Caitlin Elizabeth Conn

Curriculum Vitae

382A McAllister Hall Berry College 2277 Martha Berry Hwy NW Mount Berry, GA 30149

(717) 953-5854

cconn@berry.edu

parasitegenetics.com

Education:

• PhD in Genetics; The University of Georgia, Athens, GA				
Dissertation title: The molecular evolution of strigolactone perception in plants	2017			
 BS in Biology; The Pennsylvania State University, University Park, PA 	2011			
Professional appointments and fellowships:				
 Assistant Professor of Biology, Berry College National Science Foundation Postdoctoral Research 	2019 – present			
 Fellowship in Biology, Emory University Advisor: Dr. Nicole Gerardo Course-based Undergraduate Research Experiences 	2018 – 2019			
postdoctoral fellow, Spelman College Advisor: Dr. Jennifer Kovacs	2017 – 2018			
 Doctoral student, The University of Georgia Advisor: Dr. David Nelson National Science Foundation Graduate Research 	2012 – 2017			
 Reliable Foundation Graduate Research Fellowship in Biology, The University of Georgia Kirby and Jan Alton Graduate Fellowship, The University 	2015 – 2017			
of Georgia	2016			
Linton and June Bishop Graduate Fellowship, The University of Georgia	2015			
 Graduate School Assistantship, The University of Georgia 	2013 – 2014			
 Laboratory technician, The University of Georgia 	2011 – 2012			

Publications:

Research

- Yoshida, S., Kim, S., Wafula, E.K., Tanskanen, J., Kim, Y.-M., Honaas, L., Yang, Z., Spallek, T., Conn, C.E., Ichihashi, Y., Cheong, K., Cui, S., Der, J.P., Gundlach, H., Jiao, Y., Hori, C., Ishida, J.K., Kasahara, H., Kiba, T., Kim, M.-S., Koo, N., Laohavisit, A., Lee, Y.-H., Lumba, S., McCourt, P., Mortimer, J.C., Mutuku, J. M., Nomura, T., Sasaki-Sekimoto, Y., Seto, Y., Wang, Y., Wakatake, T., Sakakibara, H., Demura, T., Yamaguchi, S., Yoneyama, K., Manabe, R., Nelson, D.C., Schulman, A., Timko, M.P., DePamphilis, C.W., Choi, D., Shirasu, K. (2019) Genome sequence of *Striga asiatica* provides insight into the evolution of plant parasitism. *Current Biology* 29(18): 3041 – 3052. e4.
- Lopez-Obando, M., Conn, C.E., Hoffmann, B., Bythell-Douglas, R., Nelson, D.C., Rameau, C., Bonhomme, S. (2016) Structural modeling and transcriptional responses highlight a clade of PpKAI2-LIKE genes as candidate receptors for strigolactones in Physcomitrella patens. *Planta* DOI 10.1007/s00425-016-2481-y.
- **Conn, C.E.**, Nelson, D.C. (2016) Evidence that KARRIKIN-INSENSITIVE2 (KAI2) receptors may perceive an unknown signal that is not karrikin or strigolactone. *Frontiers in Plant Science* 6:1219. DOI 10.3389/fpls.2015. 01219.
- Conn, C.E., Bythell-Douglas, R., Neumann, D., Yoshida, S., Whittington, B., Westwood, J.H., Shirasu, K., Bond, C.S., Dyer, K.A., Nelson, D.C. (2015) Convergent evolution of strigolactone perception enabled host detection in parasitic plants. *Science* 349(6247): 540 – 543.
- Hedges, S.B., **Conn, C.E.** (2012) A new skink fauna from Caribbean islands (Squamata, Mabuyidae, Mabuyinae). *Zootaxa* 3288: 1 244.

Teaching

• Conn, C.E., Nelson, D.C. (2017) It's not easy being not green: the making of a parasitic plant. *The Plant Cell* 29(4): tpc.117.tt0417; DOI 10.1105/tpc.117.tt0417.

Course instruction:

•	Instructor, Berry College	
	Courses: Biological Diversity (BIO 106), Principles of	
	Cell Biology lab (BIO 111 L), Genetics (BIO 304)	Fall 2019 – present
•	Co-instructor, Sera Mey Monastic University,	
	Emory-Tibet Science Initiative	
	Course: Immunology and Disease	Summer 2019
•	Instructor of record, Emory University	
	Course: Evolutionary Biology (BIOL 241)	Spring 2019

•	Course designer and instructor, Spelman College	
	Course: Biology Methods and Research (SBIO 114)	Fall 2017
•	Instructor of record, The University of Georgia Costa	
	Rica, Tropical Biology Fall Semester	
	Course: Genetics (GENE 3200)	Fall 2016
•	Teaching assistant, The University of Georgia	
	Course: Genetics (GENE 3200)	Spring 2014

Invited guest teaching:

- Biology seminar, Earlham College, 2016
- Advanced Genetics (GENE 4200), The University of Georgia, 2016
- The Louis Stokes Alliance for Minority Participation (LSAMP), The University of Georgia, 2014 and 2015
- Experimental Chemistry I (CHEM 111), The Pennsylvania State University, Spring 2009 (with Patrick Crooks)

