

### TEXAS A&M PLANT BREEDING BULLETIN

June 2019

TEXAS A&M UNIVERSITY--EDUCATING AND DEVELOPING PLANT BREEDERS WORLDWIDE TO ALLEVIATE HUNGER AND POVERTY

THROUGH GENETIC IMPROVEMENT OF PLANTS

The National Association of Plant Breeders (NAPB) honors several graduate and undergraduate students with research or interest in plant breeding as NAPB Borlaug Scholars and provides financial assistance for the students to attend the NAPB annual meeting. At the NAPB Annual Meeting the students will be paired with a mentor either from a university or with a private plant breeding company. The mentorship will continue beyond the annual meeting. The Annual Meeting this year will be hosted by the University of Georgia and more information can be found at <a href="https://www.plantbreeding.org/2019-annual-meeting">https://www.plantbreeding.org/2019-annual-meeting</a>. We have an outstanding program planned that includes recognizing the young men and women below who will be the plant breeders of tomorrow.

### **GRADUATE NAPB BORLAUG SCHOLARS**

**Zaki Afshar: Colorado State University** 

Zaki Afshar is a Graduate Research
Assistant and Master's candidate in the Soil and Crop
Sciences Department at Colorado State University in Fort
Collins, Colorado. Zaki's thesis research focuses on
characterization of stripe rust resistance in the winter
wheat cultivar Hatcher and genetic mapping of this resistance in
a doubled haploid population. Zaki is phenotyping the population
at Fort Collins as well as in collaboration with USDA-ARS
scientists in Rossville KS and Pullman, WA.

**NAPB Mentor: Don Jones, Cotton Inc.** 



**Jessica Chitwood: University of Florida** 

Jessica Chitwood-Brown is a PhD candidate at the University of Florida under the direction of Dr. Sam Hutton. Her research seeks to improve genetic resistance in tomato to Fusarium wilt through the use of conventional and molecular breeding strategies with the goal of contributing to more productive tomato cultivars that require less chemical input by growers. Jessica also volunteers on campus and in community events such as school career days and plant breeding clinics for the home gardener.

**NAPB Mentor: Sara Potts, Corteva** 



**Heather Manching: University of Delaware** 

Heather Manching is a PhD candidate at the University of Delaware studying under Dr. Randall Wisser. Her research focuses on the genomic response to artificial selection in maize for environment-specific flowering time adaptation. She received her B.S. in Biology from the University of North Carolina in Wilmington, where she also completed her M.S. studying the relationship between phyllosphere diversity and multiple-stress response in maize.

**NAPB Mentor: Klaus Koehler, Corteva** 



**Stephanie Sjoberg: Washington State University** 

Stephanie Sjoberg is a PhD candidate in Dr. Arron Carter's winter wheat breeding program at Washington State University in Pullman, WA. Her research focuses on understanding the genetic basis and relationship between preharvest sprouting and seedling emergence in winter wheat. She has received travel awards and invitations to present her research at several national conferences. Stephanie has led the organization of WSU's Plant Science Symposium for three years.

**NAPB Mentor: Jennifer Yates, Bayer** 



**Daniel Sweeney: Cornell University** 

Daniel Sweeney is a PhD candidate studying with Mark Sorrells at Cornell University. Daniel's research is focused on genomics-assisted breeding of two-row spring malting barley for the craft brewing industry in New York state. He is particularly interested in application of genomic selection to reduce breeding cycle time and the relationship between barley malting quality, pre-harvest sprouting resistance, and grain dormancy.

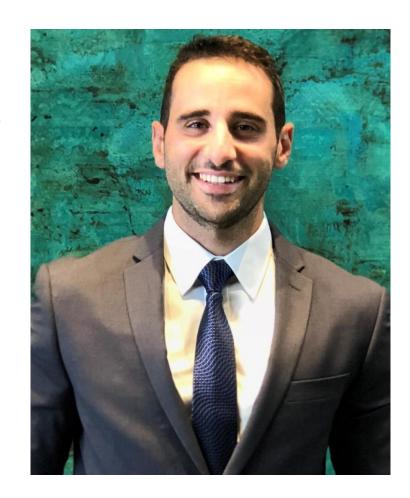
**NAPB Mentor: David Bubeck, Corteva** 



**Caio Canella Vieir: University of Missouri** 

Caio Canella is a Master's student at the University of Missouri under Dr. Pengyin Chen's guidance. Caio studies the resistance of soybean to Southern Root-knot nematode. He is part of the University's soybean breeding program and has been involved in the release of several soybean cultivars. Caio is originally from Brazil, where he received his B.S. in Agronomy from the University of Sao Paulo. Caio's career goal is to transition to industry as a plant breeder after completion of his studies.

