

**ANASTASIA LYULINA**

✉ alyulina@stanford.edu

**EDUCATION**

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

**RESEARCH EXPERIENCE**

- 2020 – present      Stanford University, Stanford, CA, United States  
Rotation Student in Dmitri Petrov's lab  
I am working on inferring mean fitness from lineage tracking experiments in barcoded yeast populations.
- 2017 – 2020      Institute of Science and Technology, Klosterneuburg, Austria  
Research Assistant in Fyodor Kondrashov's lab  
My main project investigated the genetic variation in a nearly extinct bird species.  
I used mathematical modelling, machine learning, and extensive data analysis.
- 2019      Harvard University, Cambridge, MA, United States  
Visiting Postgraduate Research Fellow in Johan Paulsson's lab  
I worked on improving fluorescent proteins by designing and screening mutant libraries.  
I did cloning, mutagenesis, and microfluidics.
- 2017      University of Calgary, Calgary, AB, Canada  
Visiting Undergraduate Student in Peter Tieleman's lab  
I studied how P-glycoprotein interacts with lipids and transports drug molecules across cell membrane with coarse-grained molecular dynamics simulations.

**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 Travel Grant

**TEACHING EXPERIENCE**

- Aug 2018,  
Aug 2016,  
Aug 2015,  
Aug 2014      School of Molecular and Theoretical Biology  
Supervised selected 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 a selected group of 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.

## ADDITIONAL COURSES

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

## 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

## 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.