

Chenhong Li, Ph.D.

Professor
College of Fisheries and Life Science
Shanghai Ocean University
999 Hucheng Huan Road, Pudong New District
Shanghai 201306, China
Phone: 15692161233
Fax: +86 21 61900405

Education

Postdoctoral Fellow, College of Charleston, Charleston, SC, (2010.8-2012.8). Advisor: Gavin Naylor.

Visiting Scholar, University of York, UK, (2011.1-2011.5). Advisor: Michael Hofreiter.

Postdoctoral Research Associate, University of Nebraska – Lincoln, (2007.8-2010.8). Advisor: Guillermo Ortí.

Ph. D., Biological Sciences-Ecology, Evolution, and Behavior. University of Nebraska, Lincoln, NE (2007). Advisor: Guillermo Ortí.

Ph. D. student (transferred to UNL), Marine Biology. Florida Institute of Technology, Melbourne, FL (2001-2002). Advisor: Junda Lin.

M. S., Aquaculture. Shanghai Fisheries University, Shanghai, China (1996). Advisor: Sifa Li.

B. S., Hydrobiology. Shanghai Fisheries University, Shanghai, China (1993).

Publications

1. X. Yao, **C. Li**, C. W. Dick, 2013. Exon-primed intron-crossing (EPIC) markers for evolutionary studies of *Ficus* and other taxa in the fig family (Moraceae). *Applications in Plant Sciences* 1 (10): 1300037.
2. P. R. Ströher, **C. Li** and M. R. Pie, 2013. Exon-primed intron-crossing (EPIC) makers as a tool for ant Phylogeography, in print.
3. **Li, C.**, M., Hofreiter, N., Straube, S., Corrigan, G. J. P. Naylor, 2013. Capturing protein-coding genes across highly divergent species. *BioTechniques* 54:321-326.
4. Betancur-R. R, Broughton RE, Wiley EO, Carpenter K, López JA, **Li C**, Holcroft NI, Arcila D, Sanciangco M, Cureton II JC, Zhang F, Buser T, Campbell MA, Ballesteros JA, Roa-Varon A, Willis S, Borden WC, Rowley T, Reneau PC, Hough DJ, Lu G, Grande T, Arratia G, Ortí G., 2013. The Tree of Life and a New Classification of Bony Fishes. *PLOS Currents Tree of Life*. 2013 Apr 18.

5. Broughton RE, Betancur-R. R, **Li C**, Arratia G, Ortí G. Multi-locus phylogenetic analysis reveals the pattern and tempo of bony fish evolution. *PLOS Currents Tree of Life*. 2013 Apr 16.
6. Betancur-R., R., **C. Li**, T. A Munroe, J. A. Ballesteros, G. Ortí. 2013. Addressing gene tree discordance and non-stationarity to resolve a multi-locus phylogeny of the flatfishes (Teleostei: Pleuronectiformes). *Systematic Biology* 62 (5): 763-785.
7. **Li, C.**, Riethoven, J.-J. M., Naylor, G. 2012. EvolMarkers: a database for mining exon and intron markers for evolution, ecology and conservation studies. *Molecular Ecology Resources*, 12(5) :967–71.
8. **Li, C.**, Matthes, K., Garcia, M., Naylor, G. J. P. 2012. Nuclear markers for phylogenetics of chondrichthyes and the problem in rooting phylogeny with distant outgroup. *Molecular Phylogenetics and Evolution*, 63:365-373.
9. Sommer, J. A., **Li, C.**, Brozek, J., Bessert, M. L., Ortí, G., Berra, T. M., 2011. Low genetic diversity in Nurseryfish, *Kurtus gulliveri* (Perciformes: Kurtidae), and an appraisal of its breeding system using microsatellite loci. *The Beagle, Records of the Museums and Art Galleries of the Northern Territory*, 2011 27: 179-188.
10. **Li, C.**, Betancur-R, R., Smith, Wm. L., Ortí, G. 2011. Monophyly and interrelationships of Snook and Barramundi (Centropomidae sensu Greenwood) and five new markers for fish phylogenetics. *Molecular Phylogenetics and Evolution*, 60: 463-471.
11. **Li, C.**, Ortí, G., Zhao, J., 2010. The phylogenetic placement of sinipercid fishes (“Perciformes”) revealed by 11 nuclear loci. *Molecular Phylogenetics and Evolution*, 56: 1096-1104.
12. **Li, C.**, Riethoven, J.-J. M., Ma, L., 2010. Exon-primed intron-crossing (EPIC) markers for non-model teleost fishes. *BMC: Evolutionary Biology*, 10: 90.
13. **Li, C.**, Bessert, M. L., Macrander, J., Ortí, G., 2009. Low variation but strong population structure in mitochondrial control region of the plains topminnow, *Fundulus sciadicus*. *Journal of Fish Biology*, 74: 1037-1048.
14. Ortí, G., **Li, C.**, 2008. Molecules and phylogenetic relationships of ostariophysans. *Journal of vertebrate paleontology*, 28(3): 123A-123A.
15. **Li, C.**, Lu, G., Ortí, G., 2008. Optimal data partitioning and a test case for ray-finned fishes (Actinopterygii) based on ten nuclear loci. *Systematic Biology*, 57(4): 519-539.
16. Wang, C., **Li, C.**, Li, S., 2008. Mitochondrial DNA-inferred population structure and demographic history of the mitten crab (*Eriocheir*, sensu stricto) along the coast of mainland China inferred from mitochondrial loci. *Molecular Ecology*, 17: 3515-3527.
17. Zhao, J., **Li, C.**, Zhao, L., Wang, W., Cao, Y., 2008. Mitochondrial diversity and phylogeography of the Chinese perch, *Siniperca chuatsi* (Perciformes: Sinipercidae). *Molecular Phylogenetics and Evolution*, 49(1): 399-404.

