

## REBEKAH L. ROGERS

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**Assistant Professor** - Jan 2017 to present  
University of North Carolina, Charlotte  
Dept of Bioinformatics and Genomics

**Postdoctoral Researcher** - Sept 2014-Dec 2016  
University of California, Berkeley, California  
Dept. of Integrative Biology  
Montgomery W. Slatkin, Advisor

**Postdoctoral Fellow** - April 2011- Aug 2014  
University of California, Irvine, California  
Dept. of Ecology and Evolutionary Biology  
Kevin R. Thornton, Advisor

### EDUCATION

**Harvard University**, Cambridge, Massachusetts - May 2011  
Dept. of Organismic and Evolutionary Biology  
Ph.D. in Biology  
Daniel L. Hartl, Advisor

**University of Georgia**, Athens, Georgia - May 2006  
Department of Genetics, Franklin College of Arts and Sciences  
B.S. in Genetics with Highest Honors, *summa cum laude*  
University of Georgia Foundation Fellow, Phi Beta Kappa, Phi Kappa Phi

### TRAINEES

**Nicholas Stewart** (Postdoctoral Scholar) Population genetics of genome structure in *Drosophila*  
**Olga Better** (PhD student) Horizontal Transfer of DNA from *Wolbachia* to insects  
**Rittika Mallik** (Masters student) Transposable element evolution in Elephantids  
**Stephanie Perez Robles** (Masters student) Evolutionary genomics of freshwater bivalves  
**Brandon Turner** (Joint Undergrad/Masters student) Genome structure changes in *Drosophila*  
**Steven Kay** (Undergraduate student) Tandem duplications in *Drosophila*  
**Kevin Selles** (Undergraduate student) Population genetics of freshwater bivalves

### GRANTS

2011-2014. NIH/NIGMS Ruth L. Kirschstein National Research Service Award  
Postdoctoral Fellowship. 3 years salary, benefits, and travel funds.  
2012. UC Irvine Center for Complex Biological Systems Opportunity Award. \$11,000.  
2010. Society for Molecular Biology and Evolution Graduate Student Travel Award. \$1500.  
2010. Harvard Graduate Student Council Conference Travel Grant. \$750.

### PUBLICATIONS

14. Stewart, NB and **RL Rogers**. Chromosomal rearrangements as a source of new gene formation in *Drosophila yakuba*. In review, Genome Research. arXiv:1806.02205

13. **Rogers, RL**, L Zhou, C Chu, R Marquez, A. Corl, T Linderoth, et al. Genomic takeover by transposable elements in the Strawberry poison frog. In Press. *Molecular Biology and Evolution*. 2018.
12. **Rogers, RL**, L Shao, and KR Thornton. 2017. Tandem duplications facilitate rapid changes in gene expression via exon shuffling. *PLoS Genetics*. 13(5), p.e1006795. bioRxiv 097501.
11. **Rogers, RL**, MW Slatkin. 2017. Excess of genomic defects in a woolly mammoth on Wrangel island. *PLoS Genetics*, 13(3), e1006601. arXiv:1606.06336.  
  
