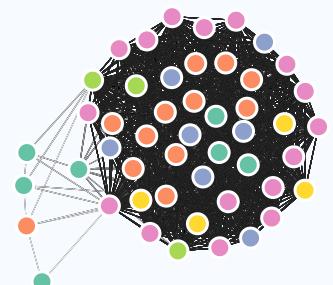


ALEX RAJEWSKI

Experienced bioinformatician with extensive experience in oncology, drug screening, 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 Bioinformatics & Plant Biology**
University of California, Riverside
- **MS Horticulture**
University of Georgia
- **BS Biochemistry, Cell, and Molecular Biology**
Drake University

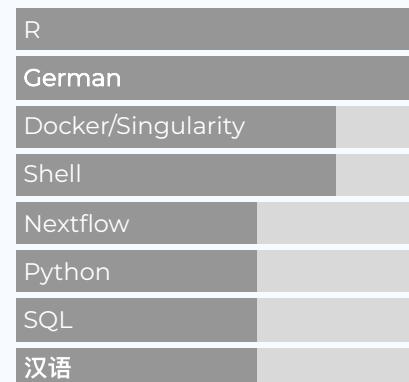
WORK EXPERIENCE

- **Bioinformatics Scientist**
SEngine Precision Medicine
 - Development of high-throughput drug screening analysis pipelines in R
 - Consultation on experimental design and statistical analysis
- **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
- **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*
- **Research Assistant**
University of Georgia
 - NGS and microsatellite analysis of population genetic structure

CONTACT

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

LANGUAGE SKILLS



- 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
- 2022
- **Multispecies Transcriptomes Reveal Core Fruit Development Genes**
Frontiers in Plant Science
Alex Rajewski, Dinusha Maheepala, Jessica Le, Amy Litt
- 2022
- **SOX9 switch orchestrates dynamic Wnt niches and kidney myofibroblast activity**
Cell (In Review)
Z. Wang; S. Aggarwal; **A. Rajewski**; M.K. Bhasin; K. Suresh; M. Yamashita; H. Akiyama; S.A. Karumanchi; S.C. Jordan; P.W. Noble; P.E. Cippà; S. Kumar.
- 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 | <ul style="list-style-type: none">● Tools for building highly customized figures
Botany Conference<ul style="list-style-type: none">• Co-taught a workshop using base R graphics for data presentation | Tucson, AZ |
| 2019 | <ul style="list-style-type: none">● Making Your Work Environment LGBTQ+ Welcoming and Affirming
Plant Biology Conference<ul style="list-style-type: none">• Hosted a panel discussion on LGBTQ+ representation and workplace issues• Recruited speakers from both academia and industry | San Jose, CA |
| 2018 | <ul style="list-style-type: none">● California's Cornucopia (TA)
UCR Dept of Botany and Plant Science<ul style="list-style-type: none">• Led discussion sections for 120 students• Introductory, non-major course | Riverside, CA |
| 2016 | <ul style="list-style-type: none">● Foundations of Plant Biology (TA)
UCR Dept of Botany and Plant Science<ul style="list-style-type: none">• Designed and led lab sections for 80 students• Broad, upper-division course | Riverside, CA |



OUTREACH

- | | |
|----------------------|--|
| current

2010 | <ul style="list-style-type: none">● Extension Master Gardener
California, Iowa, Kansas, Georgia |
| current

2018 | <ul style="list-style-type: none">● Big Brother
Big Brothers Big Sisters of the Inland Empire |
| 2020

2016 | <ul style="list-style-type: none">● Community OUTreach Educator
University of California, Riverside |
| 2020

2017 | <ul style="list-style-type: none">● Mentor
Planting Science |
| 2018

2017 | <ul style="list-style-type: none">● President
UCR Queer (LGBT) Graduate Student Association |
| 2018

2017 | <ul style="list-style-type: none">● Academic Affairs Officer
University of California, Riverside |
| 2018

2017 | <ul style="list-style-type: none">● Secretary, Botany Grad Student Assoc.
University of California, Riverside |
| 2018

2016 | <ul style="list-style-type: none">● Mentor, Grad Student Mentorship Program
University of California, Riverside |

- 2017 | ● **Member Services Taskforce**
American Society for Horticultural Science (ASHS) Conference
- 2016 | ● **Chair, Grad Student Working Group**
American Society for Horticultural Science (ASHS) Conference
- 2016 | ● **Vice President, Horticulture Grad Student Assoc.**
University of Georgia
- 2010 | ● **President, Beta Beta Beta**
Drake University

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**  Oral presentation
Southern California Evolutionary Genetics and Genomics Meeting
- 2019 | ● **Identification of Conserved Regulatory Modules in Dry and Fleshy Fruit Development**  Botany Conference
Oral presentation
- 2017 | ● **There and Back Again: When Evolution Reverses**  American Society for Horticultural Science (ASHS) Conference
Three-Minute Thesis Competition
 - 3rd Place Award
- 2017 | ● **Optimizing Tissue Culture Methods in Diverse Nightshade Species**  ASHS Conference
Poster Presentation
- 2017 | ● **Developmental Transcriptome of *Nicotiana obtusifolia***  UC Riverside CEPCEB Post-Doc Symposium
Poster Presentation
- 2016 | ● **Optimizing Tissue Culture Methods in Diverse Solanaceae Species**  Solanaceae Conference
Poster Presentation
- 2016 | ● **Evidence of Interspecific Hybridization or Incomplete Lineage Sorting in River Cane (*Arundinaria gigantea*)**  ASHS Conference
Oral presentation
- 2016 | ● **A Family Divided: Evolution of Dry and Fleshy Fruit in Nightshades**  ASHS 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**  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
• 1st Place Award at ASHS
• Top 10 at UGA  ASHS Conferencee
University of Georgia
- 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
• 1st Place Award (Masters Category)  UGA Interdisciplinary
Graduate Plant and Soil Symposium
- 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