Curriculum Vitae

Amy Lawton-Rauh

Senior Associate Provost
Professor of Genetics and Biochemistry
Clemson University
Clemson, South Carolina 29631 USA
[redacted]

EDUCATION

Ph.D. Genetics, Botany minor, North Carolina State University	2003
B.S. Honors Biology, Minor in Chemistry; University of Missouri-Columbia National Science Scholar-Missouri	1997

CAREER OVERVIEW

Clemson University, 2005 – present:

Senior Associate Provost	2022-present
Professor, Department of Genetics and Biochemistry	2017-present
Associate Provost for Faculty Affairs	2018-2022
Faculty Senate President	2017-2018
Faculty Senate Vice President	2016-2017
Associate Chair, Department of Genetics and Biochemistry	2018
Associate Professor, Department of Genetics and Biochemistry	2011-2017
Assistant Professor, Department of Genetics and Biochemistry	2005-2011

Prior to Clemson University, 1994 – 2005:

Postdoctoral Research Fellow, Max Planck Institüt für chemische Ökologie Abteilung Genetik u. Evolution, Jena, Thüringen, Germany	2003-2005
Graduate Research Fellow, Department of Genetics, North Carolina State University, Raleigh, NC USA	1997-2003
Undergraduate Research Fellow (NSF-REU, HHMI), University of Missouri, Columbia, MO USA	1994, 1995-97
European Community Science Study Abroad Fellow, full academic year University of East Anglia, Norwich, United Kingdom	1994-1995

CURRENT ROLE SUMMARY

I serve with and on behalf of the Executive Vice President for Academic Affairs and Provost (EVPAA & Provost) across the institution and with external partners in decision-making, strategic priorities and special projects planning and implementation spanning faculty affairs, academic affairs, finance and operations, research, and advancement. I am a shared governance resource and facilitator with a transparent and adaptive collaborative leadership style that is decisive when appropriate and focuses on empowering others close to practice. I lead an engaged community of academic staff, faculty, academic staff, and university-level administrators that focus on excellence in teaching, experiential learning, research, scholarship, creative pursuits, service, extension, librarianship, global engagement, and mutually beneficial community engagement.

Major duties and Responsibilities:

- Creating, steering, and leading a culture and practice of transparent and transformative initiatives employing institutional shared governance with faculty, staff, students and administrators; strong focus on empowering departments, schools, divisions, and Colleges towards achieving their strategic priorities and threading opportunities across Colleges towards University strategic plans and operations

- Designing, planning, launching, and continuous improvement of academic affairs unit architecture alongside financial, infrastructure, complex resource, talent, and workload management
- Promoting faculty advancement and institutional engagement as advocate, subject matter expert, and leader; faculty and academic staff strategic hiring priorities and approvals; faculty activity reporting and reviews (annual, merit, TPR and PTR with review of every TPR and PTR case since 2018); career advancement for faculty success programs; awards and recognition; conflict resolution; senior leadership capacity-building and hiring; strategic plan and priorities design; policy implementation and development; continuous improvement of systems and operations across faculty and academic affairs; faculty affairs in research, ethics, and grievance compliance; and shared governance linking policy with culture through transparent collaboration, research-informed communication, implementation, adaptation, and listening

CONTEXT 2005- PRESENT: CLEMSON UNIVERSITY PROFILE

Clemson University is a Carnegie R1 and Community Engaged institution and is one of two land grant universities in South Carolina. Founded in 1889, Clemson University consists of 10 Colleges, including the new Harvey S. Peeler Jr College of Veterinary Medicine, an Honors College, a collegiate Library, and five research institutes and innovation campuses. The University has six agricultural research and education centers (RECs, research partnerships with the USDA and other federal, state, and local agencies) and experiment stations located outside of Clemson, SC. Clemson University is transforming enterprise operations and systems while being deeply engaged in implementing strategic priorities, including the Clemson Elevate strategic plan, the Fiercely Forward Capital Campaign, and operations transformations such as a responsibility-centered budget model, process and infrastructure adjustments for future-forward resource allocations, and a new enterprise resource planning (ERP) system. Additional metrics from 2025 benchmark: all time high enrollment of 29,545 undergraduate and 5,485 graduate students; 1,476 international students; 93.5% first year retention rate; 86.6% 6-year graduation rate; 5,917 full time employees (4,078 staff, 1,839 faculty).

ADMINISTRATIVE RECORD

SENIOR ASSOCIATE PROVOST, CLEMSON UNIVERSITY (August 2022-present)

LEADERSHIP STRUCTURE RELATED TO THIS ROLE

At Clemson University, there is one Senior Associate Provost (SrAP). This role has nine direct reports spanning senior global engagement leadership, teaching effectiveness and innovation, while steering transformations across all Faculty Affairs-related daily operations, institutional change leadership and implementations, communications, and partnerships in conjunction with designing and leading strategic initiatives. The SrAP leads and contributes academic affairs planning, implementation, communications, engagement, and operations with staff, faculty, and academic leaders as well as local to international public and private stakeholders, partners, and alumni. The SrAP is a thought partner and strategist in all aspects of faculty and academic affairs supporting the EVPAA & Provost. There are four Associate Provosts (Undergraduate Learning, Graduate Studies, Institutional Research & Effectiveness, and Curricular Innovation).

Faculty Affairs and the EVPAA & Provost Office are co-situated to facilitate enterprise-wide operations and leadership across the academic affairs portfolio, including research, extension, academic community engagement, and an innovation + entrepreneurship framework. Leaders in this office share institutional resources, budget, workforce capacity, student experience, academic excellence, facilities, and strategic allocation responsibilities for collective decision-making supporting the EVPAA & Provost. The figure below demonstrates my leadership and executive management responsibilities connect Academic Affairs and Faculty Affairs. It also shows how the faculty affairs team relates to Faculty Success Offices (Teaching Effectiveness and Innovation, Faculty Shared Governance, the Emeritus College, and Faculty Awards& Honorifics) and Strategic Projects that include Signature Programs and special Advisory Groups (next page):

Senior Associate Provost

Academic Affairs

Office of Global Engagement
Associate Vice President for
International Programs & Partnerships

Provost Fellows

Academic Affairs Community Engagement

Coordinates Cross-campus Leaders

Organization of Academic Department Chairs
Associate Deans for Faculty Success
Faculty Senate
Collegiate and Academic Deans

Academic Affairs & Provost Operations: Leadership & Management

Partnerships with leaders and offices
across Academic Affairs and the University

Faculty Affairs

Faculty Success Offices

Office of Teaching Effectiveness and Innovation (OTEI)
Executive Director

Office of Faculty Shared Governance
Director

Emeritus College
Director

Faculty Affairs Staff

Executive Administrative Assistant

Assistant Provost for Faculty Affairs

Faculty Systems Administration
Sr Director Faculty Systems
Faculty Systems Coordinator

Faculty Success Strategic Projects

Faculty Affairs Fellows

Faculty Career Advancement
Writing Collaboratory
Faculty Personal Strategic Career Planning

'Faculty Confidential' Project
Data Science for Community Engagement

Others

Chairs of Faculty Affairs Advisory Groups
(see strategic signature programs website)

Faculty Awards & Honorifics Director

EXAMPLE RECENT LEADERSHIP ROLES AND RESPONSIBILITIES WITHIN CLEMSON UNIVERSITY

Developed, launched, and implemented findings and outcomes from several task forces and directives as change leadership, change management, and deep faculty engagement, including the following examples:

Institution and enterprise-wise:

- PTIE (promotion and tenure incorporating innovation and entrepreneurship) linking infrastructure and culture with transforming practices for reviewing faculty (critical for diversifying resources supporting research, entrepreneurship, and community engagement)
- Clemson University, Industry engagement effort
- University Strategic Compensation Plan (co-lead with Chief Human Resources Officer)
- Carnegie Classification, Community Engagement designation renewal application
- Clemson Elevate strategic plan renewal Pillar for 'Research', focusing on the goal to double research, scholarly works, and creative endeavors by 2035, core team leader
- Global Engagement Leadership and Organization Framework, chair
- Academic Affairs subject matter expert in the institutional acquisition of an HR and finance systems overhaul, State-run Request for Proposals process for a new Enterprise Resource Planning system (ERP)
- Merit-informed evaluations and review systems with Human Resources and General Counsel (2019), including the connected implementation of new annual general compensation increases following the State of South Carolina Higher Education budget, and provisos

Across academic affairs:

- Communicating and partnering with the Senior Associate Vice President for Academic Finance on annual strategic budget adjustments across expenses including compensation and operating funds for all academic related offices and colleges reporting to the Executive Vice President for Academic Affairs and Provost, critically during business transformations for the ERP and RBB alongside credit ratings
- Communicating and partnering with the Senior Associate Vice President for Academic Operations to adjust space utilization and planning for instructional and research spaces and infrastructure
- Collaborative launch and implementation of a Summer Accelerate initiative, while leading the faculty affairs instructional training and awareness campaign with Associate Deans for Faculty Success
- Establishing faculty and academic staff-related configurations of two academic colleges from a single college and the founding of the new Harvey S. Peeler Jr College of Veterinary Medicine
- As faculty data owner and shared governance subject matter expert, contributed to the institutional accreditation review and renewal for Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) successfully renewed (2023/24) and reports for ABET (Accreditation Board for Engineering and Technology) and ACEND (Accreditation Council for Education in Nutrition and Dietetics)
- Consulting and at times leading academic operations across the University from the all-around faculty (regular, special rank, and administrative) perspective with insights from academic staff and students
- Facilitating and providing strategic communications with all faculty and administrative faculty, at a high frequency before, during, and through living with the COVID-19 pandemic, several local and regional natural disasters, and other global, national, and local activities, crises, and issues

