SECHENOV UNIVERSITY

Tradition. Knowledge. Progress

Dear colleagues!

Sechenov University's mission lies in thoroughly and continually improving the lives of individuals through achieving differentiated excellence in the fields of multidisciplinary translational biomedical research and cutting-edge research-based education with a focus on innovation, development, and implementation. The strategic goal of Sechenov First MSMU consists in joining the international research and educational community to become an international medical research university number 1 in Russia to effectively collaborate with international partners in the field of biomedicine.

Sechenov First MSMU develops «the medicine of the future» on the solid academic basis of clinical medicine broadening the horizons with proactive multidisciplinary studies in the network cooperation with world leaders in engineering, technology and natural sciences.

Sechenov University trains professionals able to work effectively in the changing environment, to be leaders and to respond to challenges of time.

Rector Petr V. Glybochko

FACTS AND FIGURES

The only Russian medical university in QS Medicine, THE WUR

17,000
Undergraduate students

2,500
Foreing students

8
University teaching hospitals

102
Educational programs

≈ 362,000 m²
Educational and research facilities: 150 buildings

≈ $10,7 m
Research income

7
faculties

85%
Of teachers have academic degrees

2,100
Highly qualified faculty

10
Research institutes

153
Research associates

21,000
Postgraduates

≈ $224 m
Total annual university income

HISTORY

est. 1758

Sechenov University is the oldest and largest Russian medical school and the successor of the medical faculty of the Emperor's Moscow University.

1930

The medical faculty of the Moscow State University became an independent higher educational institution - the First Moscow Medical Institute (First MMI)

1955

The institution was named after Ivan Mikhailovich Sechenov

2010

I.M. Sechenov Moscow Medical Academy was granted the University status

DISTINGUISHED ALUMNI

Ivan Sechenov

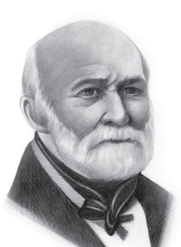
Founder of the first Russian school of physiology. He made a great contribution to the study of the brain: thalamus inhibition center, central inhibition phenomenon, etc.

Nikolai Sklifosovsky

Russian professor, author of a number of works in military abdominal surgery and dentistry. He made a significant contribution to the development of oral surgery and antiseptics.

Anton Chekhov

Great short story writer and playwright, physician, who made a great contribution to the classic literature of the world. His works are published in more than a hundred languages.



Nikolai Pirogov

Founder of anaesthesiology and military surgery in Russia, the author of the first atlas of topographic anatomy. Made a significant contribution to the Russian system of education.

RESEARCH FOCUS

Science and Technology Park for Biomedicine

Centre for Research and Education in Translational Medicine

Intsitute for Translational Medicine and Bioengineering

Centre for Biotechnology and Small Bench Manufacturing

Engineering centre,
Technology Park
Small bench production site

Centre for Basic Research

Institue for Regenerative Medicine,
Institute for Molecular Medicine
Biobank

1,500+

papers and 100+ monographs annually

200

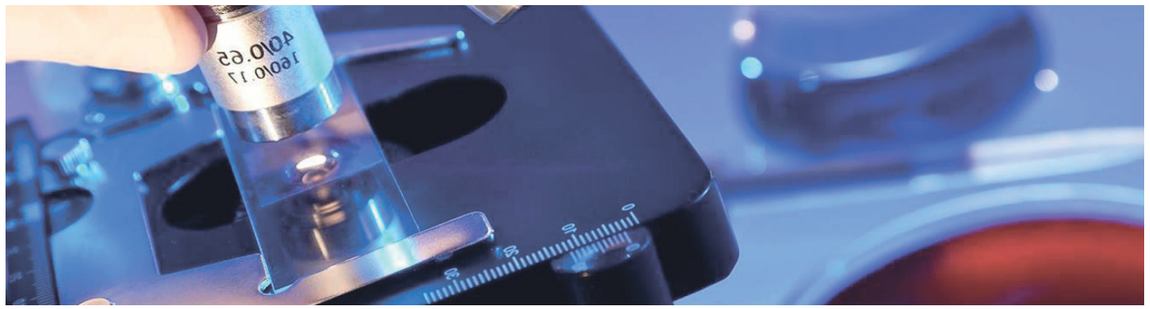
authorship certificates and patents since 2013

80

student's research clubs with 1000+ members

60+

laboratories and departaments



INSTITUTE FOR REGENERATIVE MEDICINE

Research Focus

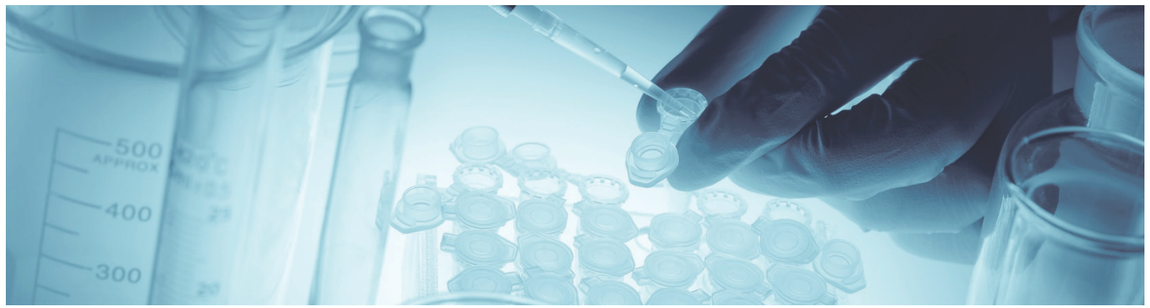
To develop approaches to help patients suffering from incurable or intractable diseases using the regenerative medicine paradigm

