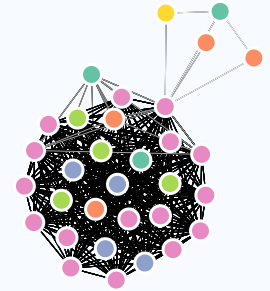


# ALEX RAJEWSKI

A molecular biologist and bioinformatician focusing on plant genetics and evolution. I am an excellent science communicator to both public<sup>1</sup> and professional<sup>2</sup> audiences.

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



## EDUCATION

- PhD. Candidate, Plant Biology**  
University of California  
Riverside, CA  
Dec 2020 | 2015
- MS: Horticulture**  
University of Georgia  
Athens, GA  
2015 | 2013  
• Thesis: Micropropagation and Evaluation of the Genetic Population Structure of River Cane (*Arundinaria gigantea*)
- BS: Biochemistry, Cell, and Molecular Biology**  
Drake University  
Des Moines, IA  
2010 | 2006

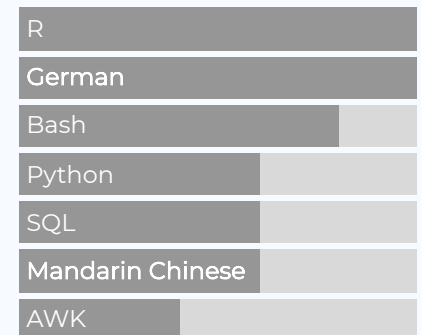
## RESEARCH EXPERIENCE

- Research Assistant**  
Dept of Botany and Plant Science  
University of California  
2020 | 2015  
• 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
- Research Assistant**  
Dept of Horticulture  
University of Georgia  
2015 | 2013  
• Planned and executed field studies at 3 sites both public and private  
• Established collaborations with researchers at 5 institutions  
• University-Wide Graduate Assistantship recipient
- Research Intern**  
Universität Rostock  
Rostock, Germany  
July 2012 | Jan 2012  
• Developed plant transformation methods in lupine, pea, tobacco, and potato  
• Investigate transgenic vaccine peptides  
• Congress-Bundestag Youth Exchange Fellow

## CONTACT

- ✉ [AlexCRajewski@gmail.com](mailto:AlexCRajewski@gmail.com)
- 🐦 [Rajewski](#)
- 🔗 [github.com/rajewski](https://github.com/rajewski)
- 🔗 [rajewski.github.io](https://rajewski.github.io)
- in [in/alexrajewski](#)

## LANGUAGE SKILLS



The source code for this CV is available [on github.com/rajewski/resume](https://github.com/rajewski/resume).

Aug  
2009  
|  
May  
2009



### Research Intern

North Carolina State University

📍 Raleigh, NC

- Validated viral protein production in novel hosts
- NSF Research Experience for Undergraduates (REU) Program

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



## INDUSTRY EXPERIENCE

2011  
|  
2010



### Research Assistant

Pioneer Hi-Bred (Corteva)

📍 Johnston, IA

- Developed SQL database to integrate phenotypic and genotypic measurements



## TEACHING EXPERIENCE

2019



### Tools for building highly customized figures

Botany Conference

📍 Tucson, AZ

- Co-taught a workshop using base R graphics for data presentation

2019



### Making Your Work Environment LGBTQ+ Welcoming and Affirming

Plant Biology Conference

📍 San Jose, CA

- Hosted a panel discussion on LGBTQ+ representation and workplace issues
- Recruited speakers from both academia and industry

2018



### California's Cornucopia (TA)

UCR Dept of Botany and Plant Science

📍 Riverside, CA

- Led discussion sections for 120 students
- Introductory, non-major course

2016



### Foundations of Plant Biology (TA)

UCR Dept of Botany and Plant Science

📍 Riverside, CA

- Designed and led lab sections for 80 students
- Broad, upper-division course



## PEER-REVIEWED PUBLICATIONS

2020



### Datura Genome Reveals Duplications of Psychoactive Alkaloid Biosynthetic Genes and High Mutation Rate Following Tissue Culture

BMC Genomics (submitted)

Alex Rajewski, Derreck Carter-House, Jason Stajich, and Amy Litt

2019



### [in Vitro Plant Regeneration and Agrobacterium tumefaciens-mediated Transformation of Datura stramonium](#)

Applications in Plant Science

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

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

- 2019 ● **Evolution and Diversification of *FRUITFULL* Genes in Solanaceae<sup>3</sup>**  
Frontiers in Plant Science  
Dinusha Maheepala, Chris Emerling, **Alex Rajewski**, Jenna Macon,  
Maya Stahl, Natalia Pabón-Mora, and Amy Litt
- 2018 ● **Classification and phylogenetic analyses of the Arabidopsis and tomato G-type lectin receptor kinases<sup>4</sup>**  
BMC Genomics  
Marcella A. Teixeira, **Alex Rajewski**, Jiangman He, Olenka G. Castaneda, Amy Litt, and Isgouhi Kaloshian