Faculty affairs-specific:

- Task force aligning all aspects of faculty review criteria, processes, and calendars (annual reviews, reappointment, tenure, promotion, merit; note Clemson University is not unionized)
- Directed strategies and implementation of faculty review systems launch, optimization and continuous improvements as the institutional Executive Sponsor (Faculty Success by Watermark)
- Conducted a deep inventory and gap analysis for faculty affairs at Clemson University resulting in the strategic organizational structure on page 2 grouping 'faculty success offices' and 'faculty affairs

operations' to clearly communicate how the institution supports excellence in faculty recruitment, retention, engagement, and career advancement (2023-ongoing continuous improvement)
- Establishing the Clemson University cohort of the annual Atlantic Coast Conference Academic Leaders Network (ACC-ALN) to elevate the annual cohort experience as the top academic faculty-specific leadership career advancement program at Clemson as mission-critical and operations-centered for institutional resilience via leadership capacity, business continuity, and succession planning
- Expanding the established annual Department Chairs Retreat to focus on communicating and discussing the strategic priorities of all institution-level leaders to tie in all operations and institutional actions throughout the academic year back to these priorities throughout the academic year (2024-present)
- University Faculty Mentoring Task Force (2019) resulting in formation of University Committee and the Office of Faculty Advancement focus on mid-career faculty mentoring
- Caregivers Task Force (2020-22)
- Tenure probationary period mentoring and adjustments during the COVID-19 pandemic (2020-present)
- Evaluation of teaching effectiveness during the COVID-19 pandemic, time-limited adjustment (2020-22)
- Developing and leading ongoing continuous improvement of faculty academic onboarding and orientation programming (Faculty Orientation) with Human Resources, local businesses, and with partners across the Clemson University institution and enterprise
- Development and launch of new annual TPR Roadshow every spring semester with administrators of faculty review processes, meeting college-by-college to deeply review and discuss opportunities and challenges, follows the annual TPR Breakfast every fall semester focused on workflows (2019-present)

Leadership roles on the following National Science Foundation-sponsored initiatives in faculty affairs:
- Senior Personnel on the NSF ART:STRIDE grant (2024-present); launching an intensive campaign to intensify NSF-PTIE-informed processes with institutional shared governance to incorporate innovation and entrepreneurial activities in faculty reviews (2025-ongoing); follows a consistent effort with very limited resources initiated to engage as a member of the NSF-PTIE Consortium (2020-present)
- Co-PI on the NSF Tigers ADVANCE grant that concluded December 2023
- Designed, implemented, and established a new Office of Faculty Career Advancement (2023-present) and key faculty success signature programs towards Artificial Intelligence literacy, writing collaboratory workshops, and transformations in showcasing and evaluating teaching effectiveness

Critical operations upfitting, streamlining, improvements, and collaborative leadership change management in foundational workflows and processes:
- Leading and partnering on academic personnel hiring, recruitment, retention: strategic planning, workflow development, and implementation of strategic annual and accelerated weekly faculty and academic staff hiring plans alongside recruitment, retention, pre-retention, and dual career hire negotiations with College Deans, unit leaders, and Department Chairs resulting in the successful increase in senior faculty hires and retention
- Facilitating Provost and President steps in faculty grievance, complaint, and formal complaint processes per the Faculty Manual
- Reviewing, consulting, and approving departmental and college bylaws as well as departmental TPR document updates, including during the following significant changes
  - Reorganizations of schools, departments, divisions, and programs
  - Formation of the new Harvey S. Peeler College of Veterinary Medicine
  - Incorporation of innovation and entrepreneurship activities and community engagement contributions into the activity reporting and reviews of faculty
  - Addition of a third lecturer-track rank (Principal Lecturer)
  - Expansion of faculty senate to include voting rights and participation of all full-time non-tenure track faculty in shared governance, faculty review processes, and select institutional leadership

- Facilitating institutional resilience and nimbleness through a continuous, highly collaborative institutional shared governance relationship and communication network via engagement with faculty senate on policies, resolutions, timely issues, statements, events, and institutional transformations
- Leading and streamlining operations with Associate Deans and the Organization of Academic Department Chairs through monthly meetings and regular drop-in sessions on special topics during the pandemic including free speech on campus, academic freedom, duty of care, Title IX, campus safety, research safety culture and compliance during catastrophic events, graduate student and postdoctoral scholar mentoring, leading from the middle as a change leader charged with management, and others
- Owning and updating Enterprise Risk Management, faculty and undergraduate data governance, and crisis leadership as faculty and academic staff subject matter expert and across academic affairs applying business continuity principles alongside compliance and future-forward strategic initiative vision building

REPRESENTATIVE MAJOR ACHIEVEMENTS IN FACULTY AFFAIRS

- Awarded the Alan Schaffer Faculty Senate Service Award for successful collaborative leadership with shared governance during the pandemic (2021), intentionally placed at the top of this list
- Launched the Office of Faculty Advancement (OFA), including a collaborative restructuring establishing a mission, vision, scale, and scope towards specific strategic priorities aligned with the university strategic plan, appointment of inaugural Director, Faculty Affairs Fellows (2023 – ongoing)
- Facilitated collaborative leadership strategy and led team that implemented an overhaul in our teaching effectiveness evaluation system which successfully launched during the pandemic (April 2020) and continues to be updated through Faculty Senate and OTEI, with most recent adoption as Resolutions through shared governance in the Faculty Manual and change leadership from OFA (2017-2023, with continuous improvement -present)
- Facilitated collaborative leadership resulting in the implementation of the expansion of voting rights from tenured/tenure-track only to all full time faculty by first establishing Faculty Senate Bylaws (2018) within which a Convention of Delegates formed and ultimately in the Faculty Constitution change enacted through institutional shared governance and participation in a live feed, fully online voting process (2/3 majority pass, with quorum) during the General Faculty Meeting August 16, 2023 (approved by the Board of Trustees October 2023)
- Led the successful selection, implementation, launch, and ongoing communications and training for a replacement faculty activity reporting, annual evaluation, and TPR system (DigitalMeasures by Watermark) during the pandemic (launched March 2020) as the university Executive Sponsor
- Implemented a new merit-informed review of faculty process and subsequent steps in compensation actions for faculty and academic staff, launched 2019, (2019-present, pending annual state provisos)
- Established new leadership positions with decision making authority supporting faculty affairs within each College administrative structure across the entire university: Associate Deans for Faculty Success
- Piloted and established a new 'Faculty Affairs Newsflash' monthly briefly that provides a digest of faculty-specific activities and functions from across university-level academic affairs offices
- Reconfigured the Organization of Academic Department Chairs (OADC) and established it as a highly engaged leadership capacity-building organization with in-depth meetings and timely discussions through meetings and interactive, timely, drop-in sessions with topical experts/leaders
- Established an annual 'TPR Roadshow' series with an intensive deep dive with each College on improving operations and decision-making methods for tenure-promotion-reappointment (TPR), post tenure review (PTR), annual review processes, and merit reviews

- Supported the development and launch of the Conflict Resolution Series leadership training program for academic leaders and faculty from the Ombuds Office
- Grew the Atlantic Coast Conference-Academic Leaders Network (ACC-ALN) presence at Clemson University to be a premiere leadership advancement achievement for high performing, high potential academic leaders employing best practices in inclusive leadership principles; this includes developing the entire program, on site logistics, and managing a recent 3-day conference with an amazing dedicated Clemson University team hosting ACC-ALN cohorts from all universities (March 2024)
- Established the University Faculty Mentoring Committee incorporating research-informed faculty mentoring principles empowering data-informed mentoring and coaching systems across the entire faculty career span within all Colleges and the Libraries (November 2021-present)
- Overhauled, reconfigured, and established new faculty onboarding, converting a series of talks into a day-long orientation workshop with collaboration spaces open to all faculty, in addition to new faculty
- Worked intensively with Deans, Associate Deans, Department Chairs, Faculty Senate, Staff Senate, Undergraduate and Graduate Student Senates, Human Resources, ADA & Access, Associate Provosts, Vice Presidents, and senior leaders to lead critical decision making and communication strategies during the COVID-19 pandemic at all levels of the University (February 2020-2023)

ADMINISTRATIVE PROFESSIONAL NETWORKS AND SELECT EXPERIENCES

Upstate Education and Opportunity Foundation, Board Member (2025)

APLU (Association of Public and Land Grand Universities) faculty affairs committee of academic affairs council, actively engaged in conferences and online community (2019-present)

ACC (Atlantic Coast Conference), Academic Leaders Network: Executive Committee (2025), Clemson liaison lead of top administrative faculty participants (2022-present)

Fundraising for Deans and Provosts conference, Academic Impressions (in person, July 2023)

HERS Next Stages, Next Steps career workshop (January 2023)

Multiple workshops and programs on science serving society, adjusting and implementing policies, practices, and leadership, also general higher education leadership: Academic Impressions, NCFDD, AAAS American Association for the Advancement of Science (AAAS), and American Council on Education (ACE) workshops (2019-present)

American Council on Education (ACE) Engage networks (2019-present)

NSF PTIE (Promotion & Tenure - Innovation & Entrepreneurship), Consortium (2019-present)

NSF ADVANCE Research and Coordination Network participant (ARC Net) (2020-present)

Connect program, selected participant (2019-20)

SCILG (South Carolina Industry Liaison Group) workshop on employment law, building inclusive workforce, engaging C-suite), (2019)

REI, Improving healthcare and educational outcomes in South Carolina, selected participant (2019)

TIGERS Advance Trailblazers (NSF-funded); Mentoring system development program, selected participant (2017-2018)

