

Madison H. Hansen
Richard Gilder Graduate School
American Museum of Natural History, New York, NY 10024
mhansen@amnh.org

Education

Richard Gilder Graduate School, New York, NY	expected August 2019
Doctor of Philosophy, Comparative Biology	
Harvey Mudd College, Claremont, CA	May 2015
Bachelor of Science, Mathematical and Computational Biology	

Research Projects

Richard Gilder Graduate School, New York, NY	current
Advisor: Dr. Ward C. Wheeler (PhD Thesis)	
Algorithms for evolutionary genomics in nonmodel organisms	
Harvey Mudd College, Claremont, CA	Fall 2014 – Spring 2015
Advisor: Dr. Eliot C. Bush. (Undergraduate Thesis)	
Reconstructing historical horizontal transfer events in <i>Escherichia coli</i> genome evolution	
California Academy of Sciences, San Francisco, CA	Summer 2014
Advisor: Dr. W. Brian Simison. (NSF REU)	
Population genomics and introgression in the slider turtle genus <i>Trachemys</i>	
Keck Science Department, Claremont, CA	Summer 2013
Advisor: Dr. Diane M. Thomson. (HHMI SURP)	
The effects of herbivory and climate variation on the vital rates of an island endemic plant population	

Publications

1. Nicholas G. Crawford, James F. Parham, Anna B. Sellas, Brant C. Faircloth, Travis C. Glenn, Theodore J. Papenfuss, James B. Henderson, **Madison H. Hansen**, W. Brian Simison, A phylogenomic analysis of turtles, *Molecular Phylogenetics and Evolution*, Volume 83, February 2015, Pages 250-257, ISSN 1055-7903, <http://dx.doi.org/10.1016/j.ympev.2014.10.021>, www.sciencedirect.com/science/article/pii/S1055790314003819

Honors and Awards

Graduated with Distinction, Harvey Mudd College	May 2015
William K. Purves Biology Prize, Harvey Mudd College Biology Department	September 2013
Dean's List, Harvey Mudd College	2012 – 2015

Fellowships and Grants

PhD Fellowship, Richard Gilder Graduate School	2015 – 2019
Mildred E. Mudd Memorial Scholarship, Harvey Mudd College	2012 – 2015

Teaching and Outreach

BridgeUP STEM Volunteer	current
American Museum of Natural History Youth Initiatives	
Homework Hotline Tutor	2011 – 2015
Harvey Mudd College Office of Community Engagement	
Advanced Mathematical Biology Grader, HMC Mathematics Department	Fall 2014
Introduction to Computer Science Tutor/Grader, HMC Computer Science Department	Fall 2014
Introduction to Biology Grader, HMC Biology Department	Spring 2014
Sophomore Retreat Facilitator, HMC Dean of Students Office	January 2014

Board of Trustees Retreat Presenter, Harvey Mudd College	November 2013
Grace Hopper Celebration Mentor, HMC Computer Science Department	October 2013
Residential Staff Mentor, HMC Dean of Students Office	2012 – 2014
Calculus Tutor/Grader, HMC Mathematics Department	Summer – Fall 2012
High School Geometry Game Developer, HMC Mathematics Department	Summer 2012

Academic Conferences

Student Conference on Conservation Science, New York, NY	October 2015
Biomathematics and Ecology Education and Research Symposium, Claremont, CA	October 2014
Grace Hopper Celebration for Women in Computer Science, Minneapolis, MN	October 2013
Grace Hopper Celebration for Women in Computer Science, Portland, OR	November 2011

Skills

Coding languages: Python, R, Unix, C++, Java, Matlab, Haskell.
Lab methods: Sanger sequencing/PCR.