18. **Li, C.**, Ortí, G., Zhang, G., Lu, G., 2007. A practical approach to phylogenomics: the phylogeny of ray-finned fish (Actinopterygii) as a case study. ***BMC: Evolutionary Biology***, 7: 44.
19. **Li, C.**, Ortí, G., 2007. Molecular phylogeny of Clupeiformes (Actinopterygii) inferred from nuclear and mitochondrial DNA sequences, ***Molecular Phylogenetics and Evolution*** 44: 386-398.
20. **Li, C.**, Bessert, M. L., Macrander, J., Ortí, G., 2007. Microsatellite loci for the plains topminnow (*Fundulus sciadicus*, Fundulidae). ***Molecular Ecology Notes*** 7: 691-693.
21. **Li, C.**, Li, S., 2003. Genetically improved farmed Nile tilapia and its new selected generation in China. In: Proceedings of the Third World Fisheries Congress: Feeding the World with Fish in the Next Millennium--The Balance between Production and Environment. ***American Fisheries Society Symposium*** 38.
22. Li, S., **Li, C.**, Dey, M., Gagalac, F., Dunham, R., 2002. Cold tolerance of three strains of Nile tilapia, *Oreochromis niloticus*, in China. ***Aquaculture*** 213: 123-129.
23. **Li, C.**, Li, S., Xing, Y., Hu, B., Zhao, S., Wu, Z., 2001. Evaluation of culture performances of two crab *Eriocheir sinensis* populations in China. ***World Aquaculture Magazine***, 32(3): 15-16, 68-69.
24. Li, S., **Li, C.**, Dey, M., Dunham, R., 1999. Seizability of four strains of Nile tilapia, *Oreochromis niloticus*, in Chinese ponds. ***Aquaculture***, 174: 223-227.

Publications in Chinese with English abstracts

Chenhong Li also has 19 publications on aquaculture and population genetics of fishes in Chinese.

Submitted papers

1. Borden, C. W., **Li, C.**, Ortí, G. Systematics and historical biogeography of a South American fish (*Prochilodus*, Prochilodontidae, Characiformes). ***Molecular Phylogenetics and Evolution***

In preparation

1. **Li, C.**, Lopez, A., Makinen, T., Broughton, R., Ortí, G. Interrelationships among ostariophysan fishes and related taxa re-assessed by ten nuclear loci and exploration of systematic bias.
2. **Li, C.** and Ortí, G. Mixture model-based optimal data partitioning for phylogenetic analysis.
3. Ortí, G., **Li, C.**, Chen, W-J, Bell, M. Phylogeny and timeframe for the diversification of sticklebacks based on new fossil evidence and nuclear gene sequences.
4. Bessert, M. L., **Li, C.**, Brock, C. Ichthyofaunal monitoring in the forks of the Platte River, NE, following five years of drought.