American Council on Education (ACE) Regional Women's Leadership Forum; selected Participant; Clemson University (2016)

Workshop on Molecular Evolution; Marine Biological Labs Woods Hole, selected participant, 2004, Teaching Assistant 2005; Admissions Committee (2006, 2007)

Preparing the Professoriate, North Carolina State University; Graduate Fellowship and Program Participant, (2000-01)

University of East Anglia, Norwich, England; European Community Science Undergraduate Study Abroad Fellow on full sponsorship, Academic Year (1994-95)

SCIENTIFIC DISCOVERY RECORD

RESEARCH PROFILE **Population Genetics of Crops, Wild relatives, and Agroecological Weedy Species**

After a postdoctoral research fellowship at the Max Planck Institüt für chemische Ökologie in Jena, Germany, I joined the Clemson University Department of Genetics and Biochemistry. My 'Plant Population Genomics' lab team obtained external and internal grants that supported internationally and nationally engaged research by undergraduate students, graduate students, postdoctoral research fellows and visiting scientists. My work with my research team and collaborators is recognized in the field of plant population and evolutionary genetics, with expertise on the genetic relationships and population dynamics amongst crops, crop wild relatives, and agroecological weedy species. In particular: (1) understanding the roles of the genome and environment in shaping domestication and ferality through constraint or accelerated adaptation, and (2) distinguishing signatures of demography from different modes and rates of molecular evolution shaping genome diversity during domestication, de-domestication, and adaptation to agroecosystems. Systems: Weedy species, crop wild relatives, and cultivated plants, particularly amaranths (genus *Amaranthus,* especially *Amaranthus palmeri),* and rice (genus *Oryza).* Google Scholar, Research Gate, LinkedIn

SPONSORED RESEARCH

Awarded-Competitive External Federal and Other External Research Funding (* Currently active)

*NSF ITE, ART: STRIDE Stimulating translation of research via intentional development and ecosystem, Senior Personnel; PI: Kuang-Ching Wang, Co-PIs: Tia Dumas, Divya Srinivasan, Chris Gesswein, and Shelia Cotton (Clemson University), $6,000,000. (2024-28).

NSF TIGERS Advance, 'Institutional Transformation at Clemson University'. 5 years (2016-21, no-cost extension to 2023) Co-PI; PI: Robert Jones, Co-PIs: Ptacek, Winslow, Rosopa; $3,405,472. (2016-23).

USDA-NIFA National Needs Fellowship program, 'Computationally-intensive translational genomics for agriculture' immersive PhD program, Lead PI with Co-PDs S. Kresovich, W. Bridges and V.P. Richards (Clemson University), $238,500. (2016-21).

Collaborative research, Rothamsted Research Institute (London, UK) and Bayer Crop Science (Germany). 'Comparative genomics of herbicide-resistant black grass populations in Europe'. 2 years (2018-20) Co-PD: C. Saski (Clemson University). ~$300,000 USD. (2018-20).

Cotton Incorporated, 'Population genetics of glyphosate resistance in *Amaranthus palmeri* (Palmer Amaranth) in the Southeast USA'. $120,000 cooperative agreement. (2012-20).

USDA-NIFA Specialty Crops Grant, 'RosBREED: Combining disease resistance with horticultural quality in new Rosaceous cultivars.' 2014-51181-22378. Lead PI: A. Iezzoni (Michigan State University), Total: $10,000,000; Clemson: ~$1,200,000 (ALR: $152,000 + travel). (2014-19).

S.C. Peach Council Grant, 'Computational resources for genome prediction in peach'. P. Miller (Undergraduate Genetics internship support), $10,000. (2016-18).

Wells Fargo Grant, 'Building a better peach'. Co-PD with Co-PDs C. Saski, S. Kresovich, K. Gasic, G. Schnabel, G. Reighard (Clemson University). $150,000. (2016-18).

USDA-NRI competitive grant, Weedy and Invasive Species Program: 'Evolutionary Dynamics and Management of Weedy Rice in the United States'. Co-PD with Lead PD N. Burgos (Uni. Arkansas, Lead PI) and Co-PD A. J. Fischer (Uni. California-Davis). $400,000 (ALR: $123,376 + travel). (2008–13).

USDA-NRI competitive grant, Arthropod and Nematode Biology Program: 'Assessment of reniform nematode variability and host-induced selection on populations'. Co-PD with Lead-PD P. Agudelo (Clemson University), $116,398, (2008–11).

Awarded-Other Funding: Postdoctoral Associates, Graduate & Undergraduate Students

Clemson Research Fellow Award "International institute-industry collaboration in translational genomics of weedy species", Co-lead: Chris Saski; Collaborators: Rothamsted Research Institute, Bayer CropScience; two-year postdoctoral fellowship; $125,000. (2018-20).

Wade Stackhouse Fellowship "Mechanisms of feralization in a crop-weed species complex", to Kimberly Kanapeckas, PhD Genetics student; $37,000. (2012-15).

Calhoun Honors Departmental Research Grant, "Evolutionary dynamics of de-domestication in rice", to Emily McMacken (Honors Biochemistry and Genetics double major), $600. (2015).

Calhoun Honors Departmental Research Grant, "Molecular evolution of novel gene structure in the dioecious-monoecious segregating genus Amaranthus", undergrad intern Sarah Barfield (Honors Biochemistry and Genetics double major). $3,000. (2012-13).

Calhoun Honors Departmental Research Grant, "Evolutionary dynamics of glyphosate resistance profiles in *Amaranthus palmeri*", to undergrad intern Katerina Lay (Honors Biochemistry and Genetics double major) $1,500. (2013-14).

American Genetics Association travel award, University of Pretoria-American Genetics Association Conservation Genetics Workshop to Kimberly Kanapeckas, PhD Genetics student. $600. (2013).

EUREKA! Research internship, Clemson University, "Evolutionary dynamics of ferality in rice" undergrad intern Emily McMacken. $600. (2013).

Wade Stackhouse Fellowship "Molecular evolution of herbicide resistance in genus Amaranthus: a phylogenetic context", Kristin Beard, PhD Genetics student. $17,000. (2011-13).

SC Rural Rehabilitation Fellowship "Mechanisms of feralization in a crop-weed species complex", Kimberly Kanapeckas, PhD Genetics candidate. $5,835. (2012-13).

HHMI/SCLife Summer Research Internship, "Molecular evolution of dormancy-related genes in the dioecious-monoecious segregating genus Amaranthus", 12 weeks, to undergrad intern Sarah Barfield (Honors Biochemistry and Genetics double major). $4,000. (2011).

EUREKA! Research internship, Clemson University, "Gene copy number of herbicide resistance genes in genus Amaranthus", undergrad intern Anna Rollings. $600. (2011).

NSF-sponsored Three-week Rice Research to Production Course at the International Rice Research Institute (IRRI), participation funds for Cindy Climer (Vigueira) PhD Genetics student. ~$4,000. (2010).

Wade Stackhouse Fellowship "Impact of population structure on genetic variation in Arabidopsis species", to Cindy Climer, PhD Genetics student, $21,000. (2008-11).

Clemson University Departmental Honors Research Grant, "Comparative genomics of COS markers in the Asteraceae plant family", undergrad intern Mary Jones (Honors Biochemistry). $695. (2009).

Clemson University Departmental Honors Research Grant, "Population genomics in Scandinavian populations of *Arabidopsis lyrata*", undergrad intern Kyle Gettler (Honors Biochemistry) $750. (2009).

SPRI/HHMI Research internship, "Development and Improvement of High Throughput Subcloning in the Hawaiian Silversword Alliance", D.W. Daniel High School student Devleena Kole. $550. (2009).

SPRI/HHMI Research internship, "A New High Throughput Method for Subcloning and Sequencing in the Genus Amaranthus", D.W. Daniel High School student Sarah Barfield $550. (2009).

Awarded-Other Funding: Postdoctoral Associates, Graduate & Undergraduate Students (cont'd)

EUREKA! Research internship, Clemson University, "Population Genetics of Weedy Rice in the U.S.", undergrad research intern Meredith O'Toole (Honors Biochemistry then Honors English). $600. (2009).

EUREKA! Research internship, Clemson University, "Evolutionary Dynamics in the Genus Amaranthus", undergrad intern Alanna Slack. $600. (2009).

SC LIFE/HHMI Undergraduate Research Internship, Clemson University, "Molecular evolution of herbicide resistance in Amaranthus". undergrad intern Steven Vensko. $550. (2008-09).

Clemson University Departmental Honors Research Grant, "Comparative evolutionary genomics in the Hawaiian silversword alliance adaptive radiation". undergrad intern Chelsea Reighard (Honors Genetics, Public Health Sciences, and Spanish). $750. (2007).

NSF-REU/Howard Hughes Undergraduate Research Internship, Clemson University, "Comparative evolutionary genomics in the Hawaiian silversword alliance adaptive radiation". undergrad intern Chelsea Reighard (Honors Genetics, Public Health Sciences, and Spanish). $1,100. (2007-08).

SPRI/HHMI Research internship, Clemson Uni., "Comparative Population Genetics in the Hawaiian Silversword Alliance Adaptive Radiation". Governor's School for Math and Science High School Student Paige Catotti. $660. (2007).

NSF-REU, Clemson Molecular Genetics and Biochemistry Summer Undergraduate Research Internship, "The Effects of Population Structure on Genetic Variation in *Arabidopsis lyrata* subsp. *petraea*". undergrad intern Jennifer Smith, Francis Marion University. $500. (2007).

SC LIFE/Howard Hughes Undergraduate Research Internship, "Among-Population Genetic Variation in the European Rock Cress *Arabidopsis lyrata* subsp. *petraea*". undergrad intern Sarah Walker (Genetics major). $550. (2006-07).

