

Rongfeng Cui
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Education

2009~2014 Ph.D. in Biology, Texas A&M University, College Station
2004~2008 Bachelor of Science in Biology, Sun Yat-sen University, Canton, China

Experiences

2014~Present

Postdoctoral research: Identifying genomic signatures of repeated adaptation to annualism in African Killifishes. Advisor: Dr. Dario Valenzano. Max-Planck Institute for the Biology of Aging.

2010-2014

Dissertation research: Mechanisms and genomic patterns of reproductive isolation in *Xiphophorus* fishes. Advisor: Dr. Gil Rosenthal. Texas A&M University.

2010-2012

Research assistant: *anyFish* – a user friendly software for creating computer-animated stimuli in animal behavior (supported by NSF). Texas A&M University.

2011-2014

Teaching assistant: BIOL-107 Zoology lab. Texas A&M University.

2009-2010

Teaching assistant: BIOL-112 introductory biology II lab. Texas A&M University.

2004~2008

Bachelor's degree thesis - A survey of the gobies (Perciformes, Gobiidae) of Zhuhai, China.

Publications

- R. Cui, T. Medeiros, D. Willemsen, L. N. M. Iasi, G. E. Collier, M. Graef, M. Reichard, D.R. Valenzano. Genome-wide relaxation of selection underlies the evolution of annual killifishes. submitted.
- R. Cui*, P. Delclos*, M. Schumer, G.G. Rosenthal. 2017. Early social learning triggers neurogenomic expression changes in a swordtail fish. *Proc. R. Soc. B.* *equal contri.
- M. Schumer, D.L. Powell, P. Delclos, M. Squire, R. Cui, P. Andolfatto, G.G. Rosenthal. 2017. Assortative mating and persistent reproductive isolation in hybrids. *PNAS*.
- R. Cui, M. Schumer, G.G. Rosenthal. 2015. Admix'em: A flexible framework for forward-time simulations of hybrid populations with selection and mate choice. *Bioinformatics*.

- S. J. Ingley, M. R. Asl, C. Wu, R. Cui, M. Gadelhak, W. Li, J. Zhang, J. Simpson, C. Hash, T. Butkowski, T. Veen, J. B. Johnson, W. Yan, G. G. Rosenthal. 2015. anyFish 2.0: An open-source software platform to generate and share animated fish models to study behavior. *SoftwareX*.
- M. Schumer, R. Cui, D Powell, G. Rosenthal, P. Andolfatto. 2015. Ancient hybridization and genomic stabilization in a swordtail fish. *Molecular Ecology*.
- D.R. Valenzano, B. Benayoun, P.P. Singh, E. Zhang, P.D. Etter, C.K. Hu, M. Clement-Ziza, D. Willemsen, R. Cui, I. Harel, B. Machado, M.C. Yee, S.C. Sharp, C.D. Bustamante, A. Beyer, E.A. Johnson, A. Brunet. 2015. The African turquoise killifish genome provides insights into evolution and genetic architecture of lifespan. 2015. *Cell*.
- M. Schumer*, R. Cui*, G.G. Rosenthal and P. Andolfatto. simMSG: an experimental design tool for high-throughput genotyping of hybrids. *Mol. Ecol. Res.* *equal contri.
- M. Schumer, R. Cui, G.G. Rosenthal and P. Andolfatto. 2015. Reproductive isolation of hybrid populations driven by genetic incompatibilities. *PLoS Genet*.
- M. Schumer, R. Cui, D. Powell, R. Dresner, G.G. Rosenthal, P. Andolfatto. 2014. High-resolution mapping reveals hundreds of genetic incompatibilities in hybridizing fish species. *eLife*.
- R. Cui, X. Yang, Y. Pan and Y. Wang, 2013. A new barbeled goby from south China. *Zootaxa* 3670(2):177-192.
- T. Veen, S. Ingley, R. Cui, et al. 2013. anyFish: open-source software to generate animated fish models for behavioral studies. *Evolutionary Ecology Research* 15:361-375.
- R. Cui, M. Schumer, K. Kruesi, R. Walter, P. Andolfatto and G.G. Rosenthal, 2013. Phylogenomics reveals extensive reticulate evolution in *Xiphophorus* fishes. *Evolution*. DOI: 10.1111/evo.12099.
- M. Schumer, R. Cui, B. Boussau, R. Walter, G.G. Rosenthal and P. Andolfatto, 2012. An evaluation of the hybrid speciation hypothesis for *Xiphophorus clemenciae* based on whole genome sequences. *Evolution*. DOI: 10.1111/evo.12009
- T. Butkowski, W. Yan, A.M. Gray, R. Cui, M.N. Verzijden and G.G. Rosenthal, 2011. Automated interactive video playback for studies of animal communication. *J. Vis. Exp.*, e2374
- Y. Wang, J. Yang and R. Cui. 2010. A New Species of *Goniurosaurus* (Squamata: Eublepharidae) from Yingde, Guangdong Province, China. *Herpetologica* 66:229-240.
- Y. Wang and R. Cui. 2007. The new distribution record of *Ficedula narcissina owstoni* in mainland China. *Acta Zootaxonomica Sinica*. 32(2):492-494.