5. Bautista, R., Gillis, J., **Li, C.**, Parmenter, S., Chen, Y., and Pezold, F. Development and utility of exon-primed intron-crossing markers in conservation of desert fishes.

Book Chapters

1. Ortí, G, **Li, C.** 2009. Phylogeny and Classification (Chapter 1). pp 1-24 in: Jamieson, B.G.M. (Eds.), ***Reproductive Biology and Phylogeny of Fishes***. Science Publishers, Enfield, New Hampshire.
2. Ortí, G, **Li, C.**, Farias, I. P. 2005. Filogenia, filogeografía y estructura poblacional de las especies de *Prochilodus* (Prochilodontidae, Characiformes) en las principales cuencas fluviales de Sudamérica. In: Renno J. -F., García-Dávila C., Duponchelle F. and Nuñez J. (Eds.), ***Biología de las Poblaciones de Peces de la Amazonía y Piscicultura***. Comunicaciones del Primer coloquio de la Red de Investigación sobre la Ictiofauna Amazónica, Iquitos, Perú, pp. 116-122.

Fellowships and Awards

First Prize for Scientific and Technological Progress (2007)

-Science and Technology Commission of Shanghai Municipality

DeepFin Graduate Student Fellowship (2005)

-National Science Foundation

Graduate Study Fellowships (2005)

-University of Nebraska

Bioinformatics Interdisciplinary Research Scholar (2003)

-University of Nebraska

SBS Graduate Symposium First-place Poster Award (2005)

-University of Nebraska

Second Prize for Scientific and Technological Progress (2004)

-Science and Technology Commission of Shanghai Municipality

Third Prize for Scientific and Technological Progress the Ministry of Agriculture (1997)

-Ministry of Agriculture, China.

Teaching Experience

Lecturer

Molecular Ecology (2009), for graduate and upper-level undergraduate students

Teaching Assistant

Introductory Biology Lab (2003-2007)

Vertebrate Zoology Lab (2005)

Bioinformatics Lab (2005), for graduate and upper-level undergraduate students

Mentoring

Two undergraduate students through Undergraduate Creative Activities and Research Experiences (UCARE) Program at University of Nebraska-Lincoln.

Two graduate students for their thesis projects.

Grants

Project	Funding source	Year	Amount
Collaborative Research: Jaws and Backbone: Chondrichthyan Phylogeny and a Spine for the Vertebrate Tree of Life (wrote the grant proposal together with Dr Gavin Naylor)	National Science Foundation	2011-2015	2,234,878
Collaborative Research: Assembling the euteleost tree of life - addressing the major unresolved problem in vertebrate phylogeny (co-PI)	National Science Foundation	2007-2012	602,956
Conservation genetics of the plains topminnow (<i>Fundulus sciadicus</i>) in Nebraska - prioritizing populations for future conservation	Nebraska State Wildlife Grant	2007	4,300
SBS Special Fund, for various research projects and travel	University of Nebraska-Lincoln	2002-2007	6,300
Travel to meetings	SigmaXi	2006-2007	300
IEEA Grant, for various research projects and travel	University of Nebraska-Lincoln	2002-2006	12,816
Conservation genetics of the plains topminnow	North American Native Fish Association	2005	1,000
Population genetics of the plains topminnow	Center for Great Plains Studies	2005	300

Professional Experience

Professor, Shanghai Ocean University	2012.8-present
Postdoctoral Research Fellow, College of Charleston	2010.8-2012.8
Visiting Scholar, University of York, UK	2011.1-2011.5
Postdoctoral Research Associate, University of Nebraska - Lincoln	2007-2010
Research Associate, Shanghai Fisheries University	1996-2001

Membership

American Society of Ichthyologists and Herpetologists

Society of Systematic Biologists

Molecular Biology and Evolution Society

American Genetic Association

Sigma Xi, The Scientific Research Society

Member of North American Native Fishes Association

Service to Profession

Review for: Evolutionary Bioinformatics, Journal of Molecular Evolution, Molecular Phylogenetics and Evolution, Ichthyological Research, Marine and Coastal Fisheries.

