Anastasia Ignashkina

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EDUCATION

Florida International University

Miami, FL

BS Biochemistry, Natural & Applied Sciences

July 2019 - July 2023

EXPERIENCE

Tutor Me Education

Academic Tutor

Remote

Aug 2022 - Present

- Perform individual and group tutoring sessions for students in STEM subjects.
- Explain and simplify complex concepts, theories, or problems to enhance students' understanding and facilitate their comprehension of academic material.

Florida International University

Miami, FL

Undergraduate Researcher

September 2022 - July 2023

- Investigated the impact of kinase mutations on cell signaling pathways and cancer progression through molecular modeling and bioinformatics analysis.
- Conducted quantum mechanics calculations to analyze properties of small molecules using computational chemistry software.
- Utilized molecular dynamics simulations and ligand-protein docking to elucidate binding interactions between Covid-19 and drug-like molecules.

Nicklaus Children's Hospital

Miami, FL

Research Scientist Intern

March 2022 - August 2022

- Designed and conducted scientific research in a specific area of interest relevant to the hospital's focus (e.g., medical imaging, drug development, disease mechanisms).
- Collected, analyzed, and interpreted experimental data using statistical and computational tools.
- Collaborated with multidisciplinary teams, including physicians, clinicians, and other researchers.

Florida International University

Miami, FL

Biological Sciences Peer Leader

May 2021 - March 2022

- Facilitated group study sessions to assist fellow students in understanding complex biological concepts.
- Led discussions on advanced biological topics, fostering critical thinking and scientific curiosity.

Herzen University

Moscow, Russia

 $Lab\ technologist$

June 2019 - August 2020

- Carried out complex laboratory experiments and assays, utilizing advanced techniques.
- Ran data analysis using specialized software or statistical tools to interpret experimental results.
- Contributed to the troubleshooting and optimization of experimental procedures.

SKILLS

Lab: ELISA, Gel electrophoresis, PCR, Chromatography, Enzyme assays, Microscopy Software: PyMOL, PyRX, AutoDock, LigPlot, VMD, Avogadro, Gaussian, Babel

Certifications: Immunology Techniques, Microbiology Laboratory Technician, Hazard Communication Training: Experimental Biotechnology, Drug Development, Human Anatomy & Physiology

PROJECT

HIV in Pregnant Women

Eliminating HIV host virus in pregnant women while targeting its reservoir cells for a complete cure. Simultaneously, the risks of birth defects and miscarriages during treatment are being minimized, ensuring the well-being of both mother and fetus. In pursuit of these goals, computational chemistry tools are harnessed to investigate potential medications and their impacts throughout all phases of HIV in expectant mothers.

Conference

Computational Chemistry-Based Design of a Peptide Probe for Electrochemical Distinction of Multiple Kinases with Applications in Ovarian Cancer Diagnosis (Boston, USA, 9/16/2023), (Madrid, Spain, 12/09/2023)