

## Core Subjects

- ✓ Research methods in biotechnology;
- ✓ Bioinformatics;
- ✓ Administration and management of agriculture and agro-industrial complex;
- ✓ Enzymatic and microbial conversion;
- ✓ Agricultural biotechnology and biotechnology of raw materials of animal and vegetable origin;
- ✓ Biotechnology of genetically modified raw materials and food;
- ✓ Biotechnological Process Control Systems;
- ✓ Nutritionology;
- ✓ The effectiveness of biotechnological industries;
- ✓ Bioinformatics;
- ✓ Safety and biosafety of agri-food raw materials and food products;
- ✓ Quality and safety management systems for biological products;
- ✓ Modern production technologies for the manufacture and storage of food products;
- ✓ Biotechnology for the production of specialized food products;
- ✓ Biotechnological features of the production of plant products;
- ✓ Biotechnological features of the production of animal products;
- ✓ Food Law and Food Security.

## Entrance tests

### Portfolio Competition by Specialty

<https://www.dvfu.ru/upload/medialibrary/729/19.04.01.pdf>

**A bachelor's degree or specialization in training is welcome:** biotechnology, agriculture, aquaculture, agro-industrial technologies, food technology, chemistry, biology, biotechnological systems and technologies.

## Form of education

Full-time

## Education period

2 years

## Degree

MASTER

### We are waiting for you at:

FEFU Campus  
10 Ajax Bay, Russky Island  
Vladivostok  
Russia,  
Building M25, Office M308  
Tel.: 8 (800) 555-0-888  
[www.biomed.dvfu.ru](http://www.biomed.dvfu.ru)

## The Head of the Programme



**Dr. Tatyana Kalenik,**  
**Doctor of Biological Sciences,**  
**Professor, Member of the**  
**European Association «ISEKI-FOOD»**

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### Curator of the educational program:

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## SCHOOL OF BIOMEDICINE

Basic educational program Master's

# Agri-Food Biotechnology



Vladivostok  
2020



## **The benefits of an educated program Agri-food biotechnology**

- Participation in the educational process of leading foreign scientists.
- Project application of project-oriented training;
- academic exchange and internships at the best universities, laboratories and companies in the world;
- Active participation and development of large international projects in the field of agri-food biotechnology;
- Consolidation of fundamental knowledge using modern innovative equipment;
- New original educational standards in the field of agri-food biotechnology;
- The possibility of continuing studies in graduate school and obtaining a degree.

## **The objects professional activity**

- Agricultural products, feed additives and fertilizers;
- Technological and food additives, synthesis of biologically active substances;
- Food products, including specialized, personalized;
- Microorganisms, enzymes, biologically active and chemical substances;
- Instruments and equipment for studying the properties of microorganisms, cell cultures, substances obtained by biosynthesis of substances obtained in laboratory and industrial conditions;
- Equipment for carrying out biotechnological processes;
- Control means of quality control of raw materials, semi-finished products and finished products;
- Regulations food production, international standards.

## **Types of Professional Skills**

- production and technological;
- organizational and management;

- research;
- design.

## **With us, you will learn:**

- The use of alternative sources of amino acids, peptides, protein in agriculture and food industry.
- Creation or improvement of biotechnologies for obtaining valuable products from waste agricultural processing;
- Creation or improvement of biotechnologies of feed additives, fertilizers;
- Creation of biotechnologies for the synthesis of food ingredients and additives, including biologically active ones.
- Creation of biotechnologies for the conversion of agricultural waste, oil and fat and dairy industries into valuable products.
- Solutions for production personalized food products and specialized food products.
- Development of innovative biotechnologies for the deep processing of agricultural raw materials to produce new types of personalized, specialized, functional and enriched foods.

## **You will become able to:**

- designing, research, production and use of amino acids, peptides and proteins, enzyme preparations, microorganisms, including cell cultures, their biosynthesis and biotransformation products;
- creation of technologies for obtaining new types of products, including products obtained using microbiological synthesis, biocatalysis, genetic engineering and nanobiotechnology;
- design and development of scientific and technical documentation and technological regulations for the production of food, agricultural and biotechnological products;
- implementation of biotechnological processes and production in accordance with compliance with legislative and regulatory national and international acts;

- organization and conduct of quality control of raw materials, intermediate products and finished products.

## **Employment:**

- research laboratories of leading universities and high-tech companies;
- research and testing laboratories of industrial enterprises;
- modern high-tech companies for the production of non-food raw materials and ingredients, as well as waste processing;
- biotechnological companies and companies for the production and processing of food raw materials;
- agri-food holdings;
- enterprises working in the field of agricultural technologies and the food industry, producing:
  - technological and food additives;
  - agricultural products and fertilizers;
  - enzyme preparations and products with their use;
  - microorganisms;
  - food products;
  - biologically active additives;
  - organic food;
  - protein concentrates and others.

## **Our partners**

Jagiellonian University (Poland), Bohai University (China), Harbin University of Commerce (China), Nihon University (Japan), Tokai University (Japan), Federal State Budgetary Scientific Institution «Federal Research Center for Agrobiotechnologies of the Far East named after A.K. Seagulls» Far Eastern Branch of the Russian Academy of Sciences, Moscow State University of Technology and Management, Kaliningrad State Technical University, Institutes of the Far Eastern Branch of the Russian Academy of Sciences, leading organizations of the Russian Far East: Ltd «Ratimir», Ltd «PepsiCo», Ltd Artemovsky Dairy,

Ltd Green-Agro, Ltd «Seaside Confectioner»,  
Trading House "VIK", Ltd «Vladhleб»,  
Ltd «Nikolsk» and etc.

**LEADING SCIENTISTS**  
**take part in the implementation of the**  
**educational program**

For example,

- Wojciech Piekoszewski – expert in toxicology and food examination, PhD, DSc, Faculty of Pharmacy, Jagiellonian University (Poland);
- Emelyanov Alexey – expert in the field of crop production, biotechnology of plant raw materials, Ph.D., director of the Federal State Budgetary Scientific Institution «Federal Research Center for Agrobiotechnologies of the Far East named after A.K. Seagulls»,
- Shi Yan-guo - expert in the field of food safety, quality and storage, PhD, professor of the Institute of Food Technology, Harbin University of Commerce (China).
- Fang Hongzhi – expert in agri-food biotechnology and biosafety, PhD, Vice President Bohai University (China);
- Juro Hiromi – expert in aquaculture, agri-food biotechnology, PhD, professor Nihon University (Japan).