

# Stephen E. Harris

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## Education:

### **CUNY GRADUATE CENTER**

- *Ph.D. - Ecology, Evolutionary Biology, and Behavior*  
- Advanced to Candidacy (Dec 2011)

**New York, NY**  
September 2009 to Present  
Graduation date: May 2015

### **CUNY GRADUATE CENTER**

- *Master of Philosophy – Ecology, Evolutionary Biology, and Behavior*

**New York, NY**  
January 2011

### **CITY COLLEGE OF NEW YORK**

- *Master of Arts - Science Education*
- *Transitional 'B' certification; Biology grades 7-12*

**New York, NY**  
June 2007 to June 2009

### **THE OHIO STATE UNIVERSITY**

- *Bachelor of Science - Molecular Genetics*

**Columbus, OH**  
Sept 2002 to June 2006

## Appointments:

- Visiting PhD Student, The City College of New York, PI: Dr. Mike Hickerson, 2013 - present
- Director of Research, The Biodiversity Center of Belize, Dangriga, Belize, 2012 – present
- Graduate Research Fellow, City University of New York, PI: Dr. Jason Munshi-South, 2009 - present

## Current Research:

- **NSF Graduate Research Fellowship:**  
Population Genomics of NYC *Peromyscus leucopus* populations - Identifying local adaptation in fragmented urban habitats
- DNA barcoding and Next Generation Sequencing for biodiversity and conservation management research in Belize
- Science Education - Curriculum Development – Teaching science through authentic research in urban classrooms in New York City and Dangriga, Belize

## Publications:

- **Harris, S. E.**, O'Neill, R. J. and Munshi-South, J. (2014). Transcriptome resources for the white-footed mouse (*Peromyscus leucopus*): new genomic tools for investigating ecologically divergent urban and rural populations. *Molecular Ecology Resources*. doi: 10.1111/1755-0998.12301
- **Harris, S.E.**, M. Bellino. 2013. DNA Barcoding from NYC to Belize. *Science* 342(6165):1462-1463.
- **Harris, S.E.**, J. Munshi-South, C. Oberfell, & R. O'Neill. (2013). Signatures of rapid evolution in urban and rural transcriptomes of white-footed mice (*Peromyscus leucopus*) in the New York metropolitan area. *PLOS One* 8(8): e74938.
- **In Preparation**

- Boehm, J.T., **Harris, S.E.**, Eddins, K., et al. (2014). Comparing traditional Chinese medicine with Internet and souvenir markets of the United States seahorse trade: an example of DNA barcoding as a teaching tool for wildlife forensics. In Preparation.
- **Harris, S.E.**, Xue, X., Joseph, T., Alvarado, D., Hickerson, M.J., Munshi-South, J. (2014). Genome-wide demographic inference of white-footed mice in recently urbanized New York City and surrounding areas. In Preparation.

### **Awards, Grants and Fellowships:**

- *Science* magazine Prize for Inquiry Based Instruction - 2013
- CUNY – The Graduate Center’s GK-12 program, International Supplement - **\$5000** - 2013
- European Society for Evolutionary Biology (ESEB), Outreach Fund - **€500** - 2012
- NSF Graduate Research Fellowship Program (GRFP)- 2011-2014
- Toyota Tapestry Grant- **\$10,000**- 2011
- American Museum of Natural History Theodore Roosevelt Memorial Grant- **\$1,999**- 2011
- Doctoral Students Research Grant Program-Cuny- **\$1,000**- 2011
- NSF GK-12 Fellowship 2010-2012
- Sue Rosenberg Zalk Student Travel and Research Fund Award 2010
- CUNY Science Scholarship 2009-2014
- Americorps Service Member Education Award 2007-2008, 2008-2009
- New York City Teaching Fellowship 2007-2009
- Ohio State University Outstanding Research Scholarship 2006
- Dean’s List 2003, 2004
- The Ohio State University Honors program 2002-2004
- Trustee’s Scholarship 2002-2003

### **Research Experience:**

- |   |                         |
|---|-------------------------|
| <b>The Biodiversity Center of Belize (BioBelize), Director of Research</b>  | <b>Dangriga, Belize</b> |
| <ul style="list-style-type: none"> <li>• Built permanent molecular biology lab for biodiversity research</li> <li>• Created biodiversity themed workshop and curriculum for local science students in Dangriga, Belize and Galen University</li> </ul>  | July, 2012 to present   |
| <b>EEB program, City University of New York, Research Student</b>   | <b>New York, NY</b>     |
| <ul style="list-style-type: none"> <li>• Next Generation Sequencing (RNAseq) of white-footed deermouse transcriptomes</li> <li>• Small mammal field work and handling</li> </ul>  | July, 2009 to present   |
| <b>Earthwatch, Team Leader – small mammals</b>  | <b>New York, NY</b>     |
| <ul style="list-style-type: none"> <li>• Managed volunteer field team in sampling of <i>Peromyscus leucopus</i></li> </ul>  | Spring, 2010            |
| <b>The Ohio State University Human Cancer Genetics, Student Research Assistant</b>  | <b>Columbus, OH</b>     |
| <ul style="list-style-type: none"> <li>• Aided in the creation, identification, and care of genetically modified mice</li> <li>• Identified function of the E2F8 protoonco-gene by creating knock-out mice</li> <li>• Worked to study the Rb tumor suppressor gene by creating knock-in mice</li> </ul> | April 2005 to June 2006 |