SC LIFE/Howard Hughes Undergraduate Research Internship, "A Genetic Cross-Based Approach to Study Linkage Disequilibrium and Genetic Variation in the European Rock Cress *Arabidopsis lyrata* subsp. *petraea*". undergrad intern Margaret Beaudrot (Honors Biochemistry). $550. (2006-07).

Personal Funding for Graduate and Undergraduate Research

Sigma Xi Grant in Aid of Research, $1,000, (2001).

Howard Hughes Medical Institute, undergraduate research internship and travel award, "P2: A Mitochondrial Mutant in Maize" *Advisor:* Kathy Newton, Department of Biological Sciences, University of Missouri-Columbia (1995-1996).

NSF-REU, undergraduate research internship, "Investigation of Malate Dehydrogenase Mutations in Maize" *Advisor:* Kathy Newton, Department of Biological Sciences, University of Missouri-Columbia, (Summer 1994).

OTHER SPONSORED RESEARCH-RELATED ACTIVITY

American Society of Naturalists (ASN) matching grant supporting outside speaker, graduate student and in-service high school teacher travel awards for "An Evening of Science", Southeast Population, Ecology, and Evolutionary Genetics group meeting, Clemson Outdoor Laboratory, $1,000. (2012).

Contributory grant, research machines, Sun Microsystems (# EDU-Q206-142A), $3,226 (2005).

PUBLICATIONS (Journal Articles; Contributions to published abstracts and bulletins not listed here)

Peer-reviewed Primary Research Journal Article Publications, 37 Published **(students, and postdocs)**

2023 Mabry, M, Bullock, J, Bagavathiannan, M, Wang, H, Husband, B, Pisias, M, Olsen, K, Caicedo, A, Drummond, E, Maggioni, L, Razifard, H, Warschefsky, E, Gressel, J, **Lawton-Rauh, A**, Tillería, S, Ureta, S, Pandolfo, C, Soltis, P, Soltis, D, Pires, JC, McAlvay, A. Building a Feral Future: Open Questions in Crop Ferality. *Plants, People, Planet*, doi: 10.1002/ppp3.10367

2022 Rangani, G, Rouse, CE, Saski, C, Noorai, RE, Shankar, V, **Lawton-Rauh, AL**, Werle, IS, and N Roma-Burgos. High resistance to quinclorac in multiple-resistant *Echinochloa colona* associated with elevated stress tolerance gene expression and enriched xenobiotic detoxification pathway. *Genes* 2022, 13, 515 doi: 10.3390/genes13030515

2019 Singh S, Singh V, Salas-Perez RA, Bagavathiannan MV, **Lawton-Rauh A**, and N Roma-Burgos. Target-site mutation accumulation among ALS inhibitor-resistant Palmer amaranth. *Pest Management Science* 75(4): 1131-1139. doi: 10.1002/ps.5232

2018 Burgos NR, Heap IM, Rouse CE, and **A Lawton-Rauh**. Evolution of herbicide-resistant weeds. Weed Control: Sustainability, Hazards, and Risks in Cropping Systems Worldwide. Book chapter. CRC Press. 12/2019.

Vigueira CC, Burgos NR, and **A Lawton-Rauh**. Pink-awned weedy rice: a potential conduit for gene exchange in rice agro-ecosystems. *Weed Research* 58(5): 369-378. doi: 10.1111/wre.12326

Ravet K, **Patterson EL**, Krähmer H, Hamouzová K, Fan L, Jasieniuk M, **Lawton-Rauh A**, Malone JM, McElroy JS, Merotto A, Westra P, Preston C, Vila-Aiub MM, Busi R, Tranel PJ, Reinhardt C, Saski C, Beffa R, Neve P and TA Gaines. The power and potential of genomics in weed biology and management. *Pest Management Science*. 74(10): 2216-2225. doi: 10.1002/ps.5048

Tseng T, Shivrain V, **Lawton-Rauh A**, and NR Burgos. Dormancy-linked population structure of weedy rice (Oryza sp.). *Weed Science* 66:331-339. doi: 10.1017/wsc.2017.86

Salas-Perez RA, Saski CA, Noorai RE, **Srivastava SK**, **Lawton-Rauh A**, Nichols, RL, and NR Burgos. RNA-Seq transcriptome analysis of *Amaranthus palmeri* with differential tolerance to glufosinate herbicide. *PLoS ONE* 13(4): e0195488. doi: 10.1371/journal.pone.0195488

Neve P, Barney JN, Buckley Y, Cousens RD, Graham S, Jordan NR, **Lawton-Rauh A**, Liebman M, Mesgaran MB, Schut M, Shaw J, Storkey J, Baraibar B, Baucom RS, Chalak M, Childs DZ, Christensen S, Eizenberg H, Fernández-Quintanilla C, French K, Harsch M, Heijting S, Harrison L, Loddo D, Macel M, Maczey N, Merotto A Jr, Mortensen D, Necajeva J, Peltzer DA, Recasens J, Renton M, Riemens M, Sønderskov M & Williams M (2018). Reviewing research priorities in weed ecology, evolution and management: a horizon scan. *Weed Research*. doi: 10.1111/wre.12304

Singh S, Singh V, **Lawton-Rauh A**, Bagavathiannan M, and NR Burgos. *EPSPS* gene amplification primarily confers glyphosate resistance among Arkansas Palmer amaranth (*Amaranthus palmeri*) populations. *Weed Science*. 66:293-300. doi:10.1017/wsc.2017.83

2017 **Kanapeckas, KL**, Tseng, T, **Vigueira, CC**, Ortiz, A, Bridges, WC, Burgos, NR, Fischer, AJ, and **A Lawton-Rauh**. Contrasting patterns of variation in weedy traits and unique crop features in divergent populations of US weedy rice (*Oryza sativa sp.*) in Arkansas and California. *Pest Management Science*, 74: 1404-1415. doi:10.1002/ps.4820; **Cover photo**.

Refereed Primary Research Journal Article Publications, Published (cont'd)

2017 Molin, WT, Wright, AA, **Lawton-Rauh, A**, and CA Saski. The unique genomic landscape surrounding the *EPSPS* gene in glyphosate resistant *Amaranthus palmeri*: A repetitive path to resistance. *BMC Genomics* 18(1):91. doi:10.1186/s12864-016-3336-4

2016 **Kanapeckas KL, Vigueira CC**, Ortiz A, **Gettler KA**, Burgos N, Fischer AJ, and **A Lawton-Rauh**. Escape to Ferality: The Endoferal Origin of Weedy Rice from Crop Rice through De-Domestication. *PLoS-ONE* doi:10.1371/journal.pone.0162676; **Highlighted in Faculty1000**

2015 Wang Y, Zhou L, Li D, Dai L, **Lawton-Rauh A**, and F Luo. Genome-Wide Comparative Analysis Reveals Similar Types of NBS Genes in Hybrid *Citrus sinensis* Genome and Original Citrus clementine Genome and Provides New Insights into Non-TIR NBS Genes. *PLoS ONE* 10(3): e0121893. doi: 10.1371/journal.pone.0121893

2014 Ziska LH, Gealy DG, Caicedo AL, Gressel J, **Lawton-Rauh A**, Avila LA, Theisen G, Norsworthy J, Ferrero A, Vidotto F, Johnson DE, Ferreira FG, Marchesan E, Menezes V, Cohn MA, Burgos N, Linscombe S, Carmona L, Tang R, and A Merotto. Weedy (Red) Rice: An Emerging Constraint to Global Rice Production. *Advances in Agronomy*. 129:181–228. doi: 10.1016/bs.agron.2014.09.003

Ward SM, Cousens RD, Bagavathiannan MV, Barney JN, Beckie HJ, Busi R, Davis AS, Dukes JS, Forcella F, Freckleton RP, Gallandt ER, Hall LM, Jasieniuk M, **Lawton-Rauh A**, Lehnhoff E, Liebman E, Maxwell BD, Mesgaran MB, Murray JV, Neve P, Nuñez M, Pauchard A, Queenborough S, and B Webber. Agricultural Weed Research: A Critique and Two Proposals. *Weed Science*. 62:4, 672-678. doi: 10.1614/WS-D-13-00161.1

Gressel J, Stewart CN, Giddings LV, Fischer AJ, Streibig JC, Burgos NR, Trewavas A, Merotto A, Leaver CJ, Ammann K, Moses V, and **A Lawton-Rauh**. Overexpression of *epsps* transgene in weedy rice: insufficient evidence to support speculations about biosafety. *New Phytologist*. 202(2):360-362. doi: 10.1111/nph.12615

2013 McCouch S, Baute GJ, Bradeen J, Bramel P, Bretting PK, Buckler E, Burke JM, Charest D, Cloutier S, Cole G, Dempewolf H, Dingkuhn M, Feuillet C, Gepts P, Grattapaglia D, Guarino L, Jackson S, Knapp S, Langridge P, **Lawton-Rauh A**, Lijua Q, Lusty C, Michael T, Myles S, Naito K, Nelson RL, Pontarollo R, Richards CM, Rieseberg L, Ross-Ibarra J, Rounsley S, Hamilton RS, Schurr U, Stein N, Tomooka N, van der Knaap E, van Tassel D, Toll J, Valls J, Varshney RK, Ward J, Waugh R, Wenzl P, Zamir D. Agriculture: Feeding the Future. *Nature*. 499(7456):23-24. doi: 10.1038/499023a; press