Scientific Presentations

2010

EvolMarkers: mining exon and intron markers for phylogenetics and population studies. Evolution 2010, Portland, Oregon, June.

2009

Molecular clocks and the timing of Ostariophysan radiations. American Society of Ichthyologists and Herpetologists (ASIH) Annual Meeting, Portland, Oregon, July.

2008

Molecules and phylogenetic relationships of ostariophysans. The Society of Vertebrate Paleontology (SVP) Annual Meeting, Cleveland, Ohio, Oct.

Phylogeny and time-frame for the diversification of sticklebacks based on new fossil evidence and nuclear gene sequences. ASIH Annual Meeting, Montreal, Canada, July.

Data partitioning without a priori assumptions substantially improves the models in phylogenetic analysis. Evolution, University of Minnesota, Minneapolis, MN. June 20-24.

2007

Chondrostei, Holostei, Teleostei? Test of hypotheses based on new nuclear DNA sequence data. ASIH Annual Meeting, Saint Louis, MO, July.

Partitioned analysis, beyond by genes and codons. ASIH Annual Meeting, Saint Louis, MO, July.

Phylogeny of ray-finned fish (Actinopterygii) based on 10 nuclear loci. ASIH Annual Meeting, Saint Louis, MO, July.

2006

Conservation genetics of the plains topminnow (*Fundulus sciadicus*). ASIH Annual Meeting, New Orleans, LA, July.

Development of genome-scale nuclear gene markers for the tree of life. ASIH Annual Meeting, New Orleans, LA, July.

Mitogenomics or genome-scale nuclear loci for high-level phylogeny? ASIH Annual Meeting, New Orleans, LA, July.

Genome-scale markers for the tree of life of ray-finned fishes (Actinopterygii). Evolution, June 23-27, Stony Brook University.

2005

Phylogeography and conservation genetics of the plains topminnow (*Fundulus sciadicus*). ASIH Annual Meeting, Tampa, FL, July.

Phylogenetic relationships among families of Clupeiformes based on mitochondrial and nuclear gene sequences. ASIH Annual Meeting, Tampa, FL, July.

2004

Phylogeography of South American freshwater fishes (*Prochilodus*, Characiformes): mtDNA vs. nuclear intron DNA sequences. ASIH Annual Meeting, Norman, OK, May.

References

Dr. Gavin Naylor (current advisor)

Associate Professor
Department of Biological Sciences
College of Charleston
Charleston, SC 29401

Phone: +1 843-953-5025

Fax: +1 843-953-9199

E-mail: gnaylor@fsu.edu

Dr. Michael Hofreiter (current collaborator)

Professor for Evolutionary Biology and Ecology
Department of Biology (Area 2)
The University of York
Wentworth Way, Heslington
York, YO10 5DD
UK

Phone: 0044 (0)1904 328610

Email: michi@palaeo.eu

Dr. Guillermo Ortí (Ph D advisor)

Louis Weintraub Associate Professor
Department of Biological Sciences
The George Washington University
Washington, D.C., 200052

Phone: +1 202-994-7065

Fax: +1 202-994-6100

E-mail: gorti@gwu.edu

Dr. Richard Broughton (current collaborator)

Associate Professor
Oklahoma Biological Survey and
University of Oklahoma
111 E Chesapeake St
Norman OK 73019

Phone: +1 405-325-5357

E-mail: rbroughton@ou.edu

Dr. Estuko Moriyama (Ph D co-advisor)

Assistant Professor
School of Biological Sciences
University of Nebraska
Lincoln, Nebraska 68588

Phone: +1 402-472-4979

Fax: +1 402-472-3193

E-mail: emoriyama2@unl.edu

Dr. Jean-Jack M. Riethoven (current collaborator)

Bioinformatics Core Research Facility
Beadle Center for Biotechnology
University of Nebraska
Lincoln, Nebraska 68588

Phone: +1 402-472-7949

jriethoven2@unlnotes.unl.edu