### **Teaching Experience:**

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| <b>American Museum of Natural History, Educator</b>  | <b>New York, NY</b>        |
| <ul style="list-style-type: none"> <li>• Science Research Mentorship Program (SRMP)</li> </ul> | October 2012 to Sept. 2013 |
| <b>High School for Environmental Studies, GK-12 teaching fellow</b>                            | <b>New York, NY</b>        |
| <ul style="list-style-type: none"> <li>• Science Research</li> </ul>                           | June 2010 to August 2012   |

**Mott Hall Bronx High School, Science Teacher, NYCTF**

- 10<sup>th</sup> Grade Earth Science

**Life Sciences Secondary School, Science Teacher, NYCTF**

- 6<sup>th</sup> and 7<sup>th</sup> grade General Science
- 10<sup>th</sup> Grade Earth Science

**New York, NY**

July 2008 to July 2009

**New York, NY**

July 2007 to June 2008

**Professional Presentations:**

- **Harris SE**, Munshi-South J., June 2014. *Demographic inference and genetic diversity in isolated urban and rural populations of white-footed deermice in New York City*. Annual Evolution Meeting (Oral Presentation)
- Bellino M, **Harris SE**, 2013. *The impact of an experiential biodiversity curriculum on high school students in Dangriga, Belize*. The National Association for Research in Science Teaching (NARST) Annual International Conference. (Interactive Poster)
- **Harris SE**, Bellino M, 2013. *DNA Barcoding from NYC to Belize: Incorporating STEM Education in Biodiversity Research*. Invited Seminar at NSF. (Oral Presentation)
- **Harris SE**, Bellino M, 2012. *Integrating Education and Biodiversity Research Through DNA Barcoding in NYC and Belize*. Student Conference on Conservation Science-New York (AMNH). (Poster)
- **Harris SE**, Munshi-South J, Obergfell C, O'Neill R. July, 2012. *Scanning NYC White-footed Mice (*Peromyscus leucopus*) exomes for adaptive divergence*. Annual Evolution Meeting. (Oral Presentation)
- Strozak V, **Harris SE**, Nygard S, Aidala Z, Bellino M, Feeney K. March, 2012. *Authentic Research Modules Integrate Fellows Research into Science Classrooms*. Graduate STEM Fellows in K-12 Education Annual Conference. (Workshop Presentation)
- **Harris SE**, Munshi-South J, Obergfell C, O'Neill R. January, 2012. *Population Genomics of Urban White-Footed Mice (*Peromyscus leucopus*) in NYC*. CUNY- The Graduate Center, Peer Mentoring and Teaching Workshop. (Poster)
- **Harris SE**, Munshi-South J, Obergfell C, O'Neill R. June, 2011. *Population Genomics of Urban White-Footed Mice (*Peromyscus leucopus*) in NYC*. Annual Evolution Meeting. (Oral Presentation)
- **Harris SE**, Munshi-South J, Obergfell C, O'Neill R. July, 2011. *Population Genomics of Urban White-Footed Mice (*Peromyscus leucopus*) in NYC*. Gordon Research Conference-Ecological and Evolutionary Genomics. (Poster)
- Aidala Z, Bellino M, Feeney K, **Harris SE**, Holman P, Meyers R. March, 2011. *100 Researchable Questions Sprouting in NYC Parks*. Graduate STEM Fellows in K-12 Education Annual Conference. (Workshop Presentation)

**Popular Press:**

"**Evolution Right Under Our Noses**" by C. Zimmer, NY times, July 2011.

**Workshops and Seminars:**

- Generic Model Organism Database (GMOD) Summer School – Genomics and Bioinformatics. Invited Participant - **May 2010**

**Membership in Professional Societies:**

- Society for the Study of Evolution (SSE) - **2011 - present**
- Sigma Xi, The Scientific Research Society, Associate Membership - **2012 - present**
- New York Academy of Sciences (NYAS) - **2012 - present**

**Skills:**

- Bioinformatics – Genomic Sequence Analysis, Molecular Genetics analytical packages, Phylogeography analytical packages, intermediate Unix programming, intermediate Perl programming, Microsoft Office