Vigueira CC, Rauh BL, Mitchell-Olds T, and **A. Lawton-Rauh**. Signatures of demography and recombination at coding genes in naturally-distributed populations of *Arabidopsis lyrata* subsp. petraea. *PLoS ONE*. 8(3): e58916. doi: 10.1371/journal.pone.0058916

2012 **Leach M**, Agudelo P, and **A Lawton-Rauh**. Effect of crop rotations on *Rotylenchulus reniformis* population structure. *Plant Disease*. 96(1): 24-29

Leach M, Agudelo P, and **A Lawton-Rauh**. Genetic variability of *Rotylenchulus reniformis. Plant Disease*. 96(1): 30-36

2011 Wang J, Zhang, L, Sun X, **Lawton-Rauh A***, and D Tian* (*co-corresponding authors). Genetic signatures of highly-adaptable R-genes in closely-related Arabidopsis species. *Gene*. 482:24-33

2010 **Lawton-Rauh A** and NR Burgos. Cultivated and weedy rice interactions and the domestication process. *Molecular Ecology*, 19 (16): 3243-3245

Peer-reviewed Primary Research Journal Article Publications, Published (cont'd)

2010 Mather KA, Molina J, Rubinstein S, Flowers JM, Caicedo AL, McNally KL, Rauh BL, **Lawton-Rauh A**, and MD Purugganan. Migration, isolation and hybridization in island populations: The case of Madagascar rice. *Molecular Ecology* 19(22):4892-4905

Shivrain V, Burgos N, Agrama H, **Lawton-Rauh A**, Lu B-R, Sales M, Boyett V, Gealy D, Moldenhauer K. Genetic diversity of weedy red rice populations (*Oryza sativa* L.) in Arkansas USA. *Weed Research*, 50 (4): 289-302

Leach M, Agudelo P, and **A Lawton-Rauh**. Population variability of *Rotylenchulus reniformis* in cotton agroecosystems. *Journal of Nematology* 42(3): 251-252

Lawton-Rauh A, **Climer C**, B Rauh. Comparative and Evolutionary genomics. *in* Principles and practices of plant genomics, Volume 3 *Advanced genomics*. Eds. C. Kole, A.G. Abbott

2009 Jimenez S, **Lawton-Rauh A**, Reighard GL, Abbott AG and DG Bielenberg. Phylogenetic Analysis and Molecular Evolution of the Dormancy Associated MADS-Box Genes from Peach. *BMC Plant Biology* Vol. 9, Article 81

Jimenez S. Li ZG, **Lawton-Rauh AL**, Reighard GL, Abbott AG, Bielenberg DG. Learning from model species: a case study of comparative genomics in Arabidopsis, Populus, peach and apricot. *HortScience* 44(3):565

2008 **Lawton-Rauh A**. Demographic factors shaping genetic variation. *Current Opinion in Plant Biology* 11(2):103-109. Invited review

2007 **Lawton-Rauh A**, Friar EF, and DL Remington. Collective evolution processes and the tempo of lineage divergence in the Hawaiian silversword alliance adaptive radiation (Heliantheae, Asteraceae). *Molecular Ecology* 16(19):3993-3994; **Cover photo**

Lawton-Rauh A, Robichaux RH, and MD Purugganan. Diversity and divergence patterns in regulatory genes suggest differential gene flow in recently-derived species of the Hawaiian silversword alliance adaptive radiation (Heliantheae, Asteraceae). *Molecular Ecology* 16(19):3995-4013; **Cover photo**

Schranz, ME, Windsor, AJ, Song BH, **Lawton-Rauh A**. and T Mitchell-Olds. Comparative genetic mapping in *Boechera stricta* (Brassicaceae). *Plant Physiology* 144:286-298

2003 **Lawton-Rauh A**. Evolutionary dynamics of duplicated genes in plants. Invited review, *Molecular Phylogenetics and Evolution* 29:396-409

Lawton-Rauh A, Robichaux RH, and MD Purugganan. Patterns of nucleotide variation in homoeologous regulatory genes in the allotetraploid Hawaiian silversword alliance (Asteraceae). *Molecular Ecology* 12:1301-1313; **Cover photo**

2000 **Lawton-Rauh AL**, Alvarez-Buylla ER, and MD Purugganan. The molecular evolution of flower development. *Trends in Ecology and Evolution* 15(4):144-149

1999 **Lawton-Rauh AL**, Buckler ES, and MD Purugganan. Patterns of molecular evolution among paralogous floral homeotic genes. *Molecular Biology and Evolution* 16(8):1037-1045

PRIMARY SCIENTIFIC RESEARCH PRESENTATIONS, REPRESENTATIVE

International Union of Pure and Applied Chemistry (IUPAC), International Conference, Brugge, Belgium; Invited speaker (2019).

Carolina Gold Rice Foundation, Charleston, SC; Invited speaker (2018).

Texas A&M, College Station, TX; Joint Seminar: Soil & Crop Sciences, Biological Sciences, Invited talk and visit (2017).

Max Planck Institüt für chemische Ökologie, Special Anniversary Symposium, Invited speaker, Jena, Germany (2017).

USDA National Needs Fellow Program, Project Directors meeting, Purdue University, West Lafayette, Indiana, poster presentation and workshop participant (2017).

CROPS 2017-HudsonAlpha, Huntsville, AL; invited speaker, program committee (2017).

Global Herbicide Resistance Challenge meeting, Denver, CO; 2 invited talks and co-organizer and presenter for a workshop on translating genomics models to address weed adaptation (2017).

Colorado State University, Joint seminar: Biological Sciences & Crop Sciences, Invited talk (2017).

University of New Hampshire, Department of Biological Sciences, Dept seminar, Invited (2016).

UGA Plant Center Retreat, Unicoi Lodge, 3 posters presented by undergraduate, graduate and postdoctoral researchers in the Lawton-Rauh Lab (2016).

Amaranth Institute Meeting, Invited talk, Nashville, TN (2016).

Genomics of Adaptation to Human Contexts (Genetics Society of America meeting), Invited talk but had to reschedule due to conflict, Fort Collins, CO (2016).

Allied Genetics Conference (American Genetics Association/Genetics Society of America), Selected talk, Orlando, FL (2016).

Building a Transdisciplinary Culture of Research, Selected talk, Clemson Uni. (2016).

University of Western Australia; AHRI, Institute of Agriculture, Plant Biology Program, invited joint seminar, Perth, Australia (2015).

Resistance 2015, Rothamsted Research, Rothamsted, Harpenden U.K. Invited talk (2015).

Botany meetings, Edmonton, Canada, invited talk (2015).

Cotton Incorporated and the International Cotton Advisory Council, Cary, NC, invited talk (2015).

Evolution of Plant Phenotypes from Genomes to Traits, B-Debate, Barcelona, Spain, invited talk (2015).

Weed Science Society of America (WSSA), Lexington, KY; invited symposium talk and workshop (2015).

Plant and Animal Genome meetings, Invited talk (Weedy and Invasive Species), San Diego, CA (2015).

Uni. Georgia Plant Center Retreat, Unicoi, Georgia; invited symposium speaker (2014).

Society for the Study of Molecular Biology and Evolution (SMBE), Puerto Rico, (2014).

2nd Andina International Weedy and Invasive Species Workshop, Benasque, Spain (2014, talk and workshop program committee chair 2013-2014).

Weed Science Society of America (WSSA), Vancouver, British Columbia, Canada; invited talk, (2014).

Society for the Study of Molecular Biology and Evolution (SMBE); Chicago, Illinois, Invited posters presented by PhD candidates Kristin Beard and Kimberly Kanapeckas, (2013).

Second Annual Latin American Rice Symposium; Porto Alegre, Rio Grande do Sul, Brazil, invited talk and workshop participant (2013).

Weed Science Society of America (WSSA), Baltimore, MD, 2 invited talks (2013).

'Crop wild relative genomics: a key to unlocking diversity' workshop; Asilomar, CA (2012; invited talk) follow-up launch of DivSEEK International Network

Southeast Population, Ecology and Evolutionary Genetics (SEPEEG) meeting (organized and coordinated), several talks from my lab group (2012).

Monsanto, Chemistry Seminar Series, invited seminar (2012).

Washington University St. Louis, Dept. of Biological Sciences, invited Departmental Seminar (2012).

PRIMARY SCIENTIFIC RESEARCH PRESENTATIONS, REPRESENTATIVE (cont'd)