On-going Projects

- Tissue engineering of the heart valve, blood vessels, trachea, cartilage and urethra
- Biomaterial and scaffold design for neural regeneration
- 3D Bioprinting of functional complex tissues
- Microfluidic Organ-on-a-Chip systems for high-content screening
- Cell therapy of diabetic ulcers, peritonitis, and liver cirrhosis and fibrosis
- Study on safety and efficacy of tissue-engineered constructs in preclinical and clinical trials
- Biobanking

The list of labs /departments

Department of Advanced Cell Technologies
Department of Advanced Biomaterials
Laboratory of Skeletal Muscle Regeneration
Laboratory of Experimental Morphology
Department of Regenerative Hepatobiliary Surgery
Biobank



INSTITUTE FOR MOLECULAR MEDICINE

Research Focus

Identification of molecular markers and molecular targets of human diseases; development of novel teranostic tools.

On-going Projects

- Interactive nanocomposite biomaterials (smart-scaffolds) for tissue engineering
- Molecular profiling of tumors to identify new genes responsible for the development of sporadic, hereditary and family stomach cancer
- Prevalence of gluten-related diseases in Russia and the development of a new technological approach for gluten-free foods production
- The cellular response to the accumulation of amyloid aggregates in the pathogenesis of Parkinson's disease
- The effect & cell factors mechanisms on renal cell carcinoma metastasis regulating
- New modulators of sensory neurons receptors

The list of labs /departments

Department of Biomedical Engineering
Laboratory of Medical Genetics
Laboratory of Molecular and Cellular Biology
Laboratory of Molecular Biology and Biochemistry
Laboratory of psychiatric neurobiology
Biobank

INSTITUTE FOR PERSONALIZED MEDICINE

Research Focus

Telemedicine and remote monitoring. Clinical and genomic bioinformatics. New biomarkers. Math modeling in medicine. Health Big Data.

On-going Projects

- "University hospital at home" – the impementation of the "Personal account of the patient" and "Health Banking" with the "Home-based hospital" telemonitoring service using the Internet of medical devices
- "SechenovConsilium" – federal professional telemedicine reference center
- "SechenovOncoPrevent" – Early risk-assesmentOncotest
- "BigData for Everyone" – big data processing

The list of labs /departments

Health Management Clinic
Center of personalized oncology
Department of math modeling in medicine
Department of Information and Internet Technologies
Department of Higher Mathematics and Modeling
Clinical and genomic bioinformatics Lab
Center of medical information systems and technologies
e-Health Lab

INSTITUTE FOR TRANSLATIONAL MEDICINE AND BIOTECHNOLOGY

Research Focus

Translation of research results of biopharmaceuticals and small molecules drug discovery to clinical routine.

On-going Projects

- New drugs R&D – an inhibitor of dipeptidyl peptidase-IV and a new generation drug for the treatment of type 2 diabetes mellitus acting at the level of a peroxisome proliferator activated receptor
- Medico-biological technologies for metabolic profiling by markers diseases as the basis for implementing methods of personalized medicine
- Nanotransport for antineoplastic drugs
- Early diagnosis of cancer

The list of labs /departments

Department of Analytical Toxicology, Pharmaceutical Chemistry and Pharmacognosy
Department of Biotechnology
Department of immunobiologicals
Laboratory of Bioinformatics
Laboratory of Directed Transport Systems
Laboratory of Pharmacokinetics and Metabolome Analysis
Center for Preclinical Studies
Center of Pharmaceutical Technologies
Center of Bioanalytical Research and Molecular Design

INSTITUTE FOR BIONIC TECHNOLOGIES AND ENGINEERING

Research Focus

Artificial organs and bionic prostheses. Hemocompatible anticoagulant coatings for implants. Tissue engineering. Smart Diagnostics. Organs-on-chips.

On-going Projects

- Artificial heart
- Artificial kidney
- Antibacterial coatings for artificial prostheses and organs
- Personalized diagnostic systems for assistance with decision-making in early diagnosis of diseases.
- Biological properties of nanocomposite coatings for joint ligaments implants
- Biological properties of implantation nanomaterial for bone-cartilage defects restoration

The list of labs /departments

Laboratory of Wearable Biocompatible Devices and Bionic Prostheses
Laboratory of Biomedical Nanotechnology

EDUCATIONAL FOCUS

School - university - hospital model of continuous medical education with early introduction to the profession

HIGHER EDUCATION

PROFESSION-ORIENTED MEDICAL CLASSES

SECHENOV PRE-UNIVERSITY

Undergraduate

4 Bachelor degree courses

8 Master programs

9 Specialist programs

10 Internationally recognized programs