NAPB Mentor: J.D. Rossouw, Bayer



#### **UNDERGRADUATE NAPB BORLAUG SCHOLARS**



**Tannis Anderson: University of Minnesota** 

Tannis Anderson is an undergraduate student attending the University of Minnesota--Twin Cities, focusing on plant breeding and genetics. She has been working in soybean breeding programs, including the University of Minnesota's soybean breeding program and the breeding program at Brushvale Seed, a soybean breeding and producing company in Breckenridge, Minnesota.

**NAPB Mentor: Arron Carter, Washington State University** 



**Adrienne Blakey: Oklahoma State University** 

Adrienne Blakey is a senior studying Plant and Soil Sciences and Agricultural Communications at Oklahoma State University in Stillwater, OK. She has served in multiple leadership roles in the College of Agricultural Sciences and Natural Resources, the Student Government Association, community-led service initiatives, and has actively contributed to the wheat breeding research community. Adrienne hopes to combine her passions for science, education and food security in her future career.

NAPB Mentor: Jodi Scheffler, USDA-ARS-Mississippi State



**Adam D'Angelo: Rutgers University** 

Adam D'Angelo is an undergraduate student double majoring in Plant Biology and Agriculture & Food Systems at Rutgers University. He is currently conducting research in Dr. Thomas Molnar's hazelnut breeding lab, and is working on his Senior Honors Thesis, which will involve phenotyping Turkish and Latvian hazelnut germplasm and mapping the self-incompatibility alleles present in high profile individuals. Upon graduation, he plans to attend graduate school to earn his PhD in Plant Breeding.

NAPB Mentor: Emilio Oyarzabal, Bayer



**Elizabeth De Meyer: Cornell University** 

Elizabeth De Meyer is an undergraduate at Cornell University in the Plant Sciences major with a concentration in Plant Breeding and Genetics. She has completed summer internships at Cornell Agritech in Geneva, New York, and the Donald Danforth Plant Science Center in St Louis, Missouri. Elizabeth's Honors Thesis on the fine mapping and characterization of kernel morphology loci in wheat is under the guidance of Mark Sorrells. She will complete her BS degree in Fall 2019.

**NAPB Mentor: Barry Tillman, University of Florida** 



**Jordan Knapp-Wilson: University of Arizona** 

Jordan Knapp-Wilson works as a research scientist in Tucson, AZ where he also attends school. He collaborates with professors at the University of Arizona such as Dr. Duke Pauli, who does research on crops such as cotton and sorghum. He has plans to continue working with Dr. Pauli over the summer. Their goal is to examine USDA cotton data from the past 35 years to identify relationships of cotton improvement throughout time and production regions.

NAPB Mentor: Rosalyn Shim, Texas Tech University



Sarah Marsh: Texas A&M University

Sarah Marsh is a senior Plant and Environmental Soil Science major with a Plant Breeding minor from Texas A&M University. She is originally from a family farm in Northern California, where from a young age she became interested in agriculture and the ways in which it could be advanced. She is Chancellor of the Texas A&M University chapter of Alpha Zeta and Secretary of the Agronomy Society.

NAPB Mentor: Jane Dever, Texas A&M University

# Meetings of Meetings of

### Interest

National Association of Plant Breeders, NAPB will hold their annual meeting at the University of Georgia, August 25-29, 2019. More information will be available soon at <a href="https://www.plantbreeding.org">https://www.plantbreeding.org</a>.

American Society of Agronomy-Crop Science Society of America-Soil Science Society of America will hold their annual meeting November 10 – 13, 2019 in San Antonio, Texas. More information available at <a href="https://www.acsmeetings.org/">https://www.acsmeetings.org/</a>.

## Distance Plant Breeding at Texas Distance Plant Breeding at Texas

A&M – Continuing Education

For more information visit <a href="https://scsdistance.tamu.edu/">https://scsdistance.tamu.edu/</a> or contact LeAnn Hague, Distance Education Coordinator in Soil and Crop Sciences at <a href="leann.hague@tamu.edu">leann.hague@tamu.edu</a> or (979) 845-6148.

Distance Plant Breeding at Texas A&M Graduate Graduate

Degrees

M.S. and Ph.D. degree programs at Texas A&M.

Visit https://scsdistance.tamu.edu/plant-breeding-distance-education/ for details.

Please direct comments concerning this bulletin to Wayne Smith, <a href="mailto:cwsmith@tamu.edu">cwsmith@tamu.edu</a> or 979.845.3450.