Christopher J. Fiscus, PhD

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Education

Ph.D. Genetics, Genomics and Bioinformatics, University of California, Riverside 2022
Dissertation: *Causes and consequences of plant genome evolution*
Advisor: Dr. Daniel Koenig

B.S. Biotechnology, University of California, Davis 2015

Professional Experience

Postdoctoral Scholar, University of California, Irvine 09/2022 - Present
Dept of Ecology and Evolutionary Biology
Advisor: Dr. Brandon Gaut

Graduate Student Researcher, University of California, Riverside 09/2016 - 09/2022
Dept of Botany and Plant Sciences
Advisor: Dr. Daniel Koenig

Quality Control Laboratory Technician, Charles Krug Winery 12/2015 - 08/2016

Harvest Laboratory Technician, Charles Krug Winery (via Apex Life Sciences) 08/2015 - 12/2015

Undergraduate Researcher, University of California, Davis 01/2014 - 10/2014
Advisor: Dr. Jeffrey Ross-Ibarra

Undergraduate Intern, University of California, Davis 03/2012 - 06/2012
Advisor: Dr. Kent J. Bradford

Teaching Experience

Guest Lecturer, University of California, Riverside
BIOL 119. Introduction to Genomics and Bioinformatics. 02/2020
Lecture: Genomics, Phenotype and Disease.

Teaching Assistant, University of California, Riverside
BIOL 119. Introduction to Genomics and Bioinformatics 01-03/2019, 01-03/2020, 01-03/2021
BIOL 102. Introductory Genetics 01-03/2018

Community Education Instructor, Modesto Junior College
Science Camp 06-08/2013, 06-08/2014

Community Education Assistant Instructor, Modesto Junior College
Introductory LEGO Mindstorms NXT Robotics 06-08/2012, 06-08/2013, 06-08/2014
Advanced LEGO Mindstorms NXT Robotics 06-08/2013, 06-08/2014
Video Game Programming for Kids 06-08/2014

Publications 0000-0001-9569-1809

Preprints

Fiscus CJ, Aguirre-Liguori JA, Gaut GRJ, Gaut BS. Climate, population size, and dispersal influences mutational load across the landscape in *Vitis arizonica*. bioRxiv. 2024. p. 2024.08.22.609253. doi:10.1101/2024.08.22.609253

In press

Landis JB, Guercio AM, Brown KE, **Fiscus CJ**, Morrell PL, Koenig D. Natural selection drives emergent genetic homogeneity in a century-scale experiment with barley. Science. 2024;385: eadl0038. doi:10.1126/science.adl0038

Deb SK, Kalra D, Kubica J, Stricker E, Truong VQ, Zeng Q, **Fiscus CJ**, [41 authors], Sedlazeck FJ, Busby B. The fifth international hackathon for developing computational cloud-based tools and resources for pan-structural variation and genomics. F1000Res. 2024;13: 708. doi:10.12688/f1000research.148237.1

Fiscus CJ, Herniter IA, Tchamba M, Paliwal R, Muñoz-Amatriaín M, Roberts PA, Abberton M, Alaba O, Close TJ, Oyatomi O, Koenig D. The pattern of genetic variability in a core collection of 2,021 cowpea accessions. G3. 2024. doi:10.1093/g3journal/jkae071

Martinez SE, Conn CE, Guercio AM, Sepulveda C, **Fiscus CJ**, Koenig D, Shabek N, Nelson DC. A KARRIKIN INSENSITIVE2 paralog in lettuce mediates highly sensitive germination responses to karrikinolide. Plant Physiol. 2022. doi:10.1093/plphys/kiac328

Selected Presentations

Fiscus CJ, Aguirre-Liguori JA, Gaut GRJ, Gaut BS. Landscape genomics and mutational load in *Vitis arizonica*. Poster. SMBE 2024. Puerto Vallarta, Mexico

Fiscus CJ, Aguirre-Liguori JA, Gaut GRJ, Gaut BS. Landscape genomics and mutational load in *Vitis arizonica*. Talk. Southern California Evolutionary Genetics and Genomics Meeting (SCalE) 2024. Pasadena, CA, USA

Fiscus CJ, Landis JB, Morales-Cruz A, Gaut BS. Disentangling the evolution of grape crop wild relatives. Talk. Plant and Animal Genome Conference 31. San Diego, CA, USA

Fiscus CJ, Landis JB, Morales-Cruz A, Gaut BS. Disentangling the evolution of grape crop wild relatives. Talk. Southern California Plant Biology Symposium 2023. Riverside, CA, USA

Fiscus CJ, Koenig D. The genetic control of rapid genome content divergence in *Arabidopsis thaliana*. Poster. SMBE 2023. Ferrara, Italy

Fiscus CJ, Koenig D. The genetic control of rapid genome content divergence in *Arabidopsis thaliana*. Talk. SMBEeverywhere GS7. Online

Fiscus CJ. Causes and consequences of plant genome evolution. Seminar. 01/2023. Friends of Evolution Seminar Series, Dept. of Ecology and Evolutionary Biology UC Irvine. Irvine, CA, USA

Fiscus CJ, Koenig D. The genetic control of rapid genome content divergence in *Arabidopsis thaliana*. Poster. PEQG 2022. Pacific Grove, CA, USA

Fiscus CJ, Koenig D. A catalog of genome content variation in *Arabidopsis thaliana*. Poster. TAGC 2020 Online. Online. doi: 10.6084/m9.figshare.12148632.v1

Fiscus CJ, Koenig D. A K-mer based approach to characterize the dark matter of the *Arabidopsis thaliana* genome. Poster. Southern California Evolutionary Genetics and Genomics Meeting (SCalE) 2019. Irvine, CA, USA

Fiscus CJ, Koenig D. A K-mer based approach to characterize the dark matter of the *Arabidopsis thaliana* genome. Poster. SMBE 2019. Manchester, UK

Awards and Fellowships

SMBE2024 Young Investigator Award- $2000	2024
UCR Graduate Student Association Conference Travel Grant- $400	2022
Earle C. Anthony Graduate Student Travel Award (UCR)-$1000	2020
UCR Graduate Student Association Conference Travel Grant- $900	2019
Best Student Appetizer, UCR Botany and Plant Sciences Holiday Party	2017, 2018, 2019
Dean's Distinguished Fellowship (UCR)- $210,938	2016 - 2021

Outreach

Scientist Mentor, PlantingScience	09/2017 - 05/2020
Volunteer, UC Riverside Plant Discovery Day	04/2019
Master Plant Science Team, PlantingScience	09/2017 - 05/2018
Guest Speaker, James C. Enochs High School Forensics/Biotechnology Career Pathway Program	03/2017

Service

Organizer, Southern California Evolutionary Genetics and Genomics Meeting (SCalE)	2023
President, GGB Graduate Student Association (UCR)	2019 - 2020
Secretary, GGB Graduate Student Association (UCR)	2017 - 2018

Professional Affiliations

Genetics Society of America	2020 - Present
Society for Molecular Biology and Evolution	2017 - Present

Mentoring

Livia Nguyen, UCR undergraduate	2020
Caitlin Santos, UCR undergraduate	2019 - 2021
Johnny Nguyen-Tran, UCR undergraduate	2019
Chris Roland Valdez, NSF-CEPCEB REU Program in Next Generation Plant Biology	06-08/2018
Selena Burke, NSF-CEPCEB REU Program in Next Generation Plant Biology	06-08/2017