

# Double Master Degree Innovative drugs

Sechenov University and  
University of Burgundy -  
Franche-Comté

Level: Higher Education- Innovative Drugs Master's degree program in  
06.04.01 "Biology";  
Field of education: Mathematical and natural sciences;

**Specialization "Innovative Drugs".**



## «INNOVATIVE DRUGS»



### "Innovative drugs"

- "Innovative drugs"- this is a unique educational program aimed at training masters who are proficient in modern physical and chemical methods of analysis and capable of setting and solving fundamental and applied sciences research tasks in the development of innovative drugs;

- the best students (up to 5 people annually) are given the opportunity to complete the second year of study at the University of Burgundy Franche-Comté and additionally receive a Master's degree in "Innovative drugs" of the University of Burgundy Franche-Comté, France.

## ADVANTAGES / FEATURES OF THE PROGRAM

Training of specialists in the field of molecular and functional imaging and nanoscience with the opportunity to undergo practical training in these areas in leading research centers of Russia and France\*

\* up to 5 undergraduates annually



### TARGET AUDIENCE

Individuals with bachelor or specialist degree, received at Sechenov University and/or other universities of medical, pharmaceutical, biological, chemical profile, etc.

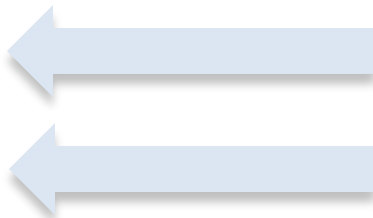
- Graduates of the specialist's degree in the field of study "Pharmacy" 33.05.01
- Graduates of the specialist's degree in the field of study "Medical Biochemistry" 30.05.01
- Graduates of the specialist's degree in the field of study "Medical Biophysics" 30.05.02
- Graduates of the bachelor's degree in the field of study "Biotechnology" 19.03.01
- Graduates of the bachelor's degree in the field of study "Bioengineering and bioinformatics" 06.05.01
- Graduates of the bachelor's degree in the direction of training 06.03.01 "Biology", etc.



## ENTRY EXAMINATION

### Biology

- The form of entry examination:  
Computer testing in biology.
- The minimum number of points  
confirming the successful completion  
of the testing: 40 points (out of 100  
points)



## PRACTICAL TRAINING

In the leading research organizations of the Russian Federation, large domestic and foreign pharmaceutical companies, structural divisions of Sechenov University.



## CURRICULUM

The curriculum was developed jointly by leading experts of the University of Burgundy Franche-Comté and Sechenov University.

Subjects taught:

- molecular and functional imaging;
- modern methods of pharmacimaging;
- introduction to nanosciences;
- nanovectors in the delivery of drugs;
- chemistry and physical chemistry;
- molecular biology;
- physico-chemical methods of molecular biology;
- pharmaceutical chemistry;
- biochemistry of regulatory processes;
- drugs development;
- scientific project management;
- bioethics;
- pharmaceutical technology;
- methodology of scientific knowledge;
- foreign language for scientific communication.

Special attention is paid to the  
practical training and research work of students



## RESEARCH WORK

Starting from the first year of study, students begin to perform independent scientific work under the guidance of leading scientists and specialists of Sechenov University in modern laboratories of the Institute of Pharmacy named after A. P. Nelyubin (the new educational and laboratory building in Troparevo-Nikulino will accept students in 2021, the Institute of Pharmacy consists of Botanical Garden and 9 departments, including the Department of Pharmaceutical and Toxicological Chemistry named after A. P. Arzamastsev, Department of Pharmaceutical Technology, Department of Pharmacology, Department of Analytical, Physical and Colloidal Chemistry, Department of Pharmacy, etc.), the Scientific and Technological Park of Biomedicine of Sechenov University, as well as the leading research centers of Russia, such as the Federal State Budgetary Institution "SSC Institute of Immunology" of the FMBA of Russia, the Federal State Budgetary Scientific Institution "V. V. Zakusov Research Institute of Pharmacology", etc.



