

Summer Blanco

Athens, Georgia | (626) 506-5765 | summerblanco847@gmail.com

Education

Ph.D. in Plant Biology & Biology Education, University of Georgia (UGA). **May 2026**

B.S. in Biology (Botany option), California State Polytechnic University, Pomona (CPP) **2020**
Honors: *Summa Cum Laude*

Research Interests

Plant evolution, genomics, phylogenetics, biology education research, qualitative research, racial equity, undergraduate & graduate student experiences in STEM

Fellowships

2022-2023 Graduate Fellow, American Association of Hispanics in Higher Education

2021-2025 Presidential Fellow, UGA **\$10,000 stipend supplement**

2021-2025 Graduate Research Fellow, National Science Foundation **\$34,000/yr.**

2020-2021 Post-Baccalaureate Research Fellow, Michigan State University

2017-2019 NIH-Minority Biomedical Research Support RISE Fellow, CPP **\$7,488/yr.**

2018 Summer Research Opportunities at Harvard **\$5000**

2016-2018 Achieve Scholars Undergraduate Research Fellow, CPP **\$1000/yr.**

2016-2017 Louis Stokes Alliance for Minority Participation (CSU-LSAMP) Undergraduate Research Fellow, CPP **\$2000**

Awards

2025 Cross Future Leaders Award, American Association of Colleges & Universities

2023 Palfrey Student Research Grant, UGA Department of Plant Biology **\$1000**

2020 Dr. Hiemenz Award, CPP Science Educational Enhancement Services **\$2000**

2019 1st Place Woody Ornamental ID, National Collegiate Landscape Competition

2018 Harold Lint Memorial Scholarship, CPP Department of Biological Sciences **\$750**

2018 Dr. Wu Scholarship, CPP Department of Biological Sciences **\$750**

2018 Marilu Johnson Scholarship, San Diego Flower and Plant Society **\$800**

2018 1st Place Cut Flower & Foliage ID, National Collegiate Landscape Competition

- 2017** Future Teacher Nominee, CPP College of Education Celebration of Teaching
- 2017** American Florists' Exchange Scholarship, American Floral Endowment **\$2200**
- 2017** Travel Grant recipient, American Society of Plant Biology **\$500**
- 2017** Program Recognizing Outstanding Undergraduate Distinction Award, CPP Louis Stokes Alliance for Minority Participation **\$500**

Research Experience

2025-Present: Research Consultant, Rooting Out Oppression & Sharing Our Outcomes Transparently (ROOT&SHOOT) Research Coordination Network

- Developed and secured funding for a qualitative research study exploring the experiences of people of color across six major plant science societies (American Phytopathological Society, American Society of Plant Biologists, American Society of Plant Taxonomists, Botanical Society of America, International Society for Molecular Plant Microbe Interactions, Maize Genetics Cooperation, North American Arabidopsis Steering Committee).
- Designed the interview protocol and conducted 39 in-depth (90-minute) semi-structured Zoom interviews with plant science trainees and professionals, including undergraduates, graduate students, postdocs, industry scientists, and faculty.
- Delivered monthly progress reports to the project steering committee.
- Managing an ongoing research workflow – supervising undergraduate assistants in transcript cleaning and qualitative coding.

2023-2025: Graduate Researcher, Biology Education Research

Supervisor: Dr. Tatiane Russo-Tait, University of Georgia, Athens, GA

- Conducted a secondary data analysis of qualitative interviews from a longitudinal study exploring the high school and college experiences of a racially/ethnic diverse group of young women interested in engineering.

2021-2025: Graduate Researcher, Plant Biology

Supervisor: Dr. Jim Leebens-Mack, University of Georgia, Athens, GA

- Led phylogenomic study of the genus, *Geranium*. Procured tissues for 70+ accessions from international herbaria, botanic gardens, and research institutions, extracted DNA, prepared Illumina libraries, and performed target-capture of Angiosperm-353 loci. Conducted phylogenomic analysis of sequencing data (i.e., HybPiper, IQ-Tree, ASTRAL) on High Performance Computing cluster.
- Collaborated on study investigating Geraniaceae genome evolution. Performed high molecular weight extraction for PacBio HiFi sequencing, assembled and annotated the genomes of *G. maculatum* and *Pelargonium citronellum* (i.e., GenomeScope, HiFiASM,

BRAKER), and assessed whole genome duplication, synteny, and gene family evolution (i.e., wgd, GENESPACE, OrthoFinder).

