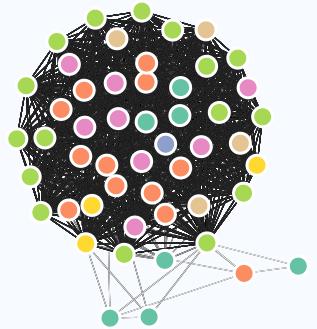


ALEX RAJEWSKI

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

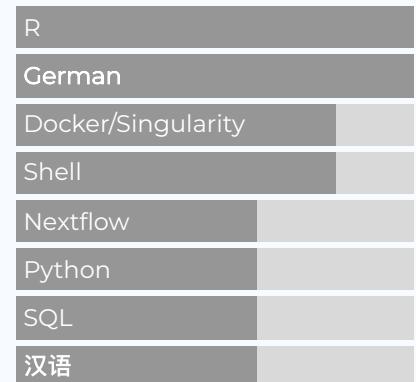
WORK EXPERIENCE

- current | 2022 • **Bioinformatics Scientist**
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

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/github.com/rajewski
/rajewski.github.io
/in/[in/alexrajewski](https://www.linkedin.com/in/alexrajewski)
🐦 [@Rajewski](https://twitter.com/Rajewski)

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

- 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
- **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
- **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
 - **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
- 2016

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**
UCR Queer (LGBT) Graduate Student Association

- 2018 | ● **Academic Affairs Officer**
University of California, Riverside
- 2017 | ● **Secretary, Botany Grad Student Assoc.**
University of California, Riverside
- 2018 | ● **Mentor, Grad Student Mentorship Program**
University of California, Riverside
- 2016 | ● **Member Services Taskforce**
American Society for Horticultural Science (ASHS) Conference
- 2014 | ● **Chair, Grad Student Working Group**
American Society for Horticultural Science (ASHS) Conference
- 2013 | ● **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**
Three-Minute Thesis Competition • 1st Place Award  ASHS Conference
- 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 • 1st Place Award at ASHS
• Top 10 at UGA  ASHS Conference
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