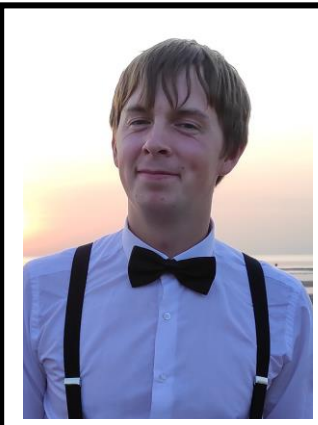


University	Peter the Great St.Petersburg Polytechnic University
Level of English proficiency	Upper Intermediate
Courses and fields of studies offered for applicants	1.5. <i>Biological Sciences</i> 1.5.3. <i>Molecular Biology</i>
Projects for potential academic supervision	1. Study of bacterial cell division proteins 2. Study of bacterial SMC complexes
Topics offered for prospective researches	1. Characterization of the SMC complex of <i>Mycoplasma gallisepticum</i> 2. Characterization of the SMC complex of <i>Acholeplasma laidlawii</i> 3. Characterization of the MukBEF complex of <i>Escherichia coli</i> 4. Characterization of the Wadjet complex of <i>Escherichia coli</i> 5. Properties of the division proteins of <i>Mycoplasma gallisepticum</i> 6. Properties of the division proteins of <i>Acholeplasma laidlawii</i> 7. Properties of the division proteins of <i>Ureaplasma parvum</i>
 Research supervisor: Alexey Vedyaykin, PhDs in Biological Sciences (Institute of Cytology of the Russian Academy of Sciences)	<i>Biochemistry and Molecular Biology</i>
	Supervisor's research interests <i>Mycoplasmas, FtsZ, SMC, bacterial cytoskeleton, bacterial division, fluorescence microscopy, super-resolution microscopy, CRISPR-Cas</i>
	Study program highlights <i>Use of unique equipment, interaction with foreign scientists and research centers, fundamental research with applied potential</i>
	Supervisor's specific requirements: <i>High responsibility and motivation. Proficiency in Russian and English. Willingness to supervise students' work.</i>
	Supervisor's publications <i>Over the past 5 years – 15 publications indexed by Web of Science Core Collection or Scopus, 5 indexed by Russian Science Citation Index (RSCI), including 9 in publications included in the first quartile (Q1) of the impact factor of JCR Science Edition, JCR Social Sciences Edition or SJR.</i> <i>List of the 5 most significant publications:</i> 1. Vedyaykin AD, Vishnyakov IE, Polinovskaya VS, Khodorkovskii MA, Sabantsev AV. New insights into FtsZ rearrangements during the cell division of <i>Escherichia coli</i> from single-molecule localization microscopy of fixed cells. <i>Microbiologyopen</i> . 2016 Jun;5(3):378-86. https://onlinelibrary.wiley.com/doi/full/10.1002/mbo3.336 . doi: 10.1002/mbo3.336. IF=3.4 (Q1) 2. A.D. Vedyaykin, E.V. Ponomareva, M.A. Khodorkovskii, S.N. Borchsenius, I.E. Vishnyakov. Mechanisms of Bacterial Cell Division. <i>Microbiology</i> 88, 245–260 (2019). https://link.springer.com/article/10.1134/S0026261719030159 . https://doi.org/10.1134/S0026261719030159 . IF=1.5 (Q3) 3. Vedyaykin A, Rumyantseva N, Khodorkovskii M, Vishnyakov I. Sula is able to block cell division in <i>Escherichia coli</i> by a mechanism different from sequestration. <i>Biochem Biophys Res Commun</i> . 2020 May 14;525(4):948-953. https://www.sciencedirect.com/science/article/abs/pii/S0006291X20304812 . doi: 10.1016/j.bbrc.2020.03.012. IF=3.1 (Q1) 4. Rumyantseva N.A., Golofeeva D.M., Vedyaykin A.D. Sula does not sequester FtsZ in <i>Escherichia coli</i> cells during the SOS response. // <i>Biochemical and Biophysical Research Communications</i> , 2024. 691: p. 149313.

	https://www.sciencedirect.com/science/article/pii/S0006291X23014079?via%3Dihub DOI: 10.1016/j.bbrc.2023.149313 IF=3.1 (Q1) 5. Rumyantseva N.A., Golofeeva D.M., Shabalina A.V., Vedyaykin A.D. Direct evidence of the ability of <i>Pseudomonas aeruginosa</i> and <i>E. coli</i> Sula to dimerize. // <i>Archives of Biochemistry and Biophysics</i>, 2024. 751: p. 109826. https://www.sciencedirect.com/science/article/pii/S0003986123003259 DOI: 10.1016/j.abb.2023.109826 IF=3.4 (Q1)
	Impacts of Supervisor's research 1. Patent RU 2808699 C1, 01.12.2023 2. Patent RU 225970 U1, 15.05.2024 3. Patent RU 231780 U1, 11.02.2025