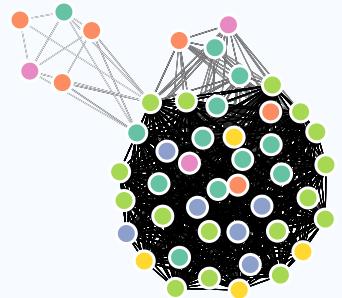


# ALEX RAJEWSKI

Cancer genomics core bioinformatician with extensive experience in single-cell sequencing, spatial transcriptomics, epigenetics, genome assembly, and phylogenetics. Also skilled in pipeline development, include Nextflow, Docker, Singularity, and Git. I am an excellent science communicator to both [public](#) and [professional](#) audiences.



## EDUCATION

- **PhD Plant Biology**  
University of California, Riverside  
2020 | 2015
- **MS Horticulture**  
University of Georgia  
2015 | 2013
- **BS Biochemistry, Cell, and Molecular Biology**  
Drake University  
2010 | 2006

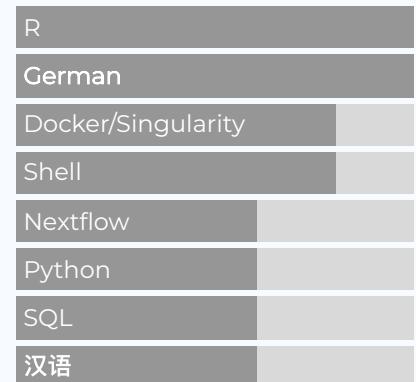
## WORK EXPERIENCE

- **Research Bioinformatician II**  
Cedars-Sinai Genomics Core  
current | 2021
  - Advanced analysis of single-cell RNA-seq, spatial transcriptomics, WES/WGS, CUT&Tag, ATAC-seq
  - Pipeline development with Nextflow, Docker, and Git
- **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*
- **Research Assistant**  
Dept of Horticulture 📍 University of Georgia  
2015 | 2013
  - NGS and microsatellite analysis of population genetic structure
- **Congress-Bundestag Fellow & Research Intern**  
Universität Rostock  
2012 | 2011
  - Vaccine production in transgenic plants
  - Developed plant transformation methods in lupine, pea, tobacco, and potato

## CONTACT

- ✉ [AlexCRajewski@gmail.com](mailto:AlexCRajewski@gmail.com)  
/github.com/rajewski  
[rajewski.github.io](http://rajewski.github.io)  
/in/[alexrajewski](https://www.linkedin.com/in/alexrajewski)  
/Twitter [@Rajewski](https://twitter.com/Rajewski)

## LANGUAGE SKILLS



2011  
|  
2010

- **Research Assistant**  
Pioneer Hi-Bred (Corteva)
  - Developed SQL database to integrate phenotypic and genotypic measurements
- **NSF Research Intern**  
North Carolina State University
  - Validated viral protein production in novel hosts

Aug 2009  
|  
May 2009

## TEACHING EXPERIENCE

- **Tools for building highly customized figures**  
Botany Conference 📍 Tucson, AZ
  - Co-taught a workshop using base R graphics for data presentation
- **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
- **California's Cornucopia (TA)**  
UCR Dept of Botany and Plant Science 📍 Riverside, CA
  - Led discussion sections for 120 students
  - Introductory, non-major course
- **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

- **Multispecies Transcriptomes Reveal Core Fruit Development Genes**  
Frontiers in Plant Science (Submitted)  
**Alex Rajewski, Dinusha Maheepala, Jessica Le, Amy Litt**
- **microRNA-16 mediates anti-fibrotic effects of exosomes in rats with heart failure and preserved ejection fraction**  
Journal of Clinical Investigation (Submitted)  
Jae Hyung Cho, **Alex Rajewski**, Catherine Bresee, Myung Yoon Kim, Thassio Mesquita, Xaviar Jones, Isabelle Pellet, Wenxie Liu, Lizbeth Sanchez, Asma Nawaz, Ahmed Ibrahim, Russell Rogers, Eugenio Cingolani, Eduardo Marbán

