

## Yevgeniy Raynes

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Brown University  
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### Education and Appointments

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Brown university, Providence RI Center for Computational Molecular Biology Postdoctoral Research Fellow	2012-
University of Pennsylvania, Philadelphia PA <b>Ph.D.</b> , Evolutionary Biology	2006-2012
New York University, New York NY <b>B.A.</b> , Biology with honors, <i>cum laude</i>	2002-2006

### Professional training

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Workshop on Molecular Evolution Woods Hole Marine Biological Laboratory	2009
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### Publications

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Raynes Y, Sniegowski P (2014). Experimental evolution and the dynamics of genomic mutation rate modifiers: a critical review. *In review*

**Raynes Y**, Halstead AL, Sniegowski PD (2014). The effect of population bottlenecks on mutation rate evolution in asexual populations. *Journal of Evolutionary Biology* **27**(1): 161-169.

Sniegowski P, **Raynes Y** (2013). Mutation Rates: How Low Can You Go? *Current biology : CB* **23**(4): R147-R149.

**Raynes Y**, Gazzara MR, Sniegowski PD (2012). Contrasting dynamics of a mutator allele in asexual populations of differing size. *Evolution* **66**(7): 2329-2334.

**Raynes Y**, Gazzara M, Sniegowski P (2011). Mutator dynamics in sexual and asexual experimental populations of yeast. *BMC Evolutionary Biology* **11**(1): 158.

Kiontke K, Gavin NP, **Raynes Y**, Roehrig C, Piano F, Fitch DHA (2004). *Caenorhabditis* phylogeny predicts convergence of hermaphroditism and extensive intron loss. *Proceedings of the National Academy of Sciences* **101**(24): 9003-9008.

## **Presentations**

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- Gordon Research Seminar on Microbial Population Biology, Andover NH 2013  
**Poster:** Evolution of chromosomal and microsatellite instability in cancer
- 2nd International Biannual Evolution and Cancer Conference, San Francisco CA 2013  
**Poster:** Evolution of chromosomal and microsatellite instability in cancer
- Evolution 2011, Norman OK 2011  
**Talk:** Contrasting dynamics of a mutator allele in asexual populations of differing size
- Evolution 2010, Portland OR 2010  
**Talk:** Sex and the evolution of mutation rates: selection on a mutator allele in experimental yeast populations
- Penn-Princeton-Rutgers EEB graduate student conference, New Brunswick NJ 2010  
**Talk:** Selection on mutation rate modifiers
- EEB Seminar, Department of Biology, University of Pennsylvania, Philadelphia PA  
**Talk:** Recombination and the evolution of mutation rates: selection on mutators in experimental yeast populations 2011
- Talk:** Mutator dynamics in experimental populations: indirect vs direct selection and the importance of clonal interference 2010
- Talk:** Direct fitness cost of a mutator allele 2009
- Talk:** Evolution of mutation rates in sexual eukaryotes 2008
- Biology Department retreat, University of Pennsylvania, Philadelphia PA 2008  
**Poster:** Evolution of mutation rate modifiers in sexual populations
- Undergraduate Research Conference, New York University, New York NY 2005  
**Poster:** Mapping of a gene involved in male tail morphogenesis in *C. elegans*

## **Teaching/Mentoring Experience**

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- Guest lecturer Biol 0380: Ecology and Evolution of Infectious Disease 2013  
Department of Ecology and Evolution. Brown University
- Mentor: supervised undergraduate students Matthew Gazzara and Angela Halstead  
Sniegowski Lab, Biology Department. University of Pennsylvania.
- Teaching Assistant Bio 140/440: Humans and their environments 2011  
Biology Department. University of Pennsylvania.
- Guest lecturer Bio 102: Introduction to Biology 2009  
College of Liberal and Professional Studies. University of Pennsylvania.

Teaching Assistant Bio 446: Statistics for Biologists Biology Department. University of Pennsylvania.	2008, 2009
Teaching Assistant Bio 101: Introduction to Biology College of Liberal and Professional Studies. University of Pennsylvania.	2008, 2007
Teaching Assistant Bio 102: Introduction to Biology College of Liberal and Professional Studies. University of Pennsylvania.	2009, 2010, 2011
Teaching Assistant Bio 102: Introduction to Biology Biology Department. University of Pennsylvania.	2008
Head Teaching Assistant Bio 102: Introduction to Biology Biology Department. University of Pennsylvania.	2007
Teaching Assistant Bio 122: Introduction to Biology Biology Department. University of Pennsylvania.	2006
Teaching Assistant Bio 101: Introduction to Biology Biology Department. University of Pennsylvania.	2006

### **Funding**

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Center for Computational Molecular Biology fellowship Brown University	2012 – 2014
The Binns/Williams Scholarship Department of Biology, University of Pennsylvania 400\$	2007

### **Service**

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Biology Department. University of Pennsylvania Biology Graduate Student Association, President	2010 – 2011
Biology Department. University of Pennsylvania Organizer of the EEB seminar series	2008 – 2009
Biology Department. University of Pennsylvania Interview Weekend and Ecology Admissions Graduate student representative	2008