College of Charleston, Dept. of Biological Sciences, Invited Departmental Seminar (2012).
Invited and sponsored international workshop 'Raising the Bar on Weedy and Invasive Species Research', Emigrant, Montana, activities, mini presentations, and leadership (2012).
First Joint Congress on Evolutionary Biology (ESEB, SSE, SSB, ASN, CSE), Ottawa, Ontario, Canada; 3 talks including grad students (2012).
'Darwin Day' Biology Students Association Club, Clemson University, invited speaker (2012).
Weed Science Society of America (WSSA), Hawaii, talk and posters (2012).
Amaranthus Institute Meeting, Ames, Iowa, invited talk (2011).
USDA Project Directors meeting, Weedy and Invasive Species, Washington DC, invited talk (2011).
SSE, SSB, ASN joint 'Evolution' meetings, Norman, OK, talk (2011).
Weed Science Society of America, invited talk (2011).
Plant and Animal Genome meetings, Weedy Plant Genomics, invited talk (2011).
Supercomputing Conference, New Orleans, LA, invited talk (2010).
Southeast Population, Evolution, & Ecological Genetics, Cherry Lake, FL, student posters, talk (2010).
Clemson University, Dept. of Environmental Horticulture, Departmental Seminar (2010).
USDA Project Directors meeting, Entomology & Nematology, Washington, DC, poster (2010).
USDA Project Directors Meeting (Weedy and Invasive Species) and Weed Science Society Conference, Denver, CO, poster (2010).
University of Georgia-Athens, Dept. Plant Biology, invited Departmental seminar (2010).
Plant and Animal Genome meetings, Weedy and Invasive Species, invited talk (2010).
Southeast Population, Evolution, & Ecological Genetics, Dahlonega, GA, several talks from lab (2009).
Evolution Meeting (Joint SSE, SSB and ASN meeting), Moscow, ID, talk (2009).
Weed Adaptation: Bridging Evolutionary Genetics & Agriculture, Athens, GA, invited poster (2008).
Japan Ecological Society, Japan (invited talk, declined due to advanced maternity), (2008).
SC Marine Genomics Symposium, Clemson University, talk (2008).
Palmer Amaranth Roundtable, Little Rock, AR, invited talk (2007).
SC Marine Genomics Symposium, Hollings Marine Lab, talk (2007).
Southeast Population, Evolution, and Ecological Genetics, Tremont, TN, talk (2007).
Clemson University, Dept. Genetics & Biochemistry, REU program seminar (2007).
Joint Plant Biology meetings: ASPB, BSA, Chicago, Ill., invited talk, (2007).
5th Okazaki Biology Conference 'Speciation & Adaptation', Japan, invited talk (2007).
Clemson University, Dept. Biological Sciences, Departmental seminar (2007).
South Carolina Inst. for Bioinformatics Research Excellence meeting, Clemson (2007).
Plant and Animal Genomes conference, San Diego, CA, poster (2007).
Southeast Population, Evolution, and Ecological Genetics, Brown Summit, NC (2006).
South Carolina Inst. for Bioinformatics Research Excellence workshop, USC, SC (2006).
Genetics of Speciation Symposium, Vancouver, Canada (2006).
Clemson University, Dept. Genetics & Biochemistry, REU seminar (2006).
Gordon Research Conference on Molecular Evolution, Ventura, CA, selected poster (2006).
Clemson University, Dept. Horticulture Research Seminar (2006).
Southeast Ecology Population Genetics & Evolution Mtg., Hendersonville, NC, talk (2005).
Heidelberger Institut für Pflanzenwissenschaften, Universität Heidelberg, talk (2005).
Clemson University, Dept. Genetics, Biochemistry & Life Sciences, invited seminar (2004).
International Conference on Arabidopsis Research, Berlin, Germany, selected poster (2004).

PRIMARY RESEARCH PRESENTATIONS, REPRESENTATIVE (cont'd)

Evolution Meeting (Joint SSE, SSB and ASN meeting), Fort Collins, CO, talk (2004).
Max Planck Institute Symposium, Jena, Germany, talk (2004).
11th New Phytologist Plant Speciation Symposium, Antigonish, Nova Scotia, Canada, invited talk (2003).
Duke University Population Biology Series, Duke University, talk (2002).
Evolution Meeting (Joint SSE, SSB and ASN meeting), Urbana-Champaign, IL, talk (2002).
Evolution Meeting (Joint SSE and SSB meeting), Knoxville, TN, talk (2001).
Max Planck Institute for Chemical Ecology, Jena, Germany, talk (2001).
Southeastern Population, Ecology and Genetics, Mountain Lake Biological Station, poster (1999).
International Botanical Congress, St. Louis, MO, poster (1999).
Evolution Meeting (Joint SSE, SSB and ASN meeting), Vancouver, Canada, talk (1998).
Maize Genetics Meeting, Clearwater Beach, FL, poster (1997).
Undergraduate Science Research Symposium, Argonne National Labs, IL, talk (1996).
Missouri Academy of Sciences Undergraduate Research Symposium, Springfield, MO, talk (1996).
Maize Genetics Meeting, Pheasant Run, IL, poster (1996).

PRESS COVERAGE OF RESEARCH EFFORTS AND IMPACT

New York Times (February 2018). Finding a Lost Strain of Rice, and Clues to Slave Cooking: The search for the missing grain led to Trinidad and Thomas Jefferson, and now excitement among African-American chefs. Kim Severson.

Glimpse (Spring 2013). A pestilence of pigweed: Spreading hundreds of thousands of seeds, one plant can doom a crop. Where is its weakness?

MENTORING, INSTRUCTION, and ENGAGEMENT RECORD

GRADUATE STUDENT AND POSTDOCTORAL RESEARCHER MENTORING

Doctoral Dissertation Major Advisor, Clemson University

Kimberly Kanapeckas (Métris), Ph.D Genetics 2015, joined the lab 2011 and worked on a USDA funded weedy rice project and a Cotton Incorporated funded *Amaranthus palmeri* population genomics project. Following a position as Assistant Marine Scientist for the South Carolina Dept. of Natural Resources (SCDNR) Marine Resources Research Institute (Population Genetics Team supervisor), Kimberly is now a Senior Lecturer in the Department of Genetics and Biochemistry, Clemson University.

Kristin Beard, Ph.D Genetics 2014, joined the lab 2009 and studied 'Functional and Molecular Evolutionary Genetics of Candidate Herbicide Resistance Genes in the Plant Genus Amaranthus'. She was a TA for GEN-411 Population and Quantitative Genetics, laboratory course and is now involved in school boards in the Aiken, SC area.

Cynthia Climer (Vigueira), Ph.D Genetics 2011, worked on two projects: 'Impact of Population Structure on Genetic Variation in *Arabidopsis petraea* and *A. arenosa'* and 'the Evolutionary Dynamics and Management of Weedy Red Rice (USDA)'. She was a postdoc at Washington University-St. Louis, was a tenured Associate Professor at High Point University, and is now the Director of Curriculum and Graduate Programs at Washington University-St. Louis, Division of Biology & Biomedical Sciences.

Monica Muñoz-Torres, PhD Genetics 2009, joined the lab in 2007 and I served as her major while she completed her research and dissertation on comparative evolutionary genomics of HOX genes in Nasonia and bumblebee. Following postdocs at Georgetown University and Lawrence Berkeley National Laboratory, Monica is a visiting Associate Professor with tenure of Biomedical Informatics at Uni Colorado Anschutz Medical and recently recognized as a Kavli Fellow.

Sara Sarasua, PhD December 2012, joined the lab in 2011 to complete analyses on the impacts of population stratification on the detection of epidemiological trends in birth defects. Following a postdoc at the Greenwood Genetics Center (GGC), she is currently an Associate Professor with tenure in the Healthcare Genetics Interdisciplinary Doctoral Program at Clemson University.

Postdoctoral Research Associate Mentor, Clemson University

Lichun Cai, Postdoctoral Research Associate (August 2019-present); funded by the Clemson Research Fellows program for research funded through joint collaboration with the Rothamsted Research Institute (London, UK) and Bayer CropScience (Germany).

Eric Patterson, Postdoctoral Research Associate (2018-19); funded by the Clemson Research Fellows program for research funded through joint collaboration with the Rothamsted Research Institute (London, UK) and Bayer CropScience (Germany); currently a tenure track Assistant Professor at Michigan State University.

Margaret Fleming, Visiting Scientist then Postdoctoral Research Associate (2018-19); funded by the USDA-SCRI RosBREED2 grant for computational genomics across Rosaceae; currently a tenure track Assistant Professor at Michigan State University

Subodh Srivastava, Postdoctoral Research Associate (2016-17); funded by the USDA-SCRI RosBREED2 grant for computational genomics across Rosaceae. Currently a staff Senior Research Scientist for USDA APHIS Phytopathology Unit in Beltsville, Maryland.

Dissertation Committee Member, Graduates (14 PhD, 2 MS)

Jason Paul-Joines, PhD Biological Sciences 2025, Clemson Uni., Advisor: Saara DeWalt
Jacklyn Thomas, PhD Genetics 2023, Advisor: Julia Frugoli, Genetics and Biochemistry
Christopher Rouse, PhD Crop Science 2018, Advisor: Nilda Burgos, Department of Crop, Soil, and Environmental Sciences, University of Arkansas Fayetteville
Reiofeli Salas, PhD Crop Science 2017, Advisor: Nilda Burgos, Department of Crop, Soil, and Environmental Sciences, University of Arkansas Fayetteville
Shilpa Singh, MS Cell and Molecular Biology 2017, Advisor: Nilda Burgos, Department of Crop, Soil, and Environmental Sciences, University of Arkansas Fayetteville
Sergio Marchant, PhD Biological Sciences 2014, Advisor: Peter Marko, Dept. Biological Sciences
Claudia Holguin, PhD Plant and Environmental Sciences 2014, Advisor: Paula Agudelo, Dept. Plant Environmental Sciences
Caitlin Rinz, PhD Genetics 2014, Advisor: Leigh Anne Clarke, Genetics and Biochemistry
Dong-Hoon Lee, PhD Genetics 2014, Advisor: Weiguo Cao, Genetics and Biochemistry
Te Ming (Paul) Tseng, PhD Cellular and Molecular Biosciences, Advisor: Nilda Burgos, Dept. Cellular and Molecular Biosciences, University of Arkansas Fayetteville.
Jacob Spangler, PhD Genetics, Advisor: Alex Feltus, Dept. Genetics and Biochemistry
Leah Williamson, PhD Genetics, Advisor: Harry Kurtz, Dept. Genetics and Biochemistry
Megan Leach, PhD Plant and Environmental Sciences, Advisor: Paula Agudelo, Dept. Plant and Environmental Sciences
Shenghua Fan, PhD Genetics, Advisor: Albert Abbott, Dept. Genetics and Biochemistry
Samuel Forrest, PhD Genetics, Advisor: Albert Abbott, Dept. Genetics and Biochemistry
Holly Nance, PhD Biological Sciences (2010), Advisor: Peter Marko, Biological Sciences
Bode Olukulu, PhD Genetics, Advisor: Albert Abbott, Dept. Genetics and Biochemistry
Andrew Tabeau, MS Entomology (2009), Advisor: Patricia Zungoli, Dept. Entomology