- 2021 ● **Datura Genome Reveals Duplications of Psychoactive Alkaloid Biosynthetic Genes and High Mutation Rate Following Tissue Culture**  
BMC Genomics  
**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
- 2019 ● **Evolution and Diversification of *FRUITFULL* Genes in Solanaceae**  
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**  
BMC Genomics  
Marcella A. Teixeira, **Alex Rajewski**, Jiangman He, Olenka G. Castaneda, Amy Litt, and Isgouhi Kaloshian

## OUTREACH

- current | 2010 ● **Extension Master Gardener**  
California, Iowa, Kansas, Georgia
- current | 2018 ● **Big Brother**  
Big Brothers Big Sisters of the Inland Empire
- 2020 | 2016 ● **Community OUTreach Educator**  
University of California, Riverside
- 2020 | 2017 ● **Mentor**  
Planting Science 
- 2018 | 2017 ● **President**  
Queer (LGBT) Graduate Student Association 
- 2018 | 2017 ● **Academic Affairs Officer**  

- 2018 | 2017 ● **Secretary**  
Botany Grad Student Assoc. 
- 2018 | 2016 ● **Mentor**  
Grad Student Mentorship Program 

2017   2016	● <b>Member</b> Member Services Taskforce	📍 American Society for Horticultural Science (ASHS) Conference
2016   2014	● <b>Chair</b> Grad Student Working Group	📍 American Society for Horticultural Science (ASHS) Conference
2015   2013	● <b>Vice President</b> Horticulture Grad Student Assoc.	📍 University of Georgia
2010   2009	● <b>President</b> Beta Beta Beta	📍 Drake University

## ORAL AND POSTER PRESENTATIONS

2020	● <b>Multispecies fruit transcriptomes highlight divergence across developmental and evolutionary time</b> Oral presentation	📍 Botany Conference
2019	● <b>Hybrid Origin of Bamboo Population Inferred from Haplotype-Phased Amplicon sequencing</b> Southern California Evolutionary Genetics and Genomics Meeting	📍 Oral presentation
2019	● <b>Identification of Conserved Regulatory Modules in Dry and Fleshy Fruit Development</b> Oral presentation	📍 Botany Conference
2017	● <b>There and Back Again: When Evolution Reverses</b> Three-Minute Thesis Competition	📍 American Society for Horticultural Science (ASHS) Conference · 3rd Place Award
2017	● <b>Optimizing Tissue Culture Methods in Diverse Nightshade Species</b> Poster Presentation	📍 ASHS Conference
2017	● <b>Developmental Transcriptome of <i>Nicotiana obtusifolia</i></b> Poster Presentation	📍 UC Riverside CEPCEB Post-Doc Symposium
2016	● <b>Optimizing Tissue Culture Methods in Diverse Solanaceae Species</b> Poster Presentation	📍 Solanaceae Conference
2016	● <b>Evidence of Interspecific Hybridization or Incomplete Lineage Sorting in River Cane (<i>Arundinaria gigantea</i>)</b> Oral presentation	📍 ASHS Conference

- 2016
- **A Family Divided: Evolution of Dry and Fleshy Fruit in Nightshades**  
Three-Minute Thesis Competition  ASHS Conference  
• 1st Place Award
- 2016
- **Role of *FRUITFULL* in the Evolution of Fleshy Fruits: Optimizing Solanaceae Tissue Culture to Generate Stable Transgenic Knockout Lines**  
Oral presentation  Botany Conference
- 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  ASHS Conference  
University of Georgia  
• 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**  
Oral presentation  Southern Region ASHS Conference
- 2014
- **Disinfestation and *in vitro* Growth and Development of *Arundinaria***  
Oral presentation  UGA Interdisciplinary Graduate Plant and Soil Symposium  
• 1st Place Award (Masters Category)
- 2014
- **Sterilization and *in vitro* Growth and Development of *Arundinaria***  
Poster Presentation  Southern Region of North America International Plant Propagators Society Conference
- 2009
- **Comparison of the Symptoms Caused by Three Geminiviruses in a Common Host**  
Poster Presentation  NCSU Summer Undergraduate Research Symposium  
Drake University Conference on Undergraduate Research in the Sciences