

Curriculum Vitae Richard Heineman

The University of Texas at Austin
Integrative Biology
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Education

Ph.D., University of Texas at Austin (Ecology, Evolution and Behavior),
GPA 4.00
2001-2007

B.A., Grinnell College (Biology), GPA 3.75
1997-2001

Honors and Awards

Terrell H. Hamilton Endowed Graduate Fellowship
NSF Graduate Fellowship Award Honorable Mention (2002)
University of Texas at Austin Dean's Excellence Award
Phi Beta Kappa

Teaching Experience

Research Educator, University of Texas Austin, Freshman Research Initiative Stream,
Viral Evolution. Fall 2007-Present
Graduate Research Assistant, University of Texas Austin, Freshman Research
Initiative Stream, BioBricks. (Faculty Advisor: Browning.) Summer 2007
Graduate Research Assistant, University of Texas Austin, Freshman Research
Initiative Stream, siRNA: Selection of Aptamer Sequence. (Faculty Advisor:
Ellington.) Spring 2007
Teaching Assistant, University of Texas Austin, Biology for Business, Law and Liberal
Arts. (Instructor: Bull.) Fall 2002, 2003, 2004, 2005
Teaching Assistant, University of Texas Austin, Ecology, Evolution, and Society.
(Instructor: Willingham.) Spring 2002
Teaching Assistant, University of Texas Austin, Ecology, Evolution, and Society.
(Instructor: Celaya.) Fall 2001
Mentor, Grinnell College, Introduction to Biological Inquiry in Neurobiology.
(Instructor: Lindgren.) Fall 2000

Publications

Brown, S.P. and **R.H. Heineman**. Submitted for publication. Experimental evolution
reveals a trade-off between virulence and propagule durability in a bacteriophage.
*Chantranupong, L. and **R.H. Heineman**. Submitted for publication. Weak success of
optimality in experimental adaptations of bacteriophage lysis time.
Heineman, R.H., J.J. Bull and I.J. Molineux. 2009. Layers of evolvability in a
bacteriophage life history trait. *Molecular Biology and Evolution* **26**, 1289-1298.

- Heineman, R.H.**, R. Springman and J.J. Bull. 2008. Optimal foraging and host avoidance by bacteriophages. *American Naturalist* **171**, E149-E157.
- Heineman, R.H.** and J.J. Bull. 2007. Genetic constraint prevents adaptation to an optimal phenotype: Experimental selection on lysis time in a phage. *Evolution* **61**, 1695-1709.
- Heineman, R.H.**, I.J. Molineux, and J.J. Bull. 2005. Evolutionary robustness of an optimal phenotype: re-evolution of lysis in a bacteriophage deleted for its lysis gene. *Journal of Molecular Evolution* **61**, 181-191.

*indicates undergraduate author.

Presentations at Meetings

- Gordon Conference for Microbial Population Genetics, 2009. Re-re-evolution of an Ablated Phenotype. (Poster)
- Evolution 2008, The Freshman Research Initiative: High-Throughput Education Through Research. (Poster)
- Evolution 2008, Optimal Foraging by Bacteriophages. (Presentation)
- Evolution 2008, How Optimal is Adaptation of Bacteriophage Lysis Time? (Presentation by Undergraduate Lynne Chantranupong)
- Gordon Conference for Microbial Population Genetics, 2007. Optimal Foraging by Phages. (Poster)
- Evolution 2006, Virus Evolution Workgroup 2006. Optimality and Genetic Constraint: Experimental Selection on Lysis Time in a Phage. (Presentation)
- Evolution 2004. Experimental Genomic Evolution: Lysozyme and Lysis in T7. (Presentation)

Invited Lectures

- Biology for Business, Law and Liberal Arts. Properties of Ideal Data, Fall 2008; Criminal Justice System, Fall 2006; Sampling Error, Fall 2005. (Instructor: Bull.)
- Microbial Ecology. Cooperation, Spring 2006. (Instructor: Hawkes.)
- Evolution, Ecology and Society. Fall 2003 (Instructor: Willingham.)

Professional Service

- Public Relations for Freshman Research Initiative, 2007-Present.
- Website Content and Maintenance for Freshman Research Initiative Website (<http://www.cns.utexas.edu/fri/>), 2007-Present.
- Organizing Committee for EEB Graduate Student Symposium, 2005-9.
- Poster Evaluation for Undergraduate Research Forum Spring, 2007-9.
- Poster Evaluation for Louis Stokes Alliance for Minority Participation Student Research Conference, 2009.
- Award Committee for Undergraduate Research Forum Spring, 2008-9.
- Reviewer for *Evolution: International Journal of Organic Evolution*, *BMC Evolutionary Biology*.
- Between-Edition Reviewer for *Life: The Science of Biology* Ninth Edition.