

Caitlin Elizabeth Conn
Curriculum Vitae

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Current position:

National Science Foundation Postdoctoral Research Fellow in Biology, Emory University

Past position:

CURE Postdoctoral Fellow, Spelman College

Education:

- PhD in Genetics, The University of Georgia, Athens, GA; 2017
Dissertation title: The molecular evolution of strigolactone perception in plants
- BS in Biology with honors, The Pennsylvania State University, University Park, PA; 2011

Research experience:

- Emory University, Dr. Nicole Gerardo's lab
 - NSF Postdoctoral Research Fellow in Biology 2018 – present
- Spelman College, Dr. Jennifer Kovacs' lab
 - CURE postdoctoral fellow 2017 – 2018
- The University of Georgia Department of Genetics, Dr. David Nelson's lab
 - Graduate student 2012 – 2017
 - Laboratory technician 2011 – 2012
- The Pennsylvania State University Biology Department, Dr. S. Blair Hedges' lab
 - Research assistant Summer 2011
 - National Science Foundation Research Experiences for Undergraduates (NSF REU) Astrobiology Summer Program Fellow Summer 2010
 - NSF REU Fellow Summer 2009
 - Schreyer Honors College scholar 2008 – 2011

Research publications:

- 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.

Presentations:

- 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 blood-feeding. 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)

College and university teaching preparation and experience:

- Participant, Emory University’s Fellowships in Research and Science Teaching (FIRST) “How to Teach” course Spring 2018
- Course designer and instructor, Spelman College Fall 2017
Course: Biology Methods and Research (SBIO 114)
- Instructor of record, The University of Georgia Costa Rica, Tropical Biology Fall Semester Fall 2016
Course: Genetics (GENE 3200)
- Teaching assistant, The University of Georgia Spring 2014
Course: Genetics (GENE 3200)
- Laboratory exercise designer and instructor (with Patrick Crooks), The Pennsylvania State University Spring 2009
Course: Experimental Chemistry I (CHEM 111)

Invited guest teaching:

- Advanced Genetics (GENE 4200), The University of Georgia 2016
- The Louis Stokes Alliance for Minority Participation (LSAMP), The University of Georgia 2014 and 2015

Teaching publications:

- **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.
- **Conn, C.**, Crooks, P. (2015) Experiment 1, *Calorimetry.PSU Chemtrek*. Keiser, J.T., ed. Hayden McNeil: Plymouth, MI.

Mentoring experience and relevant outreach:

- Spelman College Biology Department, undergraduate research mentor, 2017 – 2018
- Atlanta Science Festival, volunteer with Science Art Wonder, Spring 2018
- The Society for Integrative and Comparative Biology, annual meeting mentor, Winter 2018
- Annual Georgia Junior Science & Humanities Symposium, judge, 2013 – 2017
- The University of Georgia Bioenergy Science Center, outreach volunteer, 2013 – 2015

- Undergraduate research mentor, The Plant Center, The University of Georgia, Fall 2014 and Fall 2015
- Summer research co-mentor, Georgia Intern Fellowship for Teachers Program, The University of Georgia, 2015
- Mentor, Young Dawgs Program, The University of Georgia, Summer 2012

Honors and awards:

- National Science Foundation Post-doctoral Research Fellowship in Biology (2018 – 2020)
- Kirby and Jan Alton Graduate Fellowship, The University of Georgia Department of Genetics (2016)
- 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)
- Linton and June Bishop Graduate Fellowship, The University of Georgia Department of Genetics (2015)
- Graduate Student Travel Award, The University of Georgia Department of Genetics (2014)
- National Science Foundation Graduate Research Fellowship (2013 – 2017)
- Graduate School Assistantship, The University of Georgia (2013 – 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)
- Valedictorian, Selinsgrove Area High School (2007)

Other leadership, service, and outreach:

- The University of Georgia Plant Center, student representative, Fall 2014 – Spring 2015
- American Society of Plant Biologists, volunteer, Summer and Fall 2013
- Genetics Graduate Student Association, The University of Georgia, co-representative, Fall 2015 – Spring 2016; recruitment co-chair, Fall 2014 – Spring 2015; active member, Fall 2012 – present
- Spend a Summer Day, The Pennsylvania State University, volunteer, Summer 2011

References

Dr. Kelly A. Dyer
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