Professional development:

- Programming for Evolutionary Biology workshop, Freie Universität Berlin, Spring 2019
- Fellowships in Research and Science Teaching (FIRST) "How to Teach" course, Emory University, Spring 2018

Mentoring experience and relevant outreach:

- Undergraduate research mentor, Berry College Department of Biology, 2019 present
- Undergraduate and high school research mentor, Emory University Department of Biology, 2018 2019
- Undergraduate research mentor, Spelman College Biology Department, 2017 – 2018
- Volunteer, Science Art Wonder, Atlanta Science Festival, Spring 2018
- Annual meeting mentor, The Society for Integrative and Comparative Biology, Winter 2018
- Judge, Georgia Junior Science & Humanities Symposium, 2013 2017
- Outreach volunteer, The University of Georgia Bioenergy Science Center, 2013 – 2015
- Undergraduate research mentor, The Plant Center, The University of Georgia, Fall 2014 and Fall 2015
- Summer research mentor, Georgia Intern Fellowship for Teachers Program, The University of Georgia, 2015
- Volunteer, American Society of Plant Biologists, Summer and Fall 2013
- Research mentor, Young Dawgs Program, The University of Georgia, Summer 2012

• Volunteer, Spend a Summer Day, The Pennsylvania State University, Summer 2011

Presentations:

- Caitlin E. Conn, Hassan S. Salem, Abraham J. Moller, Aileen Berasategui, Nicole M. Gerardo. Host range and its genetic basis in the mycoparasite *Escovopsis*. SouthEastern Population Ecology, Evolution, and Genetics (SEPEEG), Mountain Lake Biological Station, The University of Virginia, Pembroke, VA, 6 October 2018.
- Mark E. Lee, Monica S. Stephens Cooley, Emily Weigel, Caitlin Conn. Enhancing the Postdoctoral Experience through Liberal Arts Colleges. Council on Undergraduate Research Biennial Conference 2018, Arlington, VA, 1 – 3 July 2018. (Panel)
- Caitlin E. Conn, Ellen O. Martinson, Jack H. Werren, Jennifer L. Kovacs. Investigating the role of horizontal gene transfer in adaptation to bloodfeeding. The Society for Integrative and Comparative Biology Annual Meeting 2018, San Francisco, CA, 3 – 7 January 2018. (Poster)
- Caitlin E. Conn, David C. Nelson. Molecular Evolution of Strigolactone Perception in Parasitic Weeds of the Orobanchaceae. The University of Georgia Plant Center Fall Retreat, Unicoi State Park, GA, 27 – 28 October 2016. (Poster)
- Caitlin Conn. Molecular evolution of a host detection mechanism in parasitic weeds. SouthEastern Population Ecology, Evolution, and Genetics (SEPEEG), Madison, FL, 21 – 23 October 2016. (Oral)
- **Caitlin E. Conn**, David C. Nelson. Molecular Evolution of Strigolactone Perception in Parasitic Weeds of the Orobanchaceae. Evolution 2016, Austin, TX, 17 – 21 June 2016. (Poster)
- Caitlin E. Conn. Evolutionary and molecular mechanisms of host perception in parasitic plants of the Orobanchaceae. The University of Georgia Plant Center Joe Key Symposium, Athens, GA, 11 – 12 May 2016. (Oral)
- **Caitlin E. Conn.** Evolutionary and molecular mechanisms of host perception in parasitic plants. Graduate Students and Postdocs in Science Research Day. The University of Georgia, Athens, GA, 28 March 2016. (Oral)
- **Caitlin E. Conn**. Evolutionary and molecular mechanisms of host perception in parasitic Orobanchaceae. Plant Functional Genomics (PFG). The University of Georgia, Athens, GA, 16 March 2016. (Oral)
- Caitlin E. Conn, Rohan Bythell-Douglas, Drexel Neumann, Satoko Yoshida, Bryan Whittington, James H. Westwood, Ken Shirasu, Charles S. Bond, Kelly A. Dyer, and David C. Nelson. Duplicate gene evolution contributes to host detection in parasitic weeds of the Orobanchaceae. The University of Georgia Plant Center Retreat, Helen, GA, 29–30 October 2015. (Poster)

