

Zhengting Zou

Research Fellow
Department of Ecology and Evolutionary Biology
University of Michigan

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EDUCATION

- 9/2009 - 7/2013 B.S. in Biological Science, Peking University, Beijing, China
- 9/2013 - 8/2017 Ph.D. in Bioinformatics, University of Michigan, Ann Arbor, MI, USA
Advisor: Dr. Jianzhi “George” Zhang

RESEARCH EXPERIENCE

- 9/2011 - 7/2013 Undergraduate Research Assistant, Peking University, Beijing, China
Laboratory of Genomic Diversity and Evolution, School of Life Sciences
Advisor: Dr. Shu-Jin Luo
- 6/2012 - 7/2012 Intern Research Assistant, Chinese Academy of Sciences, Yunnan, China
Ecological Evolution Group, Xishuangbanna Tropical Botanical Garden
Advisors: Drs. Yann Surget-Groba and Charles Cannon
- 9/2013 - 8/2017 Graduate Student Research Assistant, University of Michigan, Ann Arbor, MI, USA
Advisor: Dr. Jianzhi “George” Zhang
- 9/2017 - Research Fellow, University of Michigan, Ann Arbor, MI, USA
Advisor: Dr. Jianzhi “George” Zhang

RESEARCH INTERESTS

Molecular evolution, evolutionary systems biology, phylogenetics.

TEACHING EXPERIENCE

- 9/2014 - 12/2014, 9/2015 - 12/2015
Graduate Student Instructor, University of Michigan, Ann Arbor, MI, USA
BIOINF 527 “Introduction to Bioinformatics and Computational Biology”

1/2015 - 4/2015

Graduate Student Instructor, University of Michigan, Ann Arbor, MI, USA

BIOLOGY 305 "Introduction to Genetics"

2/2019

Guest lecturer and course liaison for bioinformatics, University of Michigan, Ann Arbor, MI, USA

BIOLOGY 173 "Authentic Research Connection: Experimental Evolution of Yeast"

PUBLICATIONS and PRESENTATIONS

Invited seminars

"Model-based genomic studies of protein sequence evolution: convergence, epistasis, and amino acid acceptance rates" School of Life Sciences, Peking University, August 2017.

Conference presentations

Zou Z, Zhang J. 2014. "How prevalent are parallel amino acid substitutions in protein evolution?" Annual Meeting of the Society for Molecular Biology and Evolution, Puerto Rico, June 2014. Poster presentation.

Zou Z, Zhang J. 2015. "Is convergence less common in protein sequences than morphological traits?" Annual Meeting of the Society for Molecular Biology and Evolution, Vienna, July 2015. Poster presentation.

Zou Z, Zhang J. 2016. "Morphological and molecular convergences in phylogenetic inference" Annual Meeting of the Society for Molecular Biology and Evolution, Gold Coast, July 2016. Oral presentation.

Zou Z, Zhang J. 2016. "Morphological and molecular convergences in phylogenetic inference" The First Young Scientists Symposium on Evolution and Genetics, Kunming, July 2016. Invited speaker.

Zou Z, Zhang J. 2017. "Are nonsynonymous transversions more deleterious than nonsynonymous transitions?" Annual Meeting of the Society for Molecular Biology and Evolution, Austin, July 2017. Poster presentation.

Publications

1. Xu X, Dong G-X, Hu X-S, Miao L, Zhang X-L, Zhang D-L, Yang H-D, Zhang T-Y, **Zou Z-T**, Zhang T-T, Zhuang Y, Bhak J, Cho YS, Dai W-T, Jiang T-J, Xie C, Li R-Q, Luo S-J. 2013. The genetic basis of white tigers. *Curr. Biol.*, 23: 1031-1035.
2. **Zou Z-T**, Uphyrkina O, Fomenko P, Luo S-J. 2015. The development and application of a multiplex short tandem repeat (STR) system for identifying subspecies, individuals and sex in tigers. *Integr. Zool.*, 10: 376-388.
3. **Zou Z**, and Zhang J. 2015. No genome-wide convergence for echolocation. *Mol. Biol. Evol.*, 32: 1237-1241.
4. **Zou Z**, and Zhang J. 2015. Are convergent and parallel amino acid substitutions in protein evolution more prevalent than neutral expectations? *Mol. Biol. Evol.*, 32: 2085-2096.
5. Oetjens MT, Shen F, Emery SB, **Zou Z** and Kidd JM. 2016. Y-Chromosome structural diversity in the bonobo and chimpanzee lineages. *Genome Biol. Evol.*, 8: 2231-2240.

6. **Zou Z**, and Zhang J. 2016. Morphological and molecular convergences in mammalian phylogenetics. *Nat. Commun.*, 7: 12758.
7. **Zou Z**, and Zhang J. 2017. Gene tree discordance does not explain away the temporal decline of convergence in mammalian protein sequence evolution. *Mol. Biol. Evol.*, 34: 1682-1688.
8. Zhang W, Xu X, Yue B, Hou R, Xie J, **Zou Z-T**, Han Y, Shen F, Zhang L, Xie Z, Yuan Y, Yin Y, Fu W, Chen D, Huang W, Liu Z, Tang Y, Zhao B, Zhang Q, Chen W, Zhang R, Chen J, Luo S-J, Zhang Z. 2019. Sorting out the Genetic Background of the Last Surviving South China Tigers. *J. Hered.*, pii: esz034.

AWARDS and HONORS

Founder Scholarship, Peking University, 2010
 Wusi Scholarship, Peking University, 2011
 Rackham Conference Travel Grant, University of Michigan, 2014, 2015, 2016
 Rackham International Student Fellowship, University of Michigan, 2015
 Rackham Predoctoral Fellowship, University of Michigan, 2016
 Bioinformatics Academic Achievement Award, Department of Computational Medicine and Bioinformatics, University of Michigan, 2016
 Young Investigator Travel Award, Society for Molecular Biology and Evolution, 2017
 Chinese Government Award For Outstanding Self-Financed Students Abroad, 2017

FUNDING

Summer Internship Grant, Xishuangbanna Tropical Botanical Garden, Chinese Academy of Sciences, 2012. Role: Intern research assistant

NVIDIA GPU Grant, NVIDIA Corporation, 2017. Role: Research fellow applicant

“Deep Learning for Phylogenetic Inference”, \$80,000, The Michigan Institute for Computational Discovery and Engineering (MICDE), University of Michigan, 2018. Role: Postdoctoral researcher (PI: Jianzhi Zhang; Co-PI: Yuanfang Guan)

PROFESSIONAL MEMBERSHIPS and SERVICES

Member of Society for Molecular Biology and Evolution (SMBE).

Ad hoc reviewer for:
Nature Communications,
Molecular Biology and Evolution,
Genome Biology and Evolution,
Journal of Heredity,
Journal of Molecular Evolution,
PLOS ONE,
BMC Plant Biology,
Frontiers in Zoology,
Philosophical Transactions B,
Current Genomics,
G3: Genes, Genomes, Genetics.

EEB “Outstanding Graduate Student Publication” Review Committee, Department of Ecology and Evolutionary Biology, University of Michigan, 2018