

ARIELLA GLADSTEIN, PH.D.

aglad@med.unc.edu ◇ github.com/agladstein

Expertise: *Human population genetics, genomics, computational biology, bioinformatics, statistics*

EDUCATION

University of Arizona, Tucson, AZ

August 2018

PhD in Ecology and Evolutionary Biology

Minor in Mathematics

Beloit College, Beloit, WI

May 2011

B.S. in Mathematical Biology & Russian, Cum Laude

Departmental Honors: Mathematical Biology

RESEARCH EXPERIENCE

Postdoctoral Fellowship

2018 - present

Schrider Lab

Department of Genetics, University of North Carolina, Chapel Hill

Project: Inference of demographic history with deep learning

Dissertation Research

2011 - 2018

Hammer Lab

Ecology and Evolutionary Biology, University of Arizona

Dissertation: Inference of recent demographic history of population isolates using genome-wide high density SNP arrays and whole genome sequences

TEACHING EXPERIENCE

ECOL 320 Genetics

Fall 2014, 2015, 2016

Graduate Teaching Assistant

University of Arizona

ECOL 182L Intro to Ecology and Evolutionary Biology Lab

Spring 2015

Graduate Teaching Assistant

University of Arizona

BIOL 247 Biometrics

Spring 2011

Teaching Assistant

Beloit College

SELECTED PUBLICATIONS

PopSim Consortium. 2019. A community-maintained standard library of population genetic models. *bioRxiv*. doi: <https://doi.org/10.1101/2019.12.20.885129>

Gladstein A.L. and Hammer M.F. 2019. Substructured population growth in the Ashkenazi Jews inferred with Approximate Bayesian Computation. *Molecular Biology and Evolution*. 36(6): 1162-1171. doi: <https://dx.doi.org/10.1093/molbev/msz047>

Gladstein A.L. et al. 2018. SimPrily: A Python framework to simplify high-throughput genomic simulations. *SoftwareX*, 7, 335-340. <https://doi.org/10.1016/j.softx.2018.09.003>

Gladstein A. and Hammer M.F. 2016. Population Genetics of the Ashkenazim. In: eLS. John Wiley & Sons, Ltd: Chichester. pp. 1-8. <https://doi.org/10.1002/9780470015902.a0020818.pub2>

Full bibliography: <https://www.ncbi.nlm.nih.gov/myncbi/ariella.gladstein.1/bibliography/public/>

SELECTED POSTERS AND PRESENTATIONS

Gladstein A.L., Schrider R.D. Demographic model selection with deep learning. Probabilistic Modeling in Genomics. 2019. Aussois, France.

Gladstein A.L., Hammer M.F. Substructured population growth in the Ashkenazi Jews inferred with Approximate Bayesian Computation. UNC Women in Computing Research Symposium. 2019. Chapel Hill, NC.

Gladstein A.L., Hammer M.F. Substructured population growth in the Ashkenazi Jews inferred with Approximate Bayesian Computation. Probabilistic Modeling in Genomics. 2018. Cold Spring Harbor, NY.

Gladstein A.L. Inference of evolutionary history with Approximate Bayesian Computation. Open Science Grid All-Hands Meeting. 2018. Salt Lake City, Utah.

Gladstein A.L., et al. Efficient pipeline for whole genome simulation and summary statistic calculation with flexible demographic models. Meeting of the American Society for Human Genetics. 2017. Orlando, FL.

AWARDS

XSEDE Startup and Supplemental allocation (500,000 CPU hrs, 6,500 GPU hrs, 5.5 Tb)	<i>2017-2020</i>
NIH Computational and Mathematical Modeling of Biological Systems Trainee (\$71,064)	<i>2013-2014</i>
NSF Integrative Graduate Education and Research Traineeship in Genomics (\$97,083)	<i>2011-2013</i>
Society for Learning Unlimited Grant (\$2,000)	<i>2009</i>
Beloit College Presidential Scholar (\$60,000)	<i>2007-2011</i>

WORKSHOPS AND HACKATHONS

SMBE satellite meeting on Speciation Genomics, Tjarno, Sweden (3 days)	<i>06/2019</i>
NCBI RNA-Seq in the Cloud hackathon, Chapel Hill, NC (3 days)	<i>03/2019</i>
Cyber Carpentry, Chapel Hill, NC (2 weeks)	<i>06/2018</i>
XSEDE HPC Workshop: Big Data, Tucson, AZ (2 days)	<i>02/2018</i>
Open Science Grid User School, Madison, WI (1 week)	<i>07/2017</i>

COMMUNITY SERVICE AND OUTREACH

Mentoring

Undergraduate interns in computer science, Tucson, AZ	<i>2018</i>
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Teaching in community

Cyber Carpentry workshop, Chapel Hill, NC	<i>2019</i>
Research Bazaar workshop on R, Tucson, AZ	<i>2018</i>
CyVerse Container Camp, Tucson, AZ	<i>2018</i>
Software Carpentry on Unix/Bash, Python, and Git, Tucson, AZ	<i>2017</i>
Tucson Womens Hackathon workshop on Git, Tucson, AZ	<i>2017</i>
Population Genetics Module at the Kino School, Tucson, AZ	<i>2013</i>

Judge

Graduate & Professional Student Council Travel Grants, Tucson, AZ	<i>2012, 2016, 2017, 2018</i>
Tucson Magnet High School Science Fair, Tucson, AZ	<i>2012, 2015</i>
EEB Undergraduate Research Poster Session, Tucson, AZ	<i>2012</i>