2020-2021: Post-baccalaureate Research Fellow

Supervisor: Dr. Erich Grotewold, Michigan State University, East Lansing, MI

- Extracted maize stalk tissues metabolites for a GWAS investigating phenolic compound biosynthesis. Assisted with molecular cloning for maintaining a maize transcription factor open reading frame collection.

Summer 2019: Technical Services Intern

Supervisor: Dr. Todd Cavins & Dr. Will Healy, Ball Horticultural Company, West Chicago, IL

- Conducted greenhouse studies to evaluate the effect of rooting substrate and mist duration on rooting speed and uniformity for floriculture crop species.

Summer 2018: Summer Research Opportunities at Harvard Intern

Supervisor: Dr. Elena Kramer, Harvard University, Cambridge, MA

- Developed pollen germination protocols for *Aquilegia coerulea* to assess the feasibility of a recently published novel transformation protocol.

2016-2018: Undergraduate Research Assistant

Supervisor: Dr. Bharti Sharma, California State Polytechnic University, Pomona, CA

- Assisted with histological sectioning of developing floral organs to determine the timing of the transition to flowering in *Aquilegia coerulea*.

Publications

Blanco, SR, Ortega, J., & Russo-Tait, T. “I don’t have white privilege, but I definitely do have a Latino privilege”: How Latinas Negotiate Racial Identity and Navigate Hegemonic Ideologies in Engineering. (in review). *Journal of Engineering Education*.

Russo-Tait, T, **Blanco, SR**, Bonilla-Silva, E. (2025) Political action is now essential for US scientists. (accepted). *Nature Human Behavior*.

Russo-Tait, T, **Blanco, SR**, Bonilla-Silva, E. (2025) US should reject color-blind racial ideology. *Science*. DOI: 10.1126/science. ady795.

Rentsch, JD, **Blanco SR**, Leebens-Mack, JH. (2024) Comparative transcriptomics of Venus flytrap (*Dionaea muscipula*) across stages of prey capture and digestion. *PLOS ONE* 19(8): e0305117. <https://doi.org/10.1371/journal.pone.0305117>

Manuscripts in preparation

Lones, L, **Blanco, SR**, Adebayo, Y, Yoshinaga, R, Armenta, R, Rice, M. Examining the community cultural wealth of Black undergraduates in STEM at a Hispanic Serving Institution. (To be submitted to *International Journal of STEM Education*).

Research Presentations

- Apr. 2026** Engineering Education Reinforces Monolithic Constructions of Latino/a/e/x Identity and Stifles Critical Consciousness. *Accepted Paper presentation at the AERA Conference in Los Angeles, CA.*
- Jul. 2025** “I don’t have white privilege, but I definitely do have a Latino privilege”: Beyond Monolithic Representations of Latinas in STEM. *Oral Presentation at Botany 2025 Conference in Palm Springs, CA.*
- Jul. 2025** Phylogenomics and preliminary genome assembly reveal WGD across the Geraniaceae. *Oral Presentation at Botany 2025 Conference in Palm Springs, CA.*
- June 2024** Phylogenetic reconstruction of the genus *Geranium* using the Angiosperms353 probe set. *Poster Presentation at Botany 2024 Conference in Grand Rapids, MI.*
- Mar. 2024** An Intersectional, Longitudinal Analysis of Latiné Girls' Critical Consciousness. *Peer-reviewed paper presentation at 2024 National Association of Research in Science Teaching in Denver, CO.*
- Jul. 2022** The Colors of Pollen: Using Citizen Science to Survey Anther Color Variation in *Geranium*. *Poster Presentation at Botany 2023 Conference in Anchorage, AK.*
- Jul. 2022** Comparative transcriptomics of Venus flytrap (*Dionaea muscipula*) across stages of prey capture and digestion. *Poster Presentation at the UNAM Agavoideae Conferences and Bioinformatics Workshop in Mexico City, MEX.*
- Aug. 2018** Pollen Magnetofection: Developing a Novel Transformation Technique for *Aquilegia coerulea*. *Poster presentation at the Leadership Alliance National Symposium Research Conference in Hartford, CT.*
- Aug. 2017** Techniques to Understand Floral Organ Abscission in *Delphinium* Species. *Oral Presentation at the CPP NIH-MBRS Summer Research Symposium in Pomona, CA.*
- June 2017** Morphological Studies to Understand Transition to Flowering in *Aquilegia coerulea*. *Poster Presentation at the American Society of Plant Biologists Annual Conference in Honolulu, HI.*

