Chenlu Di

Email: chenludi6@gmail.com
Website: https://chenludi.github.io/
University of California Los Angeles
Dept. of Ecology and Evolutionary Biology

Education

Department of Ecology and Evolutionary Biology, University of Arizona 08/2016-01/2023
Ph.D. in Ecology and Evolutionary Biology

Zhejiang University 09/2012-07/2016
Bachelor in Applied Biological Science, B.S. in Agronomy

Employment

Kirk Lohmueller Lab, Department of Ecology and Evolutionary Biology, University of California Los Angeles 01/2023-Present
Postdoctoral Researcher

Publications

1. **Chenlu Di**, Kirk E Lohmueller, 2024. Revisiting dominance in population genetics. ***Genome Biology and Evolution***,16, no. 8: evae147.
2. **Chenlu Di**, Jesus Murga Moreno, Diego Salazar Tortosar, M. Elise Lauterbur and David Enard. 2021. Decreased recent adaptation at human mendelian disease genes as a possible consequence of interference between advantageous and deleterious variants. ***eLife***.10:e69026. (old model)
3. Xinshuai Qi, Hong An, Tara E. Hall, **Chenlu Di,** Paul D. Blischak, Michael T.W. McKibben, Yue Hao, Gavin C. Conant, J. Chris Pires and Michael S. Barker. 2021. Genes derived from ancient polyploidy have higher genetic diversity and are associated with domestication in Brassica rapa. ***New Phytologist***, 230: 372-386.
4. Xiaobai Li, Weirui Li , **Chenlu Di**, Ming Xie, Liang Jin, Cheng Huang and Dianxing Wu. 2016. Development of genic simple sequence repeat panels for population classification of chinese *Cymbidium* species, ***Journal of the American Society for Horticultural Science***, 141(2):125–130.

Paper in revision

5. **Chenlu Di**, Jesus Murga Moreno and David Enard. 2022. Stability evolution as a major

mechanism of human protein adaptation in response to viruses. bioRxiv 2022.12.01.518739. (in revision at ***Molecular Biology and Evolution***)

Preprint

6. **Chenlu Di**, Swetha Ramesh, Jason Ernst, Kirk E. Lohmueller. 2025. The landscape of fitness effects of putatively functional noncoding mutations in humans. bioRxiv 2025.05.14.654124

7. **Chenlu Di***, Carlos Eduardo G. Amorim*, Meixi Lin, Clare Marsden, Christina A. Del Carpio, Jonathan C. Mah, Jacqueline A. Robinson, Bernard Y. Kim, Jazlyn A. Mooney, Omar E. Cornejo, Kirk E. Lohmueller. 2024. Evolutionary consequences of domestication on the selective effects of new amino acid changing mutations in canids. bioRxiv 2024.11.13.623529. (*contributed equally)

Teaching Experience

Lectures

Fall, 2021	Graduate teaching assistant in Intro Biology online course
Spring, 2019-2021	Graduate teaching assistant in Population genetics
Fall, 2016-2020	Graduate teaching assistant in Genetics
Spring, 2017	Graduate teaching assistant in Evolution
Spring, 2018	Graduate teaching assistant in Animal Sexual Behavior

Workshop

2021	ResBaz Arizona: assistant at a python workshop

Prizes and Scholarships

2025	Society of Molecular Biology and Evolution: Young Investigator Attendance Award
2021, 2022	The Galileo Circle Scholarship
2018, 2019, 2021	William A. Calder III Scholarship
2016	Distinguished Student Social Work Award

2016 Distinguished Poster in the National Agriculture Conference for College Students, Hefei, China

Conference, Talks and Posters

Invited talks

2024 2024 Plant Ecology Workshop in Taiwan, Keynote Speech Section
The Janzen-Connell hypothesis for diversity maintenance in tropical forests: lessons from general ecological theory
Presented by Peter Chesson

2024 Invited talk at Westlake University, China
The interplay between natural selection and diseases in human genome

Oral presentations

2024 Young Evolutionary Researchers' Symposium at Zhejiang University, China
The landscape of fitness effects of putatively functional noncoding mutations in humans

2024 Southern California Evolutionary Genetics and Genomics Meeting
Inference of fitness effects of mutations in non-coding regions of the human genome

2023 University of California, Los Angeles, QCBio Research-in-Progress Seminar
Inference of fitness effects of mutations in non-coding regions of the human genome

2022 Women in Data Science Tucson Virtual Conference
Explore the evolution in human disease genes by public human genomic data

2021 Society for Molecular Biology and Evolution (SMBE)
Decreased adaptation at human disease genes as a possible result of low recombination between deleterious and advantageous variants

2021 Cold Spring Harbor Laboratory (CSHL) Probabilistic Modeling in Genomics, (competitive)
The causes of strongly depleted recent adaptation in human disease genes

2020 Club EvMed — Virtual Evolutionary Medicine Conversations
The causes of strongly depleted recent adaptation in human disease genes

2020 Annual Arizona Astrobiology Research Symposium
The causes of strongly depleted recent adaptation in human disease genes

2019 Bay Area Population Genomics
The causes of strongly depleted recent adaptation in human disease genes

Posters

2024 Society for Molecular Biology and Evolution (SMBE)
The distribution of fitness effects of mutations in enhancers, promoters and conserved non-coding regions

2023	Society for Molecular Biology and Evolution (SMBE) *How human protein adapt in response to viruses? Altering protein stability as a major mechanism*
2022	Population, Evolutionary, and Quantitative Genetics Conference *Does adaptation to past viral infections drive the changes in protein stabilities for virus-interacting proteins?*

Professional Service

Reviewer: BCM genomics, Ecology, Genome Biology and Evolution

Local / Community Service and Outreach

2024	Judges at poster fair for undergrads, Department of Ecology and Evolutionary biology, University of California, Los Angeles
2023	Mentor for undergrads for Society for Molecular Biology and Evolution (SMBE) conference at Ferrara, Italy
2019-2023	Executive member of Chinese Genomics Meet-up online (a US non-profit organization).
2022-2023	Secretary of Chinese Genomics Meet-up online (a US non-profit organization).
2021	Volunteer in ResBaz Arizona: a python workshop
2021	Judges at poster fair for undergrads, Department of Ecology and Evolutionary biology, University of Arizona