 Popular Press: *Reddit top 10, Nature News, Nature Research Highlights, Science magazine, Live Science, New York Times, BBC News, The Guardian, The Daily Mail, The Times (London, UK), Scientific American, Popular Science, UPI, South China Morning Post, Sharjah 24, Russia News Today, India Today*  
 Radio and Podcasts: *BBC Newshour, Radio 4 (UK), 60 Second Science (Scientific American), Mocncreiff (Ireland), As it Happens with Carol Off (Canada), Dork Time Radio (Baltimore, US), The John Batchelor Show (New York)*
10. **Rogers, RL**. 2015. Chromosomal rearrangements as barriers to genetic homogenization between archaic and modern humans. *Molecular Biology and Evolution*. 32:3064-3078. arXiv: 1505.07047
9. **Rogers, RL**, JM Cridland, L Shao, TT Hu, P Andolfatto, and KR Thornton. 2015. Tandem duplications and the limits of natural selection in *Drosophila yakuba* and *Drosophila simulans*. *PLoS One*. 10(7): e0132184. arXiv: 1405.0518
8. **Rogers, RL**, L Shao, J Sanjak, P Andolfatto and KR Thornton. 2014. Revised annotations, sex-biased expression, and lineage-specific genes in the *Drosophila melanogaster* group. *G3: Genes, Genomes, Genetics* 4: 2345-2351. arXiv:1408.0247
7. **Rogers, RL**, JM Cridland, L Shao, TT Hu, P Andolfatto, and KR Thornton. 2014. Landscape of standing variation for tandem duplications in *Drosophila yakuba* and *Drosophila simulans*. *Molecular Biology and Evolution* 31:1750-1766. arXiv:1401.7371
6. **Rogers, RL** and DL Hartl. 2012. *Rapid Evolution via Chimeric Genes* in Rapidly Evolving Genes and Genetic Systems. Invited Book Chapter. R Singh and RJ Kulathinal Eds.
5. **Rogers, RL** and DL Hartl. 2012. Chimeric genes as a source of rapid evolution in *Drosophila melanogaster*. *Molecular Biology and Evolution* 29: 517-529.
4. **Rogers, RL**, T Bedford, AM Lyons and DL Hartl. 2010. Adaptive impacts of the chimeric gene *Quetzalcoat1* in *Drosophila melanogaster*. *Proc. Nat. Acad. Sci. USA* 107:10943-10948.
3. **Rogers, RL**, T Bedford, and DL Hartl. 2009. Formation and longevity of chimeric and duplicate genes in *Drosophila melanogaster*. *Genetics* 181: 313-322.
2. Pontaroli, AC, **RL Rogers**, Q Zhang, ME Shields, TM Davis, KM Folta, P SanMiguel, and JL Bennetzen. 2008. Gene content and distribution in the nuclear genome of *Fragaria vesca*. *The Plant Genome* 2: 93-101.
1. Haggerty, TM, JT Garner and **R Rogers**. 2005. Reproductive phenology in *Megaloniaias nervosa* (Bivalvia: Unionidae) in Wheeler Reservoir, Tennessee River, Alabama, USA. *Hydrobiologia* 539: 131-136.

## DISSERTATION

2011. Evolution of chimeric genes in *Drosophila melanogaster*.

## INVITED TALKS

2018. Society for Molecular Biology and Evolution, Tokyo, Japan

- 2018. Fossils and Ancient DNA symposium, Shenzhen, China
- 2016. Keynote invited speaker. RECOMB-CG satellite meeting. Montreal, Canada.

### INVITED SEMINARS

- 2018. Duke University. Population Biology Seminar. Durham, NC (upcoming)
- 2018. Virginia Tech. Ecology and Evolution Seminar, Blacksburg, VA (upcoming)
- 2018. University of Georgia. Genetics Dept Commencement Speaker. Athens, GA
- 2017. Emory and Henry College. Lyceum lecture, Emory, VA
- 2017. University of Georgia. Genetics Dept Seminar, Athens, GA
- 2017. North Carolina State University. Ecology and Evolution Seminar. Raleigh, NC
- 2017. East Carolina University. Biology Dept. Seminar. Greenville, NC
- 2016. Simons Institute, University of California, Berkeley, CA
- 2015. Max Planck Institute for Evolutionary Anthropology, Leipzig, Germany.
- 2015. Dept. of Anthropology, Southampton University, Southampton, UK.
- 2015. MRC Clinical Sciences Center, Molecular Systems, London, UK.
- 2015. Evolution and Ecology, University of California, Davis CA.
- 2014. Lee University and the American Chemical Society, Chattanooga, TN.
- 2014. Dept. of Ecology and Evolutionary Biology, University of California, Irvine, CA.
- 2011. Dept. of Biology, California State University, Dominguez Hills, CA.
- 2009. Dept. of Genetics, University of Georgia, Athens, GA.
- 2011. NerdNite, Middlesex Lounge, Cambridge MA.