ИНСТИТУТ  
ИММУНОЛОГИИ  
ФМБА РОССИИ  
ОСНОВАН В 1983 ГОДУ



НАЦИОНАЛЬНЫЙ МЕДИЦИНСКИЙ  
ИССЛЕДОВАТЕЛЬСКИЙ ЦЕНТР  
Гематологии



Федеральное государственное бюджетное учреждение  
НАЦИОНАЛЬНЫЙ МЕДИЦИНСКИЙ  
ИССЛЕДОВАТЕЛЬСКИЙ ЦЕНТР КАРДИОЛОГИИ  
Министерства здравоохранения Российской Федерации



## PARTICIPANCE IN THE DOUBLE DEGREE PROGRAM WITH THE UNIVERSITY OF BURGUNDY FRANCHE-COMTÉ, FRANCE

1. The selection of participants to continue their studies at the University of Burgundy Franche Comte is carried out in the 2nd semester of training based on the results of academic performance and research (up to 5 people);
2. The defense of the FQW (Final qualification work) (in order to obtain two diplomas) is accepted by a joint SAC (State attestation commission), the defense is conducted at Sechenov University with full-time or remote participation in the examination commission of at least two representatives of the University of Burgundy Franche Comte.
3. Flight, accommodation and other expenses in France provided by student independently;
4. The level of knowledge of the English language is not lower than B2;
5. Graduates who have successfully mastered the program, are awarded state diplomas of Russia and France;
6. It is possible to complete two semesters of study in France. French study visa is issued.



## PROGRAM DESCRIPTION

1

**Mode of study:  
Full-time**

2

**Duration of the  
program : two  
years**

3

**Language: English  
/Russian**

4

**2nd year of study –  
in France**

5

**Students  
participating in the  
program – up to 5**

6

**Scholarship at  
UBFC is possible.**

## «INNOVATIVE DRUGS»



Due to the social significance of the development of innovative drugs and their subsequent introduction into medical practice, a number of disciplines are aimed at obtaining practical skills in the field of communication, bioethics, regulatory practice in the field of drug circulation, etc. The curriculum provides an opportunity to take a number of elective courses. The program is developed and implemented jointly with the University of Burgundy Franche-Comté, France and allows you to get

- Master's degree in 06.04.01 "Biology", specialization "Innovative Drugs" from **Sechenov University**
- Master's degree in "Innovative Drugs" from the **UBFC**.





## RESEARCH WORK

### **Second year of study at the University of Burgundy Franche-Comté:**

- Pharmacoinaging;
- Nanotechnologies;
- Drugs development under the guidance of leading foreign specialists;
- Introduction to the organization of the research process in the laboratories of the University of Burgundy Franche-Comté;
- Performing independent research work, which in the future can serve as the basis for a scientific publication.
- Research work of undergraduates will be supervised by leading employees of the University of Burgundy Franche-Comté and affiliated research centers.



## WHERE GRADUATES ARE IN DEMAND

1. Scientific work in leading Russian and foreign research institutes and centers, in postgraduate studies (PhD program).
2. Career in pharmaceutical and biotechnology companies.



## PARTNER UNIVERSITY (University of Burgundy-Franche-Comté)

### University of Burgundy Franche-Comté

- the result of the merger in 2015 of 7 institutions of higher education and large research centers operating in the region of Burgundy-Franche-Comté (BFC), France.
- The university is included in the largest international rankings, including the World University Rankings | Times Higher Education (THE).
- In 2018, UBFC ranked 150-200 in the European Teaching Rankings, and in 2020 it ranked 100-150 in the ranking of young universities in the world (THE Young University Rankings).

## PROGRAM CURATORS

### **From the Sechenov University:**

Responsible for the pedagogical component of the Program:

*Prof. Galina Vladislavovna Ramenskaya, Director of the A. P. Nelyubin Institute of Pharmacy*

Responsible for the administrative component of the program:

*Prof. Yulia Vyacheslavovna Fedorova, Director of the Center for Master's Programs*

Project Coordinator:

*Acting Head of the Strategic Development and Internationalization Department Igor Sergeevich Lunkov*

### **From the University of Burgundy Franche-Comté:**

Responsible for the pedagogical component of the Program:

*Prof. Yves Artou*

Project coordinator:

*Evgenia Pashayan-Leroy*



The teaching and management of the FQW (Final qualification work) is carried out by leading specialists of the Sechenov University and the University of Burgundy Franche-Comté, experts of major research organizations of the Russian Federation.