UNDERGRADUATE STUDENT MENTORING AND ADVISING, REPRESENTATIVE, 2005-2018 (35+ students)

100% placement of all research interns into professional schools, graduate schools, medical/medical profession schools, law school, K-12 teaching, and industry positions immediately following earning degrees

Sydney Posey, undergrad research intern, then lab manager, currently staff scientist at Greenwood Genetic Center (2017-18).
Anne Carroll, Honors Biochemistry undergrad research intern, MD Albert Einstein College of Medicine.
Brooke Escoe, undergrad research intern (2018).
Megan Onyundo, NSF-REU 'Genomes to Phenomes' intern from Providence College, currently PhD student Integrative Biology UC-Berkeley (2017).
Jakob Wenzel, NSF-REU 'Genomes to Phenomes' intern from Rose Hulman Institute (2017).
Paige Miller, undergrad research intern (2016-17).
Courtney Vandermeersch, undergrad research intern. MD MUSC, Currently Physician (2016).
Austin Major, undergrad research intern, currently in pharmaceuticals industry (2015-16).
Virginia Baker, undergrad research intern (2014- 15).
Kelsey Zielinski, undergrad research intern. M.S. Crop Science NCSU (2014)

UNDERGRADUATE STUDENT MENTORING AND ADVISING, REPRESENTATIVE, 2005-2018 (cont'd)

Emily McMacken, Honors Genetics undergrad research intern, M.S. Science Education, Clemson University, currently academic advisor at the Academic Success Center, Clemson (2013-15).

Katerina Lay, Honors Genetics undergrad research intern, PhD Genetics as USDA-National Needs Fellow at Michigan State University, Postdoctoral scientist at Syngenta (2011-15).

Sarah Barfield, research intern, HHMI/SCLife summer intern Summer 2011, SPRI High School intern Summer 2009, DW Daniel High School Service Learning student Fall 2007-08, EUREKA! Honors intern Summer 2010. PhD University of Texas-Austin (EEB) on coral population genomics (2007-2013).

Caroline Thomas, undergrad research intern, University of Maryland Law School (2013).

Kirby McCall, undergrad research intern, Pharm.D. USC-College of Pharmacy (2012-13).

Kameryn McCarty, undergrad research intern, PhD Human Genetics, Emory University (2018), currently staff scientist at Greenwood Genetic Center (2012-13).

Christopher Robinson, undergrad research intern (2011-12).

Anna Rollings, undergrad EUREKA! Honors intern (2011).

Kelly Robinson, undergrad research intern. PhD Pharmacogenomics Univ Maryland (2010-11).

Thomas Lane, undergrad research intern. MS Bioinformatics, University of Tennessee. Currently VP and Co-Founder of Sequana Health (2010-11).

Kyle Gettler, undergrad research intern with Calhoun Honors, SCLife/HHMI Grants. PhD Yale University Gruber Science Fellow (2018), Postdoc Fellow and now Associate Scientist, Icahn School of Medicine at Mount Sinai (2018-present) (2009-11).

Mary Jones, undergrad Honors research intern, SCLife/HHMI Grants. Dental School. (2009-12).

Jessica Gancar, undergrad researcher, SCLife/HHMI Grant. Osteopathic Medical School. (2009-10).

Amanda Allison, undergrad researcher intern with SCLife/HHMI internship. PhD Biology at University of Tennessee, Knoxville (2009-10).

Steven Vensko, undergrad researcher and intern with SCLife/Howard Hughes. PhD Genetics NCSU. Currently bioinformatician in personalized medicine company (2008-09).

Devleena Kole, SPRI undergrad research intern. M.S. Bioengineering at University of California (2009).

Alanna Slack, EUREKA! undergrad research intern, Honors B.S. Wildlife Management Honors (2009).

Meredith O'Toole, EUREKA! undergrad research intern. Honors English (2009).

Christina Hawbaker, NSF-REU undergrad Research Intern from Willamette University. M.S. in Genetics Counseling, University of Utah. Genetic Counselor (2008).

Chelsea Reighard, Honors undergrad research intern, HHMI/SCLife and Calhoun Honors College grants. Rhodes Scholar finalist 2008, Teach for America participant. M.D. University of Michigan School of Medicine. Resident Physician Pediatric Ophthalmology, University of Michigan (2007-08).

Jennifer Smith, NSF-REU undergrad research intern from Francis Marion University, NSF-REU Program in Molecular Genetics and Biochemistry. PhD Molecular Genetics University of Florida (2007).

Paige Catotti, SPRI Summer Program for Research Intern from the S.C. Governor's School of Science and Mathematics. B.S. Honors Genetics at Clemson University (2012). M.S. Horticulture University of Georgia (2007).

Katie Horton, Seneca High School Service Learning Project research intern and Clemson University honors Chemistry research intern. Currently a High School science teacher (2006-07).

Margaret Beaudrot, Honors Undergrad Research Intern, SCLife/Howard Hughes internship, MD MUSC. Resident OB/GYN Physician at University of Cincinnati (2006-07).

Sarah Walker, Undergrad Research Intern with SCLife/Howard Hughes internship (2006-07). Currently a licensed Physician Assistant at Roper St. Francis Hospital, Charleston SC (2006-07)

General advisor, ~ 30 undergrad students/year, Department Genetics and Biochemistry (2006–09).

TEACHING

Many research outcomes, materials, and tools from my research program folded into case studies and materials for courses, workshops, and guest lecturers that I developed and presented. This includes a highly integrated lecture and lab course series on population and quantitative genetics for advanced undergraduate and graduate students that involved training and mentoring graduate teaching assistants in biochemistry, molecular biology, and genetics new to the field of population and quantitative genomics and theories of molecular evolution.

New Course Development, Clemson University

New advanced undergraduate and graduate level course: 'Population and Quantitative Genetics' GEN 4100/Honors/6100: (23-65 students per class), annual 2016-18

New advanced undergraduate and graduate level practical course: 'Population and Quantitative Genetics' GEN 4110/6110: (20-42 students per class), annual 2006-2017

New graduate course: 'Methods of Analysis in Population Genetics and Molecular Evolution' GEN-830; (5 - 7 graduate students), 2007, 2009

New graduate course: 'Advanced Special Topics in Biochemistry and Genetics' GEN/BIOCH-8900: 10-15 graduate students), Spring 2011, Spring 2012, Fall 2013

New graduate course: 'Advanced Genetics' GEN-8140, Team taught: Fall 2016, 2018.

Other Courses Taught

Clemson University

GEN-8140 Adv. Genetics, 2 weeks 'Population & Quantitative Genetics', 2010-11, 2014/16/18
GEN-8900 Advanced Special Topics in Genetics & Biochemistry, 2011-13
GEN-4100 Population and Quantitative Genetics (upper undergraduate/graduate), Fall 2006-18
GEN-4100H/GEN-6100 Honors Population and Quantitative Genetics, Special topics, Fall 2006-18
GEN-4110/6110 Population and Quantitative Genetics Laboratory Course, Fall 2006-17
GEN-4910, BIOCH-4910, and Honors sections: Directed Undergraduate Research, Annually 2006-19
GEN-830 Methods of Analysis in Population Genetics and Molecular Evolution, 2007, 2009
GEN/BIOCHEM-9910,-8910 Genetics and Biochemistry Graduate Student Research, 2005-18

Clemson University Guest Lectures

Graduate genetics refresher course for clinical geneticists and physicians: Basics and Applications of Population and Quantitative Genetics in Clinical Research', Greenwood Genetic Center, May 2017
GEN-450/650 Comparative Population Genetics 'Phylogenetic Inference' section, Fall 2007
GEN-440/640 Bioinformatics, Spring 2006
BIO-330 Evolutionary Biology, Spring 2006
GEN/BIOCH-103 Careers in Genetics and Biochemistry, Fall 2005, Fall 2008

Friedrich Schiller Universität (Jena, Germany)

Genetics Practical Short Course (Max Planck Institute for Chemical Ecology)
"Microsatellite Analysis of the Endangered Mauna Kea Silversword" April-May 2004
Guest Lecturer
"Demographic Forces Shaping Genetic Variation", Evolutionary Genomics Series, 2004
"Developmental Genetics", substitute for Prof. Dr. Günter Theissen, January 2004

North Carolina State University

General Genetics Laboratory, including development of new lab module, Fall 2000
General Genetics Recitation, Spring 2000
Preparing the Professoriate, selected participant, teaching workshop series, 2000-2001