Posters & Presentations

- R. Cui. 2018. Speciation, hybridization and adaptation in cyprinodontiform fishes. Invited speaker. Ecology and Evolution seminar α . Sun Yat-sen University, China. Host: Prof. Yang Liu.
- R. Cui, D.R. Valenzano. 2018. Genome-wide relaxation of selective constraints characterizes evolution of annualism in African killifishes. 1st Asian Evolutionary Research Conference. Shenzhen, China.
- R. Cui, D.R. Valenzano. 2016. Selection in synonymous sites inferred from low coverage

genome resequencing data. 2nd *Nothobranchius* symposium. Jena, Germany.

- R. Cui, D.R. Valenzano. 2016. Identifying genomic signatures of repeated adaptation to annualism in African Killifishes. 2nd Cologne Ageing Conference. Cologne, Germany.
- M. Schumer, R. Cui, D. Powell, R. Dresner, G.G. Rosenthal and P. Andolfatto, 2014. The genetic architecture of reproductive isolation between naturally hybridizing species. SICB, Austin, Texas.
- R. Cui, M. Schumer, K. Kruesi, R. Walter, P. Andolfatto and G.G. Rosenthal, 2013. Phylogenomics reveals extensive reticulate evolution in *Xiphophorus* fishes. SICB, San Francisco, CA.
- R. Cui, M.N. Verzijden and G.G. Rosenthal, 2012. Social effects act in opposite directions to shape mating preferences in sister species of swordtail fishes. Annual meeting of American Livebearer Association. Ft. Lauderdale, FL.
- R. Cui and G.G. Rosenthal, 2011. Early learning and mechanisms of conspecific mate preference in a swordtail fish *Xiphophorus malinche* (Teleostei, Poeciliidae). Evolution, Society for the Study of Evolution, Norman OK.

Grants & Awards

2018 Apr.

Student Award. 1st Asian Evolutionary Research Conference. ¥5000.

2016 Apr.

Best Poster Award. The 2nd Cologne Ageing Conference. €500.

2013 Jan.

Award for Best Student Oral Paper (Division of phylogenetics & Comparative Biology). SICB. San Francisco, CA.

2012 Oct

Charlotte Mangum Student Support. SICB. San Francisco, CA.

2012 Oct

Faculty of Neuroscience Travel Award. Faculty of Neuroscience, Texas A&M University. \$500.00.

2012 Aug

Doctoral dissertation improvement grant. Dissertation research: Olfactory reproductive isolating mechanisms in swordtail fishes. NSF. \$15,000.00.

2012 May

Roozbeh Arianpour Endowed Memorial Scholarship in Biology. Department of Biology, Texas A&M University. \$1,000.

2011 May

Rosemary Grant Award for Graduate Student Research. Society for the Study of Evolution. \$2490.00.

2004 May

Second Award in microbiology. 55th Intel International Science and Engineer Fair. Science Service. Portland, Oregon. \$1,500.