

## ANASTASIA LYULINA

✉ alyulina@stanford.edu

## EDUCATION

- 2020 – present      Stanford University  
Ph.D. Student in Ecology and Evolution  
Stanford, CA, United States
- 2013 – 2017      Saint Petersburg Polytechnic University  
B.Sc. in Physics  
Saint Petersburg, Russia
- 2016      Technical University of Munich  
Exchange Student  
Munich, Germany

## RESEARCH EXPERIENCE

- Sep 2020 – present      Graduate Student at Stanford University  
Biology Department • Supervisor: Dmitri A. Petrov  
As a rotation student, I am working on inferring mean fitness from lineage tracking experiments in barcoded yeast populations.  
Stanford, CA, United States
- 2017 – 2020      Research Assistant at the Institute of Science and Technology Austria  
Evolutionary Genomics Group • Supervisor: Fyodor A. Kondrashov  
My main project investigated the genetic variation in a nearly extinct bird species.  
I used mathematical modelling, machine learning, and extensive data analysis.  
Klosterneuburg, Austria
- Feb – Jul 2019      Visiting Postgraduate Research Fellow at Harvard University  
Department of Systems Biology • Supervisor: Johan Paulsson  
I worked on improving fluorescent proteins by designing and screening mutant libraries.  
I did cloning, mutagenesis, and microfluidics.  
Cambridge, MA, United States
- Jul – Aug 2017      Visiting Undergraduate Student at the University of Calgary  
Centre for Molecular Simulation • Supervisor: D. Peter Tieleman  
I studied how P-glycoprotein interacts with lipids and transports drug molecules across cell membrane with coarse-grained molecular dynamics simulations.  
Calgary, AB, Canada
- 2016 – 2017      Undergraduate Student at the Institute of Macromolecular Compounds  
of the Russian Academy of Sciences • Supervisor: Andrey A. Gurtovenko  
I performed atomic-scale molecular dynamics simulations of biological systems.  
Saint Petersburg, Russia

## FELLOWSHIPS, GRANTS, AND AWARDS

- 2020      Gruber Science Fellowship at Yale University (declined)
- 2017      Zimin Foundation Summer Research Fellowship
- 2015 – 2017      Saint Petersburg Polytechnic University Academic Stipend
- 2015      Russian Academic Excellence Project Mobility Grant

## PUBLICATIONS

- 2014      Gurtovenko A. A., Lyulina A. S. *Electroporation of asymmetric phospholipid membranes. Journal of Physical Chemistry B* 118 (33): 9909–9918, 2014. doi: 10.1021/jp5028355.

## SELECTED PRESENTATIONS AND INVITED TALKS

- 2019 *Population Genetics of the Spoon-billed Sandpiper*  
EvolVienna Meeting, Nov 26, Vienna, Austria
- 2019 *Population Genetics of the Spoon-billed Sandpiper*  
Harvard Quantitative Biology Symposium, May 23, Cambridge, MA, USA
- 2018 *Predicting Effects of Amino Acid Substitutions*  
The Graduate University for Advanced Studies, Jul 17, Hayama, Japan
- 2017 *P-gp Drug-Uptake: A Coarse-Grained Molecular Dynamics Study*  
Centre for Molecular Simulation at the University of Calgary, Aug 16, Calgary, AB, Canada

## ADDITIONAL COURSES

- Jul – Aug 2018 Okinawa Institute of Science and Technology Computational Neuroscience Course  
Okinawa, Japan

## TEACHING EXPERIENCE

- Aug 2018, Aug 2016, Aug 2015, Aug 2014 School of Molecular and Theoretical Biology  
Supervised high school students working on research projects in biological physics, molecular evolution, and evolutionary genomics. In 2018, developed and taught a two-week-long course on data visualization (in English).  
Adam Mickiewicz University, Poznań, Poland;  
Centre for Genomic Regulation, Barcelona, Spain;  
Institute of Protein Research, Pushchino, Russia
- 2016 – 2017 Private math and physics tutor to high school students  
Worked one-on-one with students interested in out-of-school mathematics and physics.  
Saint Petersburg, Russia
- Jul – Aug 2015, Jul – Aug 2014, Jul – Aug 2013 Physics Olympiad Summer Training Program  
Assisted with and later taught three-week-long courses in classical mechanics and calculus for high school students (in Russian).  
Leningrad Region, Russia;  
Sochi, Russia

## PROFESSIONAL SERVICE

- 2018, 2019 Reviewer for the *Journal of Theoretical Biology*
- 2015 – 2017 Board Member of the School of Molecular and Theoretical Biology Alumni Association  
Participated in writing a constitution for the Alumni Association;  
mentored younger students through the Alumni Association mentoring program;  
organized talks and lectures for members of the Alumni Association located in Saint Petersburg and run a biweekly journal club.