

# Chenlu Di

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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\***, 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)

6. **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

7. **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

### 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 <i>The Janzen-Connell hypothesis for diversity maintenance in tropical forests: lessons from general ecological theory</i> Presented by Peter Chesson
2024	Invited talk at Westlake University, China <i>The interplay between natural selection and diseases in human genome</i>

#### *Oral presentations*

2024	Young Evolutionary Researchers' Symposium at Zhejiang University, China <i>The landscape of fitness effects of putatively functional noncoding mutations in humans</i>
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?*

**Teaching Experience**

*Lectures*

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|-------------------|--|
| 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

**Professional Service**

**Reviewer:** BCM genomics, Ecology

**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