ALEX RAJEWSKI

A molecular biologist and bioinformatician focusing on plant genetics and evolution. I am an excellent science communicator to both public and professional audiences.

I am currently looking for industry positions that will allow me to develop my coding and genomics skills on real-world applications.



EDUCATION

Dec PhD. Candidate, Plant Biology
University of California

Riverside, CA

MS: Horticulture

University of Georgia

• Athens. GA

• Thesis: Micropropagation and Evaluation of the Genetic Population Structure of River Cane (*Arundinaria giganta*)

BS: Biochemistry, Cell, and Molecular Biology

Obes Moines, IA

2010 BS: Biochemistry,
Drake University

RESEARCH EXPERIENCE

2020 | 2015

2015

2015

2013

Research Assistant

Dept of Botany and Plant Science

University of California

- $\boldsymbol{\cdot}$ Created and characterized CRISPR mutants for a trait validation project
- Sequenced, assembled, and functionally annotated the genome of Datura stramonium
- · Eugene V. Cota-Robles Fellow
- · Graduate Assistance in Areas of National Need (GAANN) Fellow

2015 | 2013

Research Assistant

Dept of Horticulture

♀ University of Georgia

- · Planned and executed field studies at 3 sites both public and private
- · Established collaborations with researchers at 5 institutions
- · University-Wide Graduate Assistantship recipient

July 2012 | Jan 2012

Research Intern

Universität Rostock

Rostock, Germany

- Developed plant transformation methods in lupine, pea, tobacco, and potato
- · Investigate transgenic vaccine peptides
- · Congress-Bundestag Youth Exchange Fellow

CONTACT

- ✓ AlexCRajewski@gmail.com
- **y** Rajewski
- github.com/rajewski
- **𝚱** rajewski.github.io
- in in/alexrajewski

LANGUAGE SKILLS

| R |
|------------------|
| German |
| Bash |
| Python |
| SQL |
| Mandarin Chinese |
| AWK |

The source code for this CV is available on github.com/rajewski/resume.

Research Intern Aug 2009 Raleigh, NC North Carolina State University May · Validated viral protein production in novel hosts 2009 · NSF Research Experience for Undergraduates (REU) Program INDUSTRY EXPERIENCE **Research Assistant** 2011 OJohnston, IA Pioneer Hi-Bred (Corteva) 2010 · Developed SQL database to integrate phenotypic and genotypic measurements ♣☐ TEACHING EXPERIENCE Tools for building highly customized figures 2019 Tucson, AZ **Botany Conference** · Co-taught a workshop using base R graphics for data presentation 2019 Making Your Work Environment LGBTQ+ Welcoming and Affirming San Jose, CA Plant Biology Conference · Hosted a panel discussion on LGBTQ+ representation and workplace issues · Recruited speakers from both academia and industry California's Cornucopia (TA) 2018 Riverside, CA UCR Dept of Botany and Plant Science · Led discussion sections for 120 students · Introductory, non-major course Foundations of Plant Biology (TA) 2016 Riverside, CA UCR Dept of Botany and Plant Science · Designed and led lab sections for 80 students · Broad, upper-division course PEER-REVIEWED PUBLICATIONS Datura Genome Reveals Duplications of Psychoactive Alkaloid Biosyn-2020 thetic Genes and High Mutation Rate Following Tissue Culture BMC Genomics (submitted) Alex Rajewski, Derreck Carter-House, Jason Stajich, and Amy Litt

in Vitro Plant Regeneration and Agrobacterium tumefaciens-mediated

Alex Rajewski, Kevan Elkins, Ashley Henry, Joyce Van Eck, and Amy

Transformation of Datura stramonium

Applications in Plant Science

Litt

2019

I have developed diverse skils including NGS library prep and data analysis, phylogenetics, R, population genetics, and Git.

I have two first-author publications and have also collaborated on two more.

Evolution and Diversification of FRUITFULL Genes in Solanaceae 2019 Frontiers in Plant Science Dinusha Maheepala, Chris Emerling, Alex Rajewski, Jenna Macon, Maya Stahl, Natalia Pabón-Mora, and Amy Litt Classification and phylogenetic analyses of the Arabidopsis and tomato 2018 G-type lectin receptor kinases **BMC Genomics** Marcella A. Teixeira, Alex Rajewski, Jiangman He, Olenka G. Castaneda, Amy Litt, and Isgouhi Kaloshian ORAL AND POSTER PRESENTATIONS Multispecies fruit transcriptomes highlight divergence across develop-2020 mental and evolutionary time Botany Conference Oral presentation Hybrid Origin of Bamboo Population Inferred from Haplotype-Phased 2019 I am an excellent science com-**Amplicon sequencing** municator with several awards for public speaking at national Southern California Evolutionary Genetics and Genomics Meeting scientific conferences. • Oral presentation Identification of Conserved Regulatory Modules in Dry and Fleshy Fruit 2019 **Development** Botany Conference Oral presentation There and Back Again: When Evolution Reverses 2017 • American Society for Horticultural Three-Minute Thesis Competition Science (ASHS) Conference · 3rd Place Award Optimizing Tissue Culture Methods in Diverse Nightshade Species 2017 ASHS Conference Poster Presentation Developmental Transcriptome of Nicotiana obtusifolia 2017 **Q** UC Riverside CEPCEB Poster Presentation Post-Doc Symposium Optimizing Tissue Culture Methods in Diverse Solanaceae Species 2016 **♀** Solanaceae Conference Poster Presentation Evidence of Interspecific Hybridization or Incomplete Lineage Sorting 2016 in River Cane (Arundinaria gigantea) ASHS Conference Oral presentation A Family Divided: Evolution of Dry and Fleshy Fruit in Nightshades 2016 ASHS Conference Three-Minute Thesis Competition · 1st Place Award Role of FRUITFULL in the Evolution of Fleshy Fruits: Optimizing 2016 Solanaceae Tissue Culture to Generate Stable Transgenic Knockout Botany Conference Oral presentation

| 2015 | | In Vitro Comparison of Benzyladenine and meta-Topolin on Shoot Proliferation of River Cane, a Candidate for Wetlands Restoration Poster Presentation → ASHS Conference | | | |
|------|---|---|------------------|---|--|
| 2015 | | Raising Cane: Sustainable Bamboo Restoration in the American Southeast | | | |
| | | Three-Minute Thesis Competition | on | ♠ ASHS Conferencee University of Georgia | |
| | | · 1st Place Award at ASHS | | | |
| | | · Top 10 at UGA | | | |
| 2015 | • | Clonal Structure, Genetic Diversity, and <i>in vitro</i> Propagation of River Cane (<i>Arundinaria gigantea</i>), a candidate for use in wetlands reclamation | | | |
| | | Oral presentation | Southern Reg | gion ASHS Conference | |
| 2014 | • | Disinfestation and <i>in vitro</i> Growt Oral presentation | UGA Interdi | | |
| | | · 1st Place Award (Masters Catego | ry) | | |
| 2014 | | Sterilization and <i>in vitro</i> Growth and Development of <i>Arundinaria</i> Poster Presentation O Southern Region of North America International Plant Propagators Society Conference | | | |
| 2009 | | Comparison of the Symptoms Ca Common Host | used by Three Ge | miniviruses in a | |
| | | Poster Presentation NCSU Summer Undergraduate Drake University Conference on | | | |