### ORAL PRESENTATIONS

- 2018. Population, Evolutionary, and Quantitative Genetics Meeting, Madison, WI
- 2017. Evolution, Portland, OR
- 2016. Cold Spring Harbor Labs Transposable Element Meeting
- 2016. Bay Area Population Genetics Meeting, San Francisco, CA
- 2013. Southern California Evolutionary Genomics Meeting, Irvine, CA.
- 2013. UC Irvine Systems Biology Retreat, Los Angeles, CA.
- 2012. 1st Joint Congress on Evolutionary Biology, Ottawa, Canada.
- 2012. 53rd Annual *Drosophila* Research Conference, Chicago, IL.
- 2010. Society for Molecular Biology and Evolution, Lyon, France.
- 2008. 50th Annual *Drosophila* Research Conference, Chicago, IL.

### POSTER PRESENTATIONS

- 2016. Genetics Society of America, Orlando, FL
- 2015. Society of Molecular Biology and Evolution, Vienna, Austria.
- 2014. Society of Molecular Biology and Evolution, San Juan, Puerto Rico.
- 2014. 55th Annual *Drosophila* Research Conference, San Diego, CA.
- 2013. Society of Molecular Biology and Evolution, Chicago, IL.
- 2013. 54th Annual *Drosophila* Research Conference, Washington, DC.
- 2012. UC Irvine Center for Complex Biological Systems Retreat.
- 2010. 51st Annual *Drosophila* Research Conference, Washington, DC.
- 2009. Society for Molecular Biology and Evolution, Iowa City, IA.
- 2008. Society for Molecular Biology and Evolution, Barcelona, Spain.

### HONORS AND AWARDS

- 2014. UC Irvine Dean's Award for Postdoctoral Excellence
- 2008. NSF Graduate Research Fellowship Honorable Mention
- 2006. NSF Graduate Research Fellowship Honorable Mention

2006. Harvard University James Mills Peirce Fellowship  
2006. University of Georgia Best Female Honors Science Student  
2006. University of Georgia Dept. of Genetics Cynthia Kenyon Award  
2004. Goldwater Scholar  
2002. Intel International Science and Engineering Fair Finalist  
2001. Intel Science Talent Search Semifinalist  
2001. Intel International Science and Engineering Fair Finalist

### **SERVICE**

Dean's committee on Undergraduate Education (2018)  
Bioinformatics Seminar Series Organizer (2017-2018)  
Society for Molecular Biology and Evolution - Genome Structure session chair  
Harvard University Women in Science Mentor (2007-2011)  
Exam author, USA Biological Olympiad (Exams 2013-2017)  
Judge, North Carolina State Science Fair, Charlotte NC (2017)  
Judge, Orange County Science and Engineering Fair (2012, 2014)  
Judge, Intel International Science and Engineering Fair, Los Angeles (2011, 2014)  
Judge, Massachusetts State Science and Engineering Fair (2009, 2010)  
Judge, Georgia State Science Fair (2004)  
Judge, Georgia Jr. Academy of Sciences Paper Reading (2004)

### **EDITING and PEER REVIEW**

Associate Editor, Molecular Biology and Evolution (2018-2020)  
National Science Foundation panelist, EPSCoR RII (2017, 2018)  
National Science Foundation *ad hoc* proposal reviewer (2015)  
Genome Biology and Evolution (2015, 2017, 2018)  
Molecular Biology and Evolution (2011, 2014-2017)  
Frontiers in Ecology and Evolution (2014)  
Heredity (2013)  
BMC Evolutionary Biology (2013, 2018)  
Bioinformatics (2012)  
Genetics (2009)

### **TEACHING**

BINF 3101 Sequence Analysis  
BINF 6350/8350 Molecular Sequencing  
Professor, USA Biological Olympiad (2014, 2017)  
Professor, Research Science Institute at MIT, 1 week genetics course (2009-2011)

### **PROFESSIONAL MEMBERSHIPS**

Society for Molecular Biology and Evolution  
Genetics Society of America  
Society for the Study of Evolution

## REFERENCES

Montgomery W. Slatkin  
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Dept of Integrative Biology  
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