

Erol Akçay

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Education

Ph.D.	Stanford University , Stanford, CA <i>Department of Biological Sciences</i>	2008
B.S.	Middle East Technical University , Ankara, Turkey <i>Double major with Honors in Physics and Biology</i>	2004

Postdoctoral positions

National Institute for Mathematical and Biological Synthesis (NIMBioS), University of Tennessee, Knoxville, TN	August 2009 – present
Department of Biology, Stanford University, Stanford, CA	August 2008 – July 2009

Grants, Awards and Fellowships

Postdoctoral Fellowship <i>NIMBioS</i>	2009-2010
Co-PI, Working Group: Integrating Functional and Evolutionary Dynamics <i>NIMBioS</i>	2009-2010
Samuel Karlin Prize in Mathematical Biology <i>Stanford University, Department of Biology</i>	2008
Excellence in Teaching Award <i>Stanford University, Department of Biology</i>	2008
Basic Sciences Undergraduate Fellowship in Physics <i>National Scientific and Technical Research Council of Turkey</i>	2001 – 2004

Publications

- Akçay, E.**, Van Cleve, J., Feldman, M. W., & Roughgarden, J. (2009). A theory for the evolution of other-regard integrating ultimate and proximate perspectives. *PNAS*.
- Akçay, E.** & Roughgarden, J. (2009). The perfect family: biparental care in animals. *PLoS One*, 4:E7345
- Akçay, E.**, Roughgarden, J. (in press). Do we need a Sexual Selection 2.0? *Animal Behaviour*.
- Akçay, E.** & Roughgarden, J. (2007). Extra-pair parentage: a new theory based on transactions in a cooperative game. *Evolutionary Ecology Research*, 9:1223–1243.
- Akçay, E.** & Roughgarden, J. (2007). Extra-pair paternity in birds: review of the genetic benefits. *Evolutionary Ecology Research*, 9:855–868.

Publications (continued)

Akçay, E. & Roughgarden, J. (2007). Negotiation of mutualism: Rhizobia and legumes. *Proc. R. Soc. B*, 274:25–32.

Akçay, E. & Roughgarden, J. (2007). Neither should competition be assumed. *Trends in Ecology and Evolution*, 22:4.

Roughgarden, J., **E. Akçay** and M. Oishi. (2006). in E. Kavanagh, ed., Debating sexual selection and mating strategies. *Science*. 312:689–697.

Roughgarden, J., Oishi, M., & **E. Akçay** (2006). Reproductive social behavior: Cooperative games to replace sexual selection. *Science*, 311:965–970.

Manuscripts in progress

Suni, S. S., **E. Akçay**, & Gordon, D. M. (in revision). The dynamics of lineage ratio in a dependent-lineage population of harvester ants.

Van Cleve, J., **E. Akçay**, Feldman, M. W., & Roughgarden, J. (in preparation). The coevolution of mutual regard and imitation.

Akçay, E. & J. Roughgarden (in preparation). The evolution of games.

Professional Participation and Outreach Activities

Co-organizer Workshop: “Ecology and Evolutionary Biology in Turkey and Abroad”, <i>Istanbul Technical University, Istanbul, Turkey</i>	December 2009
Co-organizer Working group: “Integrating Functional and Evolutionary Dynamics”, <i>National Institute for Mathematical and Biological Synthesis</i>	2009-2010
Co-organizer Workshop: “Politics of Animal Cooperation”, <i>Stanford University</i>	May 2009
Organizer Symposium: “New approaches to the Evolution of Social Behavior”, <i>Ecological Society of America Meeting, Milwaukee, WI</i>	August 2008
Participant Working group: “Life History and Ant-Plant Interactions”, <i>Santa Fe Institute</i>	January 2008
Reviewer , <i>Proceedings of the Royal Society B, Theoretical Population Biology, Behavioral Ecology, Ecology Letters, Animal Behaviour</i>	
Ph.D. Admissions Committee <i>Department of Biology, Stanford University</i>	2007
Editor , evrimianlamak.org <i>A website on evolution for the general public in Turkey</i>	2007 - 2009

Presentations

The evolution of cooperation by mutual regard. <i>Harvard University, Cambridge, MA (Invited seminar)</i>	February 2008
<i>University of Florida, Gainesville, FL (Invited seminar)</i>	April 2008
<i>Ecological Society of America Meeting, Milwaukee, WI</i>	August 2008
The perfect family: a re-examination of biparental care in animals. <i>Ecological Society of America Meeting, San Jose, CA</i>	August 2007
Extra-pair paternity in birds: a review of data, and a new theory <i>Université Pierre et Marie Currie (Paris VI), Paris, France (Invited seminar)</i>	October 2006
<i>Middle East Technical University, Ankara, Turkey (Invited seminar)</i>	December 2007
Negotiation of a mutualism: rhizobia and legumes <i>Ecole Normale Supérieure, Paris, France (Invited seminar)</i>	October 2006
<i>World Summit on Evolution, Galapagos Islands, Ecuador</i> (poster, NSF-funded participant)	June 2005

Teaching Experience

Stanford University, Department of Biological Sciences

Teaching assistant and guest lecturer BioSci 185: Reproductive Social Behavior	Fall 2008
Teaching assistant BioSci 43: Plant Biology, Ecology and Evolution	Spring 2007
Guest lecturer BioSci 284: Theoretical Ecology	Winter 2007
Teaching assistant and guest lecturer BioSci 221: Theoretical Population Biology	Spring 2006
Teaching assistant BioSci 163: Neural Systems and Behavior	Fall 2005