Molecular and Cell Biology

Far Eastern Federal University

Degree or qualification is awarded: **Master**

Language of study: **English** Mode of study: **full-time**

Duration: 2 years

Availability of free education: **yes** Price: **290 000 rubles per year**

Programme webpage at the university website:

 $\frac{https://www.dvfu.ru/upload/medialibrary/d9d/mceq0iqu0teadk5qdnn3kagfwtlahb10/06.04.01\%20MCB\%20(\%D0\%9C\%D0\%9E\%D0\%9F).pdf}{D0\%9E\%D0\%9F).pdf}$

Programme curator: **Vlasov Gleb** Tel.: **8(423)265-24-24 ext.2684** E-mail: <u>interadmission@dvfu.ru</u>

Molecular and cell biology are likely the most rapidly expanding areas in life sciences, which are now setting the fundamental basis for modern medicine.

Molecular and cell biologists are the experts who can understand cell structure and function, research the mechanistic causes of various pathologies, use genetic and tissue engineering to develop modern medical technologies. These specialists work on a wide range of tasks: from complex diagnostics and genome analysis to cell-based treatments and correction of genetic defects. Molecular and cell biologists are needed all around the world. FEFU graduates with molecular and cell biology expertise work in many countries.

You will be great in wherever there is a need for creative thinking and original decisions based on the fundamental knowledge in biomedicine, molecular mechanisms, and innovative solutions in molecular and cell research, for the better future of humanity and the planet in general.

You will learn and apply:

- methods for analyzing the structure and properties of biopolymers, based on molecular cloning, sequencing, big data analysis, and bioinformatics;
- principles and approaches of synthetic biology, genetic engineering, recombinant DNA and RNA manipulation techniques, and genome editing;
- modern methods of optical, electron, and atomic force microscopy, fluorescence-activated cell sorting and analyses, high-content microscopy;
- technologies involved in cell and tissue bioengineering, based on mapping of living cells, stem cell applications, and bioprinting.

Specializations within this programme