## ORAL AND POSTER PRESENTATIONS

- 2020 ● **Multispecies fruit transcriptomes highlight divergence across developmental and evolutionary time**  
Botany Conference  
• Oral presentation
- 2019 ● **Hybrid Origin of Bamboo Population Inferred from Haplotype-Phased Amplicon sequencing**  
Southern California Evolutionary Genetics and Genomics Meeting  
• Oral presentation
- 2019 ● **Identification of Conserved Regulatory Modules in Dry and Fleshy Fruit Development**  
Botany Conference  
• Oral presentation
- 2017 ● **There and Back Again: When Evolution Reverses<sup>5</sup>**  
American Society for Horticultural Science Conference  
• Three-Minute Thesis Competition  
• 3rd Place Award
- 2017 ● **Optimizing Tissue Culture Methods in Diverse Nightshade Species<sup>6</sup>**  
American Society for Horticultural Science Conference  
• Poster Presentation
- 2017 ● **Developmental Transcriptome of *Nicotiana obtusifolia***  
UC Riverside Center for Plant Cell Biology Post-Doc Symposium  
• Poster Presentation
- 2016 ● **Optimizing Tissue Culture Methods in Diverse Solanaceae Species<sup>7</sup>**  
Solanaceae Conference  
• Poster Presentation

I am an excellent science communicator with several awards for public speaking at national scientific conferences.

- 2016 ● **Evidence of Interspecific Hybridization or Incomplete Lineage Sorting in River Cane (*Arundinaria gigantea*)**  
American Society for Horticultural Science Conference  
• Oral presentation
- 2016 ● **A Family Divided: Evolution of Dry and Fleshy Fruit in Nightshades<sup>8</sup>**  
American Society for Horticultural Science Conference  
• Three-Minute Thesis Competition  
• 1st Place Award
- 2016 ● **Role of FRUITFULL in the Evolution of Fleshy Fruits: Optimizing Solanaceae Tissue Culture to Generate Stable Transgenic Knockout Lines<sup>9</sup>**  
Botany Conference  
• Oral presentation
- 2015 ● **In Vitro Comparison of Benzyladenine and meta-Topolin on Shoot Proliferation of River Cane, a Candidate for Wetlands Restoration<sup>10</sup>**  
American Society for Horticultural Science Conference  
• Poster Presentation
- 2015 ● **Raising Cane: Sustainable Bamboo Restoration in the American Southeast**  
American Society for Horticultural Science Conference  
University of Georgia 3 Minute Thesis Competition  
• Three-Minute Thesis Competition  
• 1st Place Award at ASHS  
• Top 10 at UGA
- 2015 ● **Clonal Structure, Genetic Diversity, and *in vitro* Propagation of River Cane (*Arundinaria gigantea*), a candidate for use in wetlands reclamation**  
Southern Region American Society for Horticultural Science Conference  
• Oral presentation
- 2014 ● **Disinfestation and *in vitro* Growth and Development of *Arundinaria***  
UGA Interdisciplinary Graduate Plant and Soil Symposium  
• Oral presentation  
• 1st Place Award (Masters Category)
- 2014 ● **Sterilization and *in vitro* Growth and Development of *Arundinaria***  
Southern Region of North America International Plant Propagators Society Conference  
• Poster Presentation

2009

● **Comparison of the Symptoms Caused by Three Geminiviruses in a Common Host<sup>a</sup>**

NCSU Summer Undergraduate Research Symposium  
Drake University Conference on Undergraduate Research in the Sciences

• Poster Presentation



## LINKS

- 1: <https://plantscientist.wordpress.com/2016/01/28/river-cane-the-american-bamboo/>
- 2: <https://ashs.confex.com/ashs/2017/videogateway.cgi/id/4763?recordingid=4763>
- 3: <https://doi.org/10.3389/fpls.2019.00043>
- 4: <https://doi.org/10.1186/s12864-018-4606-0>
- 5: <https://goo.gl/6M79LS>
- 6: <https://goo.gl/C4QC7t>
- 7: <https://goo.gl/TCHTnR>
- 8: <https://goo.gl/nGcu9t>
- 9: <https://goo.gl/i4nsPC>
- 10: <https://goo.gl/ajf7ra>
- 11: <http://goo.gl/zvZw8X>