

**Caitlin Elizabeth Conn**  
*Curriculum Vitae*

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**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:**

- Associate Professor of Biology, Berry College 2026 – present
- Assistant Professor of Biology, Berry College 2019 – 2026
- National Science Foundation Postdoctoral Research Fellowship in Biology, Emory University  
*Advisor: Dr. Nicole Gerardo* 2018 – 2019
- Course-based Undergraduate Research Experiences postdoctoral fellow, Spelman College  
*Advisor: Dr. Jennifer Kovacs* 2017 – 2018
- Doctoral student, The University of Georgia  
*Advisor: Dr. David Nelson* 2012 – 2017
- National Science Foundation Graduate Research Fellow in Biology, The University of Georgia 2015 – 2017
- Kirby and Jan Alton Graduate Fellow, The University of Georgia 2016
- Linton and June Bishop Graduate Fellow, The University of Georgia 2015
- Graduate School Assistant, The University of Georgia 2013 – 2014
- Laboratory technician, The University of Georgia 2011 – 2012

## Publications:

Research (\* denotes Berry College student author)

- Merrilles\*, A.R., Buelow\*, A.L., Early\*, J.P., McCulla\*, M.E., Williams\*, S.J., **Conn, C.E.** The evolution of *KAI2* and its homologue *DLK2* in parasitic plants and their non-parasitic relatives. *Biological Journal of the Linnean Society* 147(1): blaf143.
- Hollis\*, M.M., Quigley\*, S.L., **Conn, C.E.** (2024) The molecular evolution of the haustorium formation genes *Pirin* and *QR1* in parasitic plants. *Biological Journal of the Linnean Society* 143(4): blae105.
- Berasategui, A., Salem, H., Moller, A.G., Christopher, Y., Vidaurre Montoya, Q., **Conn, C.**, Read, T.D., Rodrigues, A., Ziemert, N., Gerardo, N. (2024) Genomic insights into the evolution of secondary metabolism of *Escovopsis* and its allies, specialized fungal symbionts of fungus-farming ants. *mSystems* 9(7): e00576-24.
- **Conn, C.E.**, Howie, N., Lynch, M., Lee\*, S., Young\*, E., Westbrook, J.W., Holliday, J., Zhang, Q., Cipollini, M. (2023) Validation of an alternative small stem assay for blight resistance in backcross hybrid chestnuts (*Castanea* spp.) and recommendations for its expanded use. *Plant Disease*. DOI 10.1094/PDIS-06-22-1489-RE.
- Martinez, S.E., **Conn, C.E.**, Guercio, A.M., Sepulveda, C., Fiscus, C.J., Koenig, D., Shabek, N., Nelson, D.C. (2022) A *KARRIKIN INSENSITIVE2* paralog in lettuce mediates highly sensitive germination responses to karrikinolide. *Plant Physiology* 190(2): 1440 – 1456.
- 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: peer-reviewed

- **Conn, Caitlin Elizabeth.** (2024) Photos to Phylogenies: A Scavenger Hunt to Explore the Tree of Life. *Advances in Biology Laboratory Education* 44: <https://doi.org/10.37590/able.v44.art22>.
- **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.

### Non-peer-reviewed products

- Conn, C. (2022) The Conn Family Tree: Chestnuts Throughout the Century. *Chestnut Fall 2022*: 4 – 5.
- Candeias, M. (Host; 2021) Ep. 336 – Parasitic Plants & their Hosts (audio podcast interview with Conn, C.). *In Defense of Plants*. <https://www.indefenseofplants.com/podcast/tag/Caitlin+Conn>
- Conn, C. (2021) The Making of a Parasitic Plant: Parasitism as a Life Strategy. B. Anderton, producer, and E. Kornblum, videographer/editor, published by iBiology.
- Conn, C., Crooks, P. (2015) Experiment 1, Calorimetry. *PSU Chemtrek*. J. T. Keiser, editor, published by Hayden McNeil, Plymouth, MI.

### Course instruction:

- Instructor, Berry College  
*Courses: Biological Diversity (BIO 106/BIO 106L and BIO 106H/BIO106H L), Principles of Cell Biology (BIO 111/BIO 111L), Genetics (BIO 304), Evolutionary Biology (BIO 345 I), Tropical Biodiversity and Conservation (BIO 383/BIO 383 L), Virology (BIO 480)* Fall 2019 – present
- Co-instructor, Sera Mey Monastic University, Emory-Tibet Science Initiative  
*Course: Immunology and Disease* Summer 2019
- Instructor, 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, 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:

- STEM week seminar, Georgia State University – Perimeter College, 2021 (virtual)
- 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:**

- Partnership for Undergraduate Life Sciences Education Southeast Region workshop, The University of Georgia, Summer 2025
- Center for Teaching Excellence and Faculty Development book club, Berry College, Spring 2024
- Association for Biology Laboratory Education conference, University of California San Diego, June 2023
- Mentoring Undergraduate Research Faculty Learning Community, Berry College, Spring 2021 – Fall 2021
- Course-based Undergraduate Research Experiences Grant, Berry College, Summer 2020
- Early-career Faculty Learning Community, Berry College, Spring 2020 – Fall 2020
- Diversity Infusion Mini-grant, Berry College, Spring 2020
- Teaching and Learning in the Diverse Classroom course, CornellX, Spring 2020
- 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 service:**

- Board member, The American Chestnut Foundation – GA Chapter, May 2024 – present
- Judge, Berry Regional Science Fair, Spring 2025
- Science Coordinator, The American Chestnut Foundation – GA Chapter, May 2022 – April 2024
- Biology Liaison, STEMTeach, Spring 2022 – Spring 2024
- Judge, International Science and Engineering Fair (ISEF), Spring 2022
- Member, Berry College Committee on Student Research, Fall 2020 – Spring 2022
- Member, Berry College Planning Council, Fall 2020
- Member, Berry College Diversity, Equity, and Inclusion Committee, Fall 2020 – Spring 2021
- Undergraduate research mentor, Berry College Department of Biology, 2019 – present
- Member, Berry College Liberal Arts Curriculum Exploratory Committee, Spring 2020

- Representative for Department of Biology/School of Mathematics and Natural Science, Berry College Dean's Scholars Dinner and Decision Berry events, Spring 2020
- 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
- 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
- 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:**

- **Conn, C.E.** Photos to Phylogenies: A Scavenger Hunt to Explore the Tree of Life. Association for Biology Laboratory Education, San Diego State University, San Diego, CA. 30 June 2023.
- **Conn, C.E.**, Howie, N., Lynch, M., Lee, S., Young, E., Westbrook, J., Holliday, J., Zhang, Q., Cipollini, M.L. Evaluation of the Alternative Small Stem Assay in Backcross Chestnut Seedlings in Georgia. The American Chestnut Foundation 2022 Southern Regional Meeting (virtual). 26 February 2022.
- **Caitlin E. Conn.** Parasitic Plants and the Search for the Host with the Most. Atlanta Botanical Garden Science Café (virtual). 15 July 2021.
- **Caitlin E. Conn.** The Ecology and Evolution of Host Interaction in Parasitic Plants of the Orobanchaceae. Duke University (virtual). 22 March 2021.
- **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 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 Postdocs 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)