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

Adrion, J. R.*, Cole, C. B.*, Dukler, N.*, Galloway, J. G.*, **Gladstein, A. L.***, Gower, G.*, Kyriazis, C.C.*, Ragsdale, A.P.*, Tsambos, G.*, ..., Gravel, S., Gutenkunst, R.N., Lohmeuller, K.E., Ralph, P.L., Schrider, D.R., Siepel, A., Kelleher, J., Kern, A.D. 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/`

*First author

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)	*2017-2020*
NIH Computational and Mathematical Modeling of Biological Systems Trainee ($71,064)	*2013-2014*
NSF Integrative Graduate Education and Research Traineeship in Genomics ($97,083)	*2011-2013*
Society for Learning Unlimited Grant ($2,000)	*2009*
Beloit College Presidential Scholar ($60,000)	*2007-2011*

WORKSHOPS AND HACKATHONS

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

COMMUNITY SERVICE AND OUTREACH

Mentoring

Undergraduate interns in computer science, Tucson, AZ	*2017*

Teaching in community

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

Judge

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

[†]Presenter