

## CURRICULUM VITAE

### ALAN R. LEMMON

---

*Date of Birth:* April 21, 1976

*E-mail:* alemmon+”at”+evotutor.org

*Phone:* 402.709.7165 (home); 530.754.9551 (work); 530.752.1449 (fax)

*Mailing Address:* Evolution and Ecology, U. of California, One Shields Ave., Davis, CA 95616

#### ACADEMIC HISTORY

Assistant Professor Department of Scientific Computing, Florida State University (starting 12/2008)  
Postdoctoral Fellow Center for Population Biology, University of California at Davis (9/2007-present)  
Ph.D. Ecology, Evolution, and Behavior, University of Texas – Austin (2001-2007)  
*Dissertation Title:* Analytical, Computational, and Statistical Approaches to Studying Speciation  
Research Associate Laboratory of Evolutionary Genetics, Free University of Brussels (1/2001-7/2001)  
B.A. Environmental, Population, and Organismal Biology;  
Molecular, Cellular, and Developmental Biology, University of Colorado – Boulder (1995-2000)

#### AWARDS

NSF **I.G.E.R.T. Fellowship** in Computational Phylogenetics: **\$81,000** (9/2005-8/2007)  
**Publisher’s Award** for the Best Student Paper Published in Systematic Biology, 2004: **\$500** (6/2005)  
**EEB Departmental Fellowship**, University of Texas: **\$1100** (6/2007)  
**EEB Departmental Fellowship**, University of Texas: **\$700** (6/2006)  
**EEB Departmental Fellowship**, University of Texas: **\$600** (6/2005)  
**NSF Graduate Research Fellowship:** **\$100,000** (9/2002-8/2005)  
University of Texas **Preemptive Fellowship:** **\$7,000** (9/2001-6/2002)

#### PUBLICATIONS / SUBMITTED MANUSCRIPTS (available at <http://www.evotutor.org/pdfs>)

Lemmon, A. R., and M. C. Milinkovitch. 2002. The metapopulation genetic algorithm: an efficient solution for the problem of large phylogeny estimation. **PNAS** 99:10516-10521.  
Lemmon, A. R., and E. C. Moriarty. 2004. The importance of proper model assumption in Bayesian phylogenetics. **SYSTEMATIC BIOLOGY** 53:265-277.  
Lemmon, A. R., C. Smadja, and M. Kirkpatrick. 2004. Reproductive character displacement is not the only possible outcome of reinforcement. **JOURNAL OF EVOLUTIONARY BIOLOGY** 17: 177-183.  
Lemmon, A. R., and M. Kirkpatrick. 2006. Reinforcement and the genetics of hybrid incompatibilities. **GENETICS** 173:1145-1155.  
Lemmon, E. M., A. R. Lemmon, and D. C. Cannatella. 2007. Geological and climatic forces driving speciation in the continentally distributed trilling chorus frogs (*Pseudacris*). **EVOLUTION** 61:2086-2103.  
Brown, J. M., and A. R. Lemmon. 2007. The importance of data partitioning and the utility of Bayes

- factors in Bayesian phylogenetics. **SYSTEMATIC BIOLOGY** 56:643-655.
- Lemmon, E. M., A. R. Lemmon, J. T. Collins, J. A. Lee-Yaw, and D. C. Cannatella. 2007. Phylogeny-based delimitation of species boundaries in the trilling chorus frogs (*Pseudacris*). **MOLECULAR PHYLOGENETICS AND EVOLUTION** 44:1068-1082.
- Lemmon, E. M., A. R. Lemmon, J. T. Collins, and D. C. Cannatella. 2008. A new North American chorus frog species (Amphibia: Hylidae: *Pseudacris*) from the south-central United States **ZOOTAXA** 1675:1-30.
- Lemmon, A. R., and E. C. Moriarty. 2008. A likelihood framework for estimating phylogeographic history on a continuous landscape. **SYSTEMATIC BIOLOGY** 57:544-561.
- Lemmon, A. R., J. M. Brown, C. Stanger-Hall, and E. C. Moriarty. 2008. The effect of missing data on phylogenetic estimates obtained by maximum-likelihood and Bayesian inference. **SYSTEMATIC BIOLOGY** *accepted*.
- Brown J. M., S. M. Hedtke, A. R. Lemmon, and E. C. Moriarty. When trees grow too long: investigating the causes of highly inaccurate Bayesian branch lengths. **SYSTEMATIC BIOLOGY** *in review*.