University of Missouri-Columbia Undergraduate TA, Plant Taxonomy, Spring 1997

ACADEMIC AND HIGHER EDUCATION SERVICE RECORD

GLOBAL & NATIONAL RESEARCH LEADERSHIP ACTIVITIES, SINCE 2005

American Public & Land Grand Universities (APLU), Faculty Affairs (2019-present)
American Council on Education (ACE) Engage participant (2019-present)
Board of Directors voting member, Carolina Gold Rice Foundation, (April 2018-present)
DivSeek partnership (Clemson University signatory) and working group member for section on Translational approaches and tools for minor and underutilized crops (2014-present)
International Weed Genomics Consortium, Proposal committee (2016-2019)
CROPS 2017, CROPS 2019 (HudsonAlpha), Program committee (2016-17, 2018-19)
International Weed Science Congress, Scientific Program committee (2015-16)
NSF/BDebate "Evolution of plants: from genomes to phenotypes" workshop (Barcelona, Spain, 2015)
Amaranth Institute, Board Member (2014-16)
Policy Forum Participant, National Research Council forum on resistance, Washington, D.C. (2014)
Program Committee Chair, Second International Workshop on Weedy and Invasive Species (2013-14; Workshop in Benasque, Spain (2014)
Panelist and participant, 2nd Annual Latin American Rice Symposium, Porto Alegre, Rio Grande do Sul, Brazil (2013)
Crop wild relative genomics, workshop, Asilomar, CA (2012)
Southeast Population, Ecological, and Evolutionary Genetics (SEPEEG) regional group meeting, Organizer and Facilitator for 2012 meeting, Clemson Outdoor Lab (2012)
Raising the Bar: Improving the standard and utility of weed/invasive plant research, Invited participant, Emigrant, MN (2012)
Palmer Amaranth Roundtable, Little Rock, AR (2007)
Coordinator, Hawaiian Silversword Alliance Workshop (Organizer, 2006; Participant, UC-Berkeley 2007)
MBL Woods Hole, Admissions committee, Workshop on Molecular Evolution (2006, 2007)
MBL Woods Hole, Assistant/consultant, Workshop on Molecular Evolution (2005)

PROFESSIONAL ACADEMIC RESEARCH SOCIETIES, ACTIVE MEMBERSHIPS, SINCE SEPTEMBER 2005

American Association for the Advancement of Science (AAAS)
Genetics Society of America (GSA)
Sigma Xi
Phi Kappa Phi (2018)
Omicron Delta Kappa (Clemson Circle, Faculty Secretary, 2012-14)
Previous memberships: Society for the Study of Molecular Biology & Evolution (SMBE), Society for the Study of Evolution (SSE), Weed Science Society of America (WSSA), International Weed Science Society (IWSS), Botanical Society of America (BSA)

HONORS AND AWARDS

Research

Nominee: Sigma Xi Young Investigator Award (2010), Nominee: Sloan Fellowship (2006)
Marine Biological Laboratory Workshop on Molecular Evolution, Selected Participant (2004)
Kenneth R. Keller Award for Excellence in Doctoral Thesis Research, Nominee (2003)
Sigma Xi Grant-in-Aid of Research (May 2001)
Professor Stanley Zimmering Prize for Outstanding Undergraduate Research, Biology (1997)
Howard Hughes Medical Institute Undergraduate Research Fellowship (1995-96)
HHMI Travel Award (1997) to attend the international Maize Genetics Conference
NSF/REU Undergraduate Research Fellowship (Summer 1994)
National Science Scholar, Fellowship, Missouri Recipient (1992-97)

Academic and Professional Development, Representative

Alan Schaffer Faculty Senate Service Award (2021)
'Hall of Fame' Alumni Award, Fort Zumwalt South High School, St. Peters, MO (2006)
NCSU Preparing the Professoriate, selected fellow (2001-02)
University of Missouri Curators Scholar (1992-97)
Thomas Simons Scholar (1992-1996), Tandy Technology Scholar (1992)
MU Freshman Engineering Scholarship (1992-93), George Washington Carver Award (1992)

Honor Societies

Phi Kappa Phi, Clemson Chapter, Faculty inductee (2018-present)
Omicron Delta Kappa, Clemson Circle, Faculty secretary (2012-14), Member (2012-present)
Sigma Xi, Full member (2006-present)
Graduate: Gamma Sigma Delta Honor Society (1998)
Undergraduate: Golden Key National Honor Society (1994), Phi Eta Sigma (1993)
John Danforth International 'I Dare You' Youth Leadership Award (1991)

Teaching

North Carolina State University, Department of Genetics Outstanding Teaching Award (May 2001)

UNIVERSITY AND PUBLIC SERVICE, SINCE SEPTEMBER 2005

Reviewer

Journals (representative)

Contributing reviewer:

Proceedings: National Academy of Sciences; Nature Plants; Molecular Biology and Evolution; Molecular Ecology; Heredity; Genetica; Molecular Phylogenetics and Evolution; New Phytologist; International Journal of Plant Sciences; American Journal of Botany; Weed Research; Weed Science; Tree Genetics and Genomics; Invasive Species Management; Evolution; BMC Evolutionary Biology; BMC Genomics; BMC Plant Biology; Plant Physiology

Editor: Weed Science (2012-15), ISRN Evolutionary Biology (2012), Frontiers Plant Genetics and Genomics (2011-12)

Funding Agencies

Grant panelist

National Science Foundation, 2008 ('evolutionary biologist')
National Science Foundation, 2010 ('plant evolutionary geneticist')
National Science Foundation, 2011 ('evolutionary geneticist')
National Science Foundation, 2012 (plant genomics)
National Science Foundation, 2012 (evolutionary processes)
USDA CAP, 2014 ('population geneticist')
National Science Foundation, 2018, 2021, 2022 ('plant diversity genomics')

Site visit committee member/panelist, National Science Foundation, 2012
Multi-institutional grant (~$40 million) ('evolutionary genomics')

ad hoc invited reviewer:

National Science Foundation: Population Genetics Cluster, Molecular & Cellular Biology Program, Environmental Genomics, NSF-Gates BREAD
Clemson University: Experiment Station, Curriculum Innovation Incentive, SC SeaGrant

Committees, Clemson University (prior to position in Provost Office August 2018)

University

Note: during **Faculty Senate leadership** service 2016-18 as VP/President-elect and President, also represented the faculty at many public events to present senate reports and represent the faculty (and university).

Chair, Ombuds Committee (2018)
Chair, Research Misconduct Case Committee (2018)
Chair, Faculty Senate Bylaws, working group and Committee (Summer 2018)
Faculty Senate Advisory Committee (appointment, immediate past President; 2018)
Faculty Senate President (2017-18)
Faculty Senate Vice President, President-elect (2016-18)
Chair, Faculty Senate Research and Scholarly Work Committee (2014-16; Co-chair 2016-17)
Search Committee, Assoc. Provost Entrepreneurship and Innovation (2016-17)
Faculty Senate ad hoc Diversity and Inclusion Committee (2016-17)
Task Force on University Research Safety Culture (2016-17)
Search Committee, Molecular Breeding Assistant Professor (2015-16)
Clemson 2020*Forward* Research Prioritization committee, Faculty Senate appointee (2015)
Uniform Guidance Committee, Senate Appointee (2014-2018)
Class of '39 Award Selection Committee, Senate appointee (2014)
Provost Task Force on Internationalization, Senate appointee (2013-14)
Faculty Senate Policy subcommittee (2013–14)

Committees, Clemson University (prior to position in Provost Office August 2018) (cont'd)

College Committee Service

Chair, College of Science Bylaws Committee (Summer 2018)
Member, College of Science Mentoring Coordination Group (2018, 2021-22)
Science*Forward* Strategic Plan Committee, chair of the Discovery subcommittee (2017)
Faculty Senator, College of Agriculture, Forestry and Life Sciences (CAFLS), elected (2013-16)
Committee on Public Service Activities (PSA) and College (CAFLS) strategic relationship (2014-15)
Chair, Clemson University Genomics Institute (CUGI) Faculty Advisory Committee (2013-17)
CAFLS rep., Elected, Univ Graduate Fellowships/Awards Committee, (2012-13)
Scholarships & Awards Committee, College member 2006-11, College Chair 2011-13, University Committee 2011-13 (2006-13)
Member and participant, South Carolina Marine Genomics Initiative (2007-09)

Department

Executive committee as Associate Department Chair (2018)
Chair, Global Engagement committee (2015-18)
Tenure-Promotion-Review Committee, chair and service on subcommittees (2011-2018)
Member, Genetics and Biochemistry Executive Committee (2012-13)
Chair, Departmental Chairperson Performance Review (2010)
Member, Genetics and Biochemistry Graduate Program Coordination Committee (2006-13)
Member, Functional Genomics Faculty Search Committee (2008-09)
Member, Department of Genetics and Biochemistry Executive Committee (2007-08)
Member, Doctoral Dissertation Committees (various, see list under students)
Member, Bioinformatics Faculty Search Committee (2006-07)

College and University, Graduate and Undergraduate, Representative

NCSU Genetics Grad Student Assoc., Vice President 1999-2000; President (1999-2000)
NCSU Graduate Student Grievance Panel, Student Representative (1999)
NCSU Graduate Student Senator, Chair of the Political Action and Response Committee (1999-2000)
University of Missouri Undergraduate Student Senator (1992-94)

Other Public-facing Scientific Professional Service, Clemson, SC (prior to August 2018)

Presented invited public talks locally, most recent: 'Science on Tap' 'Genetic Footprints of Crop Domestication', Viva Wine Bar (Summer 2018)
Mentor/Research Director for Sara Barfield's (DW Daniel High School senior) continued research project presented at the SC Academy of Sciences (Winter 2010)
Presented an invited talk on Evolutionary Genomics Research using sequencing technology to the DW Daniel High School Junior Academy of Sciences (2009)
Organized and presented 'Crop-wild species hybridization: population and evolutionary genetics at work!' at 'Biotechnology and the New Green Revolution' workshop for High School teachers (2009)
Mentor/Research Director for SPRI interns, see details in interns section (2007-09)
Developed and presented a workshop on population genetics and teaching tools to in-service High School teachers, Greenwood Genetics Center, (Summer 2008)
Developed and presented a workshop on NCBI website resources and freeware DNA sequence analysis software for teaching evolutionary genetics to in-service High School teachers, (Summer 2007)
Judge, Anderson-Oconee-Pickens Counties (AOP) Science Fair (2006-07)
Mentor/Research Director for a Seneca High School Service-Learning Project, Katie Horton (Fall 2006)