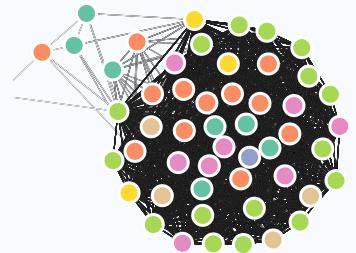


# ALEX RAJEWSKI

Experienced bioinformatics data scientist with experience in oncology, drug design, single-cell sequencing, spatial transcriptomics, epigenetics, genome assembly, and phylogenetics. Also skilled in pipeline development, including Nextflow, Docker, Singularity, and Git. I am an excellent science communicator to both [public](#) and [professional](#) audiences.



## EDUCATION

- 2020 • **PhD Bioinformatics & Plant Biology**  
University of California, Riverside  
• Genome assembly/annotation, RNA-seq, phylogenetics, high-throughput CRISPR screening  
• NGS library prep, PCR, tissue culture, in situ hybridization, microscopy
- 2015 • **MS Horticulture**  
University of Georgia  
• Population genetics, Microsatellites/SSR, phylogenetics
- 2010 • **BS Biochemistry, Cell, and Molecular Biology**  
Drake University

## WORK EXPERIENCE

- current | 2023 • **Senior Computational Biologist**  
[Tempus AI](#)
- 2023 | 2022 • **Bioinformatics Scientist**  
[Tempus AI](#) (fmr. SEngine Precision Medicine)  
• Development of high-throughput drug screening analysis pipelines in R  
• Consultation on experimental design and statistical analysis
- 2022 | 2021 • **Research Bioinformatician II**  
[Cedars-Sinai Genomics Core](#)  
• Advanced analysis of single-cell RNA-seq, spatial transcriptomics, WES/WGS, CUT&Tag, ATAC-seq  
• Pipeline development with Nextflow, Docker, and Git
- 2020 | 2015 • **Research Assistant**  
University of California, Riverside  
• Created and characterized CRISPR mutants for a trait validation project  
• Sequenced, assembled, and functionally annotated the genome of *Datura stramonium*

## CONTACT

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

## LANGUAGE SKILLS



- 2015  
|  
2013
- **Research Assistant**  
University of Georgia
    - NGS and microsatellite analysis of population genetic structure
- 2012  
|  
2011
- **Congress-Bundestag Fellow & Research Intern**  
[Universität Rostock](#)
    - Vaccine production in transgenic plants
    - Developed plant transformation methods in lupine, pea, tobacco, and potato
- 2011  
|  
2010
- **Research Assistant**  
Pioneer Hi-Bred (Corteva)
    - Developed SQL database to integrate phenotypic and genotypic measurements
- Aug 2009  
|  
May 2009
- **NSF Research Intern**  
North Carolina State University
    - Validated viral protein production in novel hosts

## PEER-REVIEWED PUBLICATIONS

- 2024
- [SOX9 switch links regeneration to fibrosis at the single-cell level in mammalian kidneys](#)  
Science  
S. Aggarwal; Z. Wang; D. Rincon Fernandez Pacheco; A. Rinaldi; **A. Rajewski**; J. Callemeyn; E. Van Loon; B. Lamarthe; A. Ester Covarrubias; Jean Hou et al.
- 2023
- [Stacking the odds: Multiple sites for HSV-1 latency](#)  
Science Advances.  
Shaohui Wang, Xueying Song, **Alex Rajewski**, Chintda Santiskulvong, and Homayon Ghiasi
- 2022
- [Multispecies Transcriptomes Reveal Core Fruit Development Genes](#)  
Frontiers in Plant Science  
**Alex Rajewski**, Dinusha Maheepala, Jessica Le, Amy Litt
- 2022
- [Cell therapy attenuates endothelial dysfunction in hypertensive rats with heart failure and preserved ejection fraction](#)  
Heart and Circulatory Physiology  
G. de Couto, T. Mesquita, X. Wu, **A. Rajewski**, F. Huang, A. Akhmerov, N. Na, D. Wu, Y. Wang, L. Li, M. Tran, P. Kilfoil, E. Cingolani, E. 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

## 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

## 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  
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2017
- **President**  
UCR Queer (LGBT) Graduate Student Association
- 2018  
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2017
- **Academic Affairs Officer**  
University of California, Riverside
- 2018  
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2017
- **Secretary, Botany Grad Student Assoc.**  
University of California, Riverside
- 2018  
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2016
- **Mentor, Grad Student Mentorship Program**  
University of California, Riverside
- 2017  
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2016
- **Member Services Taskforce**  
American Society for Horticultural Science (ASHS) Conference
- 2016  
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2014
- **Chair, Grad Student Working Group**  
American Society for Horticultural Science (ASHS) Conference
- 2015  
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2013
- **Vice President, Horticulture Grad Student Assoc.**  
University of Georgia
- 2010  
|  
2009
- **President, Beta Beta Beta**  
Drake University

## ORAL AND POSTER PRESENTATIONS

- 2020
- **Multispecies fruit transcriptomes highlight divergence across developmental and evolutionary time**  
Oral presentation  Botany Conference
- 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**  
Oral presentation  Botany Conference
- 2017
- **There and Back Again: When Evolution Reverses**  
Three-Minute Thesis Competition  American Society for Horticultural Science (ASHS) Conference
    - 3rd Place Award
- 2017
- **Optimizing Tissue Culture Methods in Diverse Nightshade Species**  
Poster Presentation  ASHS Conference
- 2017
- **Developmental Transcriptome of *Nicotiana obtusifolia***  
Poster Presentation  UC Riverside CEPCEB Post-Doc Symposium

- 2016 ● **Optimizing Tissue Culture Methods in Diverse Solanaceae Species**  
Poster Presentation  Solanaceae Conference
- 2016 ● **Evidence of Interspecific Hybridization or Incomplete Lineage Sorting in River Cane (*Arundinaria gigantea*)**  
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