Samira Kaziakhmedova

Email: kaziakhmedova.sa@phystech.edu Phone: +79150329455 DoB: 28.08.2000

Research interests Biology, genetics, stem cells, bioinformatics

Education Moscow Institute of Physics and Technology Moscow, Russia

B.Sc. in Applied Physics and Mathematics September 2018 – Present

Department of Biological and Medical Physics

GPA: 4.91/5.00

Additional

Education Coursera.org

Innate Immunity and B-cell Function 2020

Certificate

Stepik.org

Biotechnologies: gene engineering 2019

Certificate

Research experience Genome Engineering Lab (GEL MIPT) - Student Intern

one student from the course

February 2021 – Present

Advisor: Prof. Pavel Volchkov

Work on "Adrenal hyperplasia" project

- Evaluated of efficiency of viral transduction in liver and adrenal glands with qPCR and immunohistochemistry

- Selected the most effective AAV serotype

Genome Engineering Lab (GEL MIPT)

Rotation process November 2019 – 2021

1.) "Avian influenza"

- Cloned guide RNAs for Cas13-mediated targeted cleavage on the region of the avian influenza virus RNA (H1N1)

2.) "The AAV Design"

- Evaluated the applicability of the statistical model of bmDCA (Boltzmann-machine learning Direct Coupling Analysis) in the case of predicting a new protein sequence of the capsid of the AAV by plotting contact map for tertiary structure of new sequence and the AUC-curve

Teaching experience Teaching assistant Fall 2020 Correspondence School of Physics and Technology (MIPT) Honors and scholarships - My application to LMU Amgen Scholars Programme was preselected for the lab of Prof. Vollmar. The programme was cancelled due to Covid-19 pandemic 2020 - Abramov Foundation Fellow : top 10 students from the course on academic perfor-2019 mance - Participated in International Tournament of Natural Sciences (Saint-Petersburg, 2019), where solved the problem of drug delivery for patients suffering from epidermolyc bullose Skills **Programming** Python R Lab skills Transformation, PCR, qPCR, transfection, immunocytochemistry, electrophoresis Languages

Travelling, downhill ski, roller skating, poem writer.

English (upper-intermediate)

Other interests