## SOFTWARE DEVELOPED

### Phylogenetic

#### *PhyloMapper*

Maximum likelihood estimation of ancestral geographic location  
Version 1.0 released: September 2008

#### *MrConverge*

Convergence diagnostics for Bayesian phylogenetics  
Unreleased

#### *metaPIGA*

Phylogenetic estimation using a metapopulation genetic algorithm  
Version 1.0 released August 2002  
[http://www.ulb.ac.be/sciences/ueg/html\\_files/MetaPIGA.html](http://www.ulb.ac.be/sciences/ueg/html_files/MetaPIGA.html)

### Educational

#### *EvoTutor*

Java simulations/tutorials of evolutionary processes  
Version 1.0 Released January 2001  
<http://www.evotutor.org>  
Reviewed by Nature Reviews Genetics (2001, 2:832)

## PROGRAMMING LANGUAGES

Java, C++, R

## TEACHING EXPERIENCE

**Teaching Assistant for Biostatistics** (Fall 2006, University of Texas - Austin)  
Instructor: Dr. Lauren Meyers

**Teaching Assistant for Evolution** (Fall 2001, University of Texas - Austin)

Instructor: Dr. Mark Kirkpatrick

**Teaching Assistant for Principles of Evolution** (Fall 2000, University of Colorado - Boulder)

Instructor: Dr. Jorge Moreno

**Teaching Assistant for Principles of Evolution** (Spring 2000, University of Colorado - Boulder)

Instructor: Dr. Jorge Moreno

**Teaching Assistant for Principles of Evolution** (Fall 1999, University of Colorado - Boulder)

Instructor: Dr. Andrew Martin

## MEETING PRESENTATIONS

**Toward a Genomic Approach to Integrating Spatial Ecology and Statistical Phylogeography**

(6/2008) Symposium presentation.

Joint meeting for the Society for the Study of Evolution and the Society of Systematic Biologists

**A Likelihood Framework for Estimating Phylogeographic History Using Geographically**

**Continuous Genetic Data** (6/2007)

Joint meeting for the Society for the Study of Evolution and the Society of Systematic Biologists

**Bayes Factors and Partition Choice in Phylogenetic Inference** (6/2006)

Joint meeting for the Society for the Study of Evolution and the Society of Systematic Biologists

**Reinforcement and the Genetics of Hybrid Incompatibilities** (6/2005)

Joint meeting for the Society for the Study of Evolution and the Society of Systematic Biologists

**Convergence in Bayesian Phylogenetics** (6/2004)

Joint meeting for the Society for the Study of Evolution and the Society of Systematic Biologists

## OTHER PRESENTATIONS

**New Computational Approaches to Studying the Patterns and Processes of Speciation** (3/2007)

Florida State University – School of Computational Science

**Processes Driving Speciation: from Geographic Isolation to Reinforcement** (2/2007)

University of California at Davis – Center for Population Biology

**Evolution of Reproductive Isolation in Hybrid Zones** (4/2006)

University of California at Berkeley - Museum of Vertebrate Zoology

**Speciation in Chorus Frogs** (4/2005)

Florida Department of Environmental Protection

**Reinforcement and the Genetics of Hybrid Incompatibilities** (4/2005)

Southeastern Louisiana University

**Reinforcement and the Genetics of Hybrid Incompatibilities** (11/2004)

University of Texas at Austin Population Biology Seminar

**Neural Networks** (12/2000)

University of Colorado at Boulder

**EvoTutor: The Web as a Pedagogical Tool** (11/2000)

University of Northern Colorado

## **PROFESSIONAL SERVICE**

Reviewer for: SYSTEMATIC BIOLOGY  
EVOLUTION  
JOURNAL OF MOLECULAR EVOLUTION  
HEREDITY  
BIOCHEMICAL GENETICS