Invited Talks

- June 2025** Speaker, NSF GRFP Application Boot Camp, *Graduate school event at UGA.*
- Feb. 2025** Russo-Tait, T & **Blanco, SR**, Color-evasive Ideology and Critical Consciousness in STEM, *Oral presentation for Social Justice in STEM Education Seminar Series at Tufts University (Virtual event).*

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- July 2024** Panelist, Demystifying the NSF Fellowship Application Process, *American Society of Plant Biology Early Career Plant Scientists (Virtual event)*.
- July 2024** Panelist, Applying to Graduate School, *Research & Extension Experience for Undergraduates event at UGA*.
- July 2023** Panelist, Preparing for Grad School, *Summer Undergraduate Research Experience in Neuroscience program event at UGA*.
- July 2022** Panelist, How to Apply to Graduate School, *Research & Extension Experience for Undergraduates event at UGA*.
- Mar. 2022** Speaker, Rose, Bud, and Thorn: Reflections on pursuing a PhD in Plant Biology, *NIH Minority Biomedical Research Support program event at CPP*.
- July 2022** Panelist, Graduate School Primer: How to Navigate the Challenges of Academia, *American Society of Plant Biologists Annual Conference in Portland, OR*.
- Sept. 2021** Panelist, Navigating Your Fellowship Application, *American Society of Plant Biology Early Career Plant Scientists Section (Virtual event)*.

Service

- 2025-2026** Diversity, Equity, Inclusion Committee, Department of Plant Biology, UGA
- Sept. 2025** Organizer, “Science Speaks: Getting Lawmakers to Listen”, In-person Workshop with Science for Georgia
- June 2025** Organizer, “Things Can Be Better: How to Change Minds and Fight Misinformation”, In-person Workshop with Science for Georgia
- 2025** Director, Coalition of Athens Scientist
- 2025** Reviewer, CBE: Life Sciences Education’
- Spr. 2025** Organizing Committee Member, Cultivating a Culture of Inclusive Excellence in Plant Science 4-part Online Symposium Series, Sponsored by ROOT&SHOOT
- 2025** Communications Co-Chair, Latino Research Interest Group (LARIG), National Association for Research in Science Teaching (NARST)
- 2024-2025** Working Group Member, Culturally Relevant Mentor Training Curriculum Development, ROOT&SHOOT Research Coordination Network
- Oct. 2024** Co-Organizer, “Unpacking Anti-Blackness in Latinidad & it’s Impact on STEM”, NARST LARIG Virtual Panel Event
- 2024** Founder, Athens-Clarke County Seed Lending Library
- 2022** Organizer, Integrated Plant Sciences Diversity Preview Week, UGA
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- 2021-2024** VP of events, Athens Science Café, UGA
- 2021-2022** Teaching and Outreach Chair, Plant Biology Graduate Student Association, UGA
- 2021** Diversity, Equity, and Inclusion subcommittee, Early Career Plant Scientists section, American Society of Plant Biology
- 2020** Co-Founder, College of Science Voices of Color Affinity Group, CPP

Teaching

- Fall 2025** Lecture Teaching Assistant, Bioinformatics and Omics (BINF 4550/6550), UGA
- Spr 2023** Lecture Teaching Assistant, Flowers (P BIO 3270), UGA
- Fall 2022** Instructor of Record, Principles of Biology II Lab (BIO 1108L), UGA
- 2019** Ernest Prete Jr. K-12 STEM Education Senior Mentor, CPP
- 2018** Ernest Prete Jr. K-12 STEM Education Teaching Fellow, CPP

Mentorship

- 2024** PLANTS mentor, Botanical Society of America Annual Conference
- 2023-2024** Research Mentor, Jessica Ortega, Post-baccalaureate Research Assistant
- 2022-2023** Research Mentor, Fatima Islam, LSAMP Undergrad Research
- 2021** Mentor, Cientifico Latino Graduate School Mentorship Initiative
- 2016-2020** Peer Mentor, Science Educational Enhancement Services
- 2016-2018** Peer Mentor, Achieve Scholars, CPP

Training & Certifications

- 2023** Research Mentor Certification, Center for the Integration of Research, Teaching, and Learning (CIRTL) Network
- 2023** Instructor certification (Research Computing), Software Carpentries

Professional Societies

Botanical Society of America (BSA)
Society for the Study of Evolution (SSE)
Society for the Advancement of Biology Education Research (SABER)
American Educational Research Association (AERA)
National Association of Research in Science Teaching (NARST)

References

Dr. Tatiane Russo-Tait

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