12,000.

ISK Biotech Control of bacterial spot on tomato and pepper. 1994, \$3,000; 1995, \$3,000.

Novartis Use of CGA-245704 for control of bacterial spot in tomato. 1997, \$2,000; 1998, \$2,000.

OVGA Cuppels, D.A., and Wilson, M. Control of bacterial spot and bacterial speck of tomato through the

introduction of microbial antagonists. 1996, \$5,000; 1997, \$8,300.

PHT Biological control of frost injury in peaches. 1997, \$2,000.

Determination of variability in the biocontrol agent P. fluorescens A506. 1996, \$4,500. PHT

MENTORING:

Post-doctoral researchers:

Graduate students (Major Professor): *Faiardo, Julius *Dianese. Alexei M.S. Ph.D. *Zhang, Dunhua *Ji, Pingsheng *Zhang, Yongxiang *Moss, William Ph.D. *Press, Caroline M.S.

Undergraduate Research Students at Colorado College (on-campus in my laboratory):

Becker, Elana (Non-credit research experience)

Beitner, Mike (BE409) Belle, Carolyn (BY309) Boyle, Brandi (BY309)

Bussey, Mary (BY499 - Senior thesis)

Callaway, Ewen (BY 499 - Senior thesis)

Canty, Caitlin (BY309) Carroll, Rebecca (BY309)

Chang, Matt (Non-credit research experience, BY309)

Chase, Geoff (BY309 and BY409)

Chien, Lawrence (Non-credit research experience)

^{*}Auburn University, Auburn, AL

Copeland, Stella (Non-credit research experience)

Cully, Michelle (Non-credit research experience)

Daly, Rebecca (Non-credit research experience and BY499 - Senior thesis)

Dang, Angela (BY309)

Dupree, Katy (BY309; BE309; BE409; and BE499 Senior Thesis; post-graduation research)

Engels, Mary (BY499 - Senior thesis)

Erdkamp, Kim (BY309)

Ezelle, Julie (Non-credit research experience)

Frank, Graham (BY309, BY409, and BY499 Senior Thesis)

Garton, Rachel (BY499 - Senior thesis)

Griffeth, Val (BY309)

Hampson, Hailey (BE309)

Hannan, Philipp (BY309-ext.format and BY409)

Honig, Jessica (Non-credit research experience)

Kenyon, Charlie (BY309)

Kellogg, Leah (BY309)

Kumagai, Abby (BY309)

Low, Hana (BY309-extended format)

Martin, Ruthie (BY309, BY409 and BY499 - Senior thesis)

MacKenzie, Avery (BY309, BY409, BY455 and BY499 - Senior thesis)

McKinnon, Joss (Non-credit research experience)

Mikros, Athena (BY309)

Mochizuki, Akie (BY309 and BY409)

Morgan, Wynne (BY309 and BY409)

Nakamura, Elle (BY309)

Neldner, Katie (Non-credit research experience)

Newby, Heather (Non-credit research experience)

Nguyen, Quynh (Non-credit research experience)

Pugh, Brian (Non-credit research experience and BY499 - Senior thesis)

Quick, Sunita (BY309)

Rines, Amy (Non-credit research experience)

Shan, Lilly (Non-credit research experience)

Sheade, Nina (Non-credit research experience, BY309 and BY499 - Senior thesis)

Shum, Andrew (BY309 and BY409)

Simon, Margo (BY309)

Smith, Martha (BY309)

Snyder, Ben (Non-credit research experience)

Sosa, Sonia (Non-credit research experience)

Sparks, Erin (BY409-extended format)

Staley, Patricia (Non-credit research experience and BY309)

Stayton, Taylor (BY309)

Suni, Sevan (BY309-extended format)

Volz, Caleb (Non-credit research experience)

Vosburgh, Brendan (BY409-extended format)

Walker, Melissa (BY309 and BY409)

Wellman, Hannah (BY309)

Woolley, Meghan (BY409 and BY455)

Zhao, Kehan (BE309, summer research experience)

Note: "Non-credit research experience" refers most frequently to 10-weeks full-time research over the summer, but occasionally to non-309/409/499 research during the semester.

Secondary Senior Thesis Advisor:

Aldridge, Carol Bartsch, Kyle Knauss, Collin Kreier, Freda Nguyen, Quynh Shepard, Anderson Slay, Frin

Slay, Erin Suni, Sevan Weitemier, Kevin Wellman, Hannah

Undergraduate Research Students (off-campus):

Buchwald, Andrea (BY499) De Rouen, Anthony (BY309) Klein, Kristen (BY499) Dooley, Keven (BY499) Marlesa, Moore (BY309; 409) Neldner, Katie (BY499) Warshauer, Ben (BY499)

Junior High and High School students:

Nusbaum, Anna(Science Fair Project) Pelican, Hanna (Science Fair Project) Shankar, Aarthi (Science Fair Project)

Smith, Lauren (Science Fair Project - two years)

White, Mallory (Science Fair Project)
Zook, Forre (Science Fair Project)

High School Teachers:

Suazo, Abe

TECHNICIANS AND VISITING SCIENTISTS:

Technicians:

*Byrne, J. Research Assistant

*Campbell, L. Research Associate

Treat, Eric Former CC undergraduate

*Wang, S.-Y. Research Associate

*Auburn University, Auburn, AL

Visiting Scientists:

Archila, Fredy *Roine, Elina

*Romantschuk, Martin Stoeckel, Don