- **Caitlin E. Conn**, Drexel A. Neumann, Kelly A. Dyer, and David C. Nelson. The evolution and molecular mechanism of host-induced germination in parasitic Orobanchaceae. Enthusiasts of Diversity, Genetics, and Evolution (EDGE). The University of Georgia, Athens, GA, 20 February 2015. (Oral)
- **Caitlin E. Conn**, Drexel A. Neumann, Kelly A. Dyer, and David C. Nelson. The evolution and molecular mechanism of host-induced germination in parasitic Orobanchaceae. The University of Georgia Plant Center Retreat, Helen, GA, 23–24 October 2014. (Poster)
- **Caitlin E. Conn**, Drexel A. Neumann, Kelly A. Dyer, and David C. Nelson. Evolution of Host Recognition in Parasitic Plants. Evolution 2014, Raleigh, NC, 20–24 June 2014. (Oral)
- **Caitlin E. Conn**, Drexel A. Neumann, Kelly A. Dyer, and David C. Nelson. Evolution of Host Recognition in Parasitic Plants. The University of Georgia Plant Center Retreat, Helen, GA, 24–25 October 2013. (Poster)
- **Caitlin E. Conn**, Drexel A. Neumann, Kelly A. Dyer, and David C. Nelson. The evolution of host perception in parasitic plants of the Orobanchaceae. SouthEast Population, Ecology, and Evolutionary Genetics, Mountain Lake Biological Station, The University of Virginia, Pembroke, VA, 28 September 2013. (Oral)
- **Caitlin E. Conn**, Drexel A. Neumann, Kelly A. Dyer, and David C. Nelson. Evolution of Host Recognition in Parasitic Plants. The University of Georgia Department of Genetics Annual Retreat, The University of Georgia, Athens, GA, 14 September 2013. (Poster)
- **Caitlin E. Conn**, Drexel A. Neumann, Kelly A. Dyer, and David C. Nelson. Evolution of Host Recognition in Parasitic Plants. Graduate Students and Post-docs in Science Annual Research Day, The University of Georgia, Athens, GA, 14 August 2013. (Poster)
- **Caitlin E. Conn**, Drexel A. Neumann, Kelly A. Dyer, and David C. Nelson. Evolution of Host Recognition in Parasitic Plants. Plant Biology 2013, American Society of Plant Biologists, Providence, RI, 20–24 July 2013. (Poster)
- **Caitlin E. Conn**, Drexel A. Neumann, Kelly A. Dyer, and David C. Nelson. Evolution of Host Recognition in Parasitic Plants. Enthusiasts of Diversity, Genetics, and Evolution (EDGE), The University of Georgia, Athens, GA, 01 March 2013. (Oral)
- **Caitlin E. Conn**, Drexel A. Neumann, Kelly A. Dyer, and David C. Nelson. Evolution of Host Recognition in Parasitic Plants. The University of Georgia Plant Center Retreat, Helen, GA, 25–26 October 2012. (Poster)
- **Caitlin E. Conn**. Caribbean island lizards demonstrate universal evolutionary concepts. Astrobiology Summer Program Symposium, The Pennsylvania State University, University Park, PA, 11 August 2010. (Oral)
- S. Blair Hedges, **Caitlin E. Conn**. Discovery of a remarkable lizard fauna on Caribbean islands hidden from science and conservation. Evolution 2010, Portland, OR, 25–29 June 2010. (Oral)

• **Caitlin E. Conn**, Patrick D. Crooks. Calorimetry of fuels and the use of energy to do work: Exploring calorimetry in the general chemistry laboratories. Chemistry Poster Symposium, The Pennsylvania State University, University Park, PA, December 2008. (Poster)

Honors and awards:

- Best Graduate Student Talk, The University of Georgia Graduate Students and Postdocs in Science Research Day (2016)
- Graduate Student Poster Competition Co-winner, The University of Georgia Plant Center Fall Retreat (2015)
- Graduate Student Travel Award, The University of Georgia Department of Genetics (2014)
- Best Graduate Student Talk, SouthEast Population, Ecology, and Evolutionary Genetics meeting (2013)
- Tutor of the Year 2010–2011, Central Intermediate Unit #10 Development Center for Adults (2011)
- Academic Excellence Scholarship, The Pennsylvania State University (2007–2011)
- Schreyer Scholar, The Schreyer Honors College, The Pennsylvania State University (2007–2011)
- Dean's List (3.5 or greater GPA on a 4.0 scale) eight out of eight semesters at The Pennsylvania State University (2007–2011)
- Chemistry 113 A+ Award (given to students with the highest grades in the Penn State general chemistry lab; 2008)

Other leadership, service, and outreach:

- Co-representative, Genetics Graduate Student Association, The University of Georgia, Fall 2015 Spring 2016
- Student representative, The University of Georgia Plant Center, Fall 2014 – Spring 2015
- Recruitment co-chair, Genetics Graduate Student Association, The University of Georgia Fall 2014 – Spring 2015

References:

Dr. Nicole Gerardo Associate Professor Department of Biology 1111 Rollins Research Center Emory University Atlanta, GA 30322 (404) 727-0394 nicole.gerardo@emory.edu

Dr. Jennifer L. Kovacs Assistant Professor Biology Department 142 Science Center Spelman College Atlanta, GA 30314 (404) 270-5724 jkovacs@spelman.edu

Dr. Mark E. Lee Associate Professor Biology Department 280 Science Center Spelman College Atlanta, GA 30314 (404) 270-5718 marklee@spelman.edu

Dr. David C. Nelson Associate Professor of Genetics Department of Botany & Plant Sciences 5488 Boyce Hall The University of California Riverside Riverside, CA 92521 (951) 827-4397 david.nelson@ucr.edu

Dr. Robert J. Schmitz Associate Professor Department of Genetics B416 Davison Life Sciences Complex The University of Georgia Athens, GA 30602 (706) 542-1887 schmitz@uga.edu