

Curriculum Vitae

Sire M Kassama

skassama@ucdavis.edu

Education

University of California – Davis
Ph.D. Candidate

September 2019 - Present

University of Central Florida
B.S. Biotechnology

August 2015-May 2019

Experience

Graduate Researcher

Dr. David Mackill and Dr. Alana Firl, Department of Plant Sciences, University of California Davis

August 2019 - Present

- Assessing diverse germplasm of *Theobroma cacao* for drought resistance traits through high-throughput phenotyping methodology
- Evaluate the soil microbiome of cacao for beneficial fungi and bacteria in drought stress

Undergraduate Researcher

Dr. Anna Savage and Dr. John Hart, Department of Biology, University of Central Florida (UCF)

August 2016 - April 2019

- Uncovering the genetic basis for an important seedling root system trait in common bean
- Perform genome wide analysis using a panel of 40,000 SNP

Undergraduate Intern

Dr. P. Stephen Baenziger, Department of Agronomy and Horticulture, University of Nebraska – Lincoln (UNL)

June 2018 - August 2018

- A Genetic Conundrum: an evaluation of a wheat breeding selection program
- Statistical analyses on herbicide-resistant wheat trials

Undergraduate Researcher

Dr. Klaas Van Wijk, Department of Plant Biology, Cornell University

June 2017 - August 2017

- Evaluating the roles of flavin reductase related and ubiquinone methyl transferase related proteins in *Arabidopsis thaliana*
- Perform protein extraction to isolate target proteins for further analysis
- Perform Quantitative PCR to confirm presence of multiple genes

Grants

2018 Uncovering the genetic basis for an important seedling root system trait in common bean (\$900); Undergraduate Research Grant, Office of Undergraduate Research, University of Central Florida

Honors and Awards

2019 National Science Foundation Graduate Research Program Fellow
2019 Eugene Cota-Robles Graduate Fellow
2018 Golden Opportunity Scholar
2017 McNair Scholar, University of Central Florida

Publications

Andrews, E. M., **Kassama, S.**, Smith, E. E., Brown, P. H., & Khalsa, S. D. S. (2021). A review of potassium-rich crop residues used as organic matter amendments in tree crop agroecosystems. *Agriculture*, 11(7), 580.

Presentations**Oral**

2017 Sire Kassama, Klaas van Wijk. Evaluating the roles of flavin reductase related and ubiquinone methyl transferase related proteins in *Arabidopsis thaliana*. *Boyce Thompson Research Institute Plant Genome Research Symposium*. Ithaca, NY.

Poster

2018 Sire Kassama, Stephen Baenziger. Evaluation of a Wheat Breeding Selection Program. *University of Nebraska-Lincoln Summer Research Symposium*. Lincoln, Nebraska.

2018 Sire Kassama, John Hart, Anna Savage. Uncovering the genetic basis for an important seedling root system trait in common bean. *TRIO Research Showcase*. Orlando, FL.

2017 Sire Kassama, Klaas van Wijk. Evaluating the roles of flavin reductase related and ubiquinone methyl transferase related proteins in *Arabidopsis thaliana*. *Southeastern Ecology and Evolution Conference*. Fort Meyers, FL.

2017 Sire Kassama, John Hart, Anna Savage. Uncovering the genetic basis for an important seedling root system trait in common bean. *Plants Beyond Limits*. Orlando, FL.

Student Involvement

2020-2022 Horticulture and Agronomy Student Association at the University of California – Davis
President 2020-2021

- Create events to increase student engagement
- Coordinate meetings between student association subcommittees
- Primary point of contact to interested and incoming students for the program
- Explore avenues to donate fresh produce and excess plant material to local farms
- Establish DEI subcommittee for the graduate program
- Act as a representative for students in the programs' executive committee meeting

Treasurer 2021-2022

- Maintain financial records of student association events

2019 Academic Advancement Program at the University of Central Florida

Peer Mentor

- Create podcasts and workshops to guide students through graduate school preparation
- Engage students by developing clear educational goals and creating benchmarks and measures of success
- Lead workshops associated with graduate school preparation

2018-2019 Botanical Society of America

Outreach Chair

- Enrich the education of college students with opportunities for in depth excursions with native plants of Florida
- Connects undergraduate students with graduate students and professionals in the horticulture field