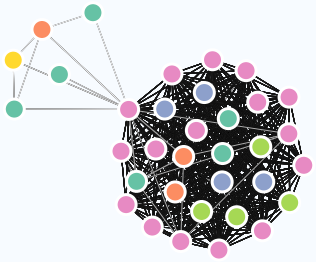
ALEX RAJEWSKI

A bioinformatician working in human cancer genetics but with training also in plant genetics and evolution. I am an excellent science communicator to both public and professional audiences.



EDUCATION

Dec 2020 | 2015

PhD. Candidate, Plant Biology
University of California — Riverside, CA

- Disssertation: Gene Evolution in Solanaceae

2015 | 2013

MS: Horticulture
University of Georgia — Athens, GA

- Thesis: Micropropagation and Evaluation of the Genetic Population Structure of River Cane (*Arundinaria giganta*)

2010 | 2006

BS: Biochemistry, Cell, and Molecular Biology
Drake University — Des Moines, IA

WORK EXPERIENCE

current | 2021

Research Bioinformatician II
AGCT Core — Cedars-Sinai Hospital

2020 | 2015

Research Assistant
Dept of Botany and Plant Science — University of California

- 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

2015 | 2013

Research Assistant
Dept of Horticulture — University of Georgia

- Planned and executed field studies at 3 sites both public and private
- Established collaborations with researchers at 5 institutions
- University-Wide Graduate Assistantship recipient

July 2012 | Jan 2012

Research Intern
Universität Rostock — Rostock, Germany

- Developed plant transformation methods in lupine, pea, tobacco, and potato
- Investigate transgenic vaccine peptides
- Congress-Bundestag Youth Exchange Fellow

CONTACT

AlexCRajewski@gmail.com
Rajewski
github.com/rajewski
rajewski.github.io
in/alexrajewski

LANGUAGE SKILLS

- R
- German
- Bash
- Python
- SQL
- Mandarin Chinese
- AWK

The source code for this CV is available on github.com/rajewski/resume.

2011 | 2010

Research Assistant
Pioneer Hi-Bred (Corteva) — Johnston, IA

- Developed SQL database to integrate phenotypic and genotypic measurements

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 skils including NGS data analysis, phylogenetics, R, population genetics, and Git.

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 (in review)
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

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

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

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

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

2015

Raising Cane: Sustainable Bamboo Restoration in the American Southeast

Three-Minute Thesis Competition

ASHS Conferencee
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