

Gorkovets Tatiana Konstantinovna

Biophysicist

Cell Phone + 7 916 118 57 48

Email tgorkovets@gmail.com

Age 29.10.1992

Languages Russian (native)
English (upper-intermediate/advanced)
French (A1)

Education

2014-now PHD student at the Biological Department, Lomonosov Moscow State University (MSU).

2009-2014 Undergraduate student at the Biological Department, Lomonosov Moscow State University (MSU).

Research experience

Molecular Simulations Group, Biological Faculty, Lomonosov Moscow State University, Moscow, Russian Federation, group leader: prof. Konstantin V. Shaitan.

Integrative Biology Group, Moscow State University, Faculty of Biology, Bioengineering Department. Supervisor: Alexey Shaytan, PHD, Lead Investigator.

- **2014-now** – PhD thesis project «Nucleosome interactions with H1 histones and pioneer transcription factors»
- **2013-2014** – Master thesis project “Modulation of voltage-gated sodium channels by short peptides”. Supervisors: Dr. Alexey K. Shaytan, Dr. Konstantin V. Shaitan.
- **2012-2013** – Bachelor thesis “Development of molecular dynamics simulation of potassium voltage-gated channel Kv1.2”. Supervisors: Dr. Alexey K. Shaytan, Dr. Konstantin V. Shaitan.
- **2011-2012** – Semester report “Molecular modeling of phospholipids bilayers”. Supervisors: Dr. Alexey K. Shaytan, Dr. Konstantin V. Shaitan.

11.2012, 07.2013, 02.2014-04.2014 – internship at the TMS (theoretical simulations and modeling) group, the University of Lorraine, CNRS, France. Joint project “Voltage-dependent ion channels: from biophysics to therapeutics”. Supervisor: Dr. Mounir Tarek.

KEY SKILLS

- Research skills:
 - Classic molecular dynamics (NAMD, GROMACS)
 - Homology modeling (MOLDELLER)
 - Molecular modeling (AutoDock, AutoDock Vina, MGLTools)
 - Visualization (VMD, Chimera)
 - Scripting (Bash, awk, python)
 - basic methods of molecular biology, biochemistry and biophysics.
- Computer skills:
 - Windows OS and Linux (advanced user)
 - Supercomputers, MPI calculations
 - Analytical software (gnuplot, xmgrace)
 - Auxiliary software (putty, xming, winscp)
- Teaching experience
- Reports preparation and presentations skills
- Large amount of data analysis skills
- Multitasking
- Communication skills
- Responsibility

PUBLICATIONS

1. Armeev, G. A., T. K. Gorkovets, D. A. Efimova, K. V. Shaitan, and A. K. Shaytan. 2016. “Modeling of the Structure of protein–DNA Complexes Using the Data from FRET and Footprinting Experiments.” *Moscow University Biological Sciences Bulletin* 71: 29–33. <http://dx.doi.org/10.3103/S0096392516010016>
2. Gorkovets T.K., Shaytan A.K. Creation of potassium voltage-gated channel Kv1.2 model for molecular dynamic simulation. in: “Computational and Theoretical Modeling of Biomolecular Interactions”. Moscow-Izhevsk: Institute of Computer Science, 2013, pp. 25-26. ISBN 978-5-4344-0126-5
3. T.K. Gorkovets, G.A. Armeev, K.V. Shaitan, A.K. Shaytan, 2018 “Joint Effect Of Histone H1 Amino Acid Sequence And DNA

Nucleotide Sequence On The Structure Of Chromatosomes:
Analysis By Molecular Modeling Methods” Moscow University
Biological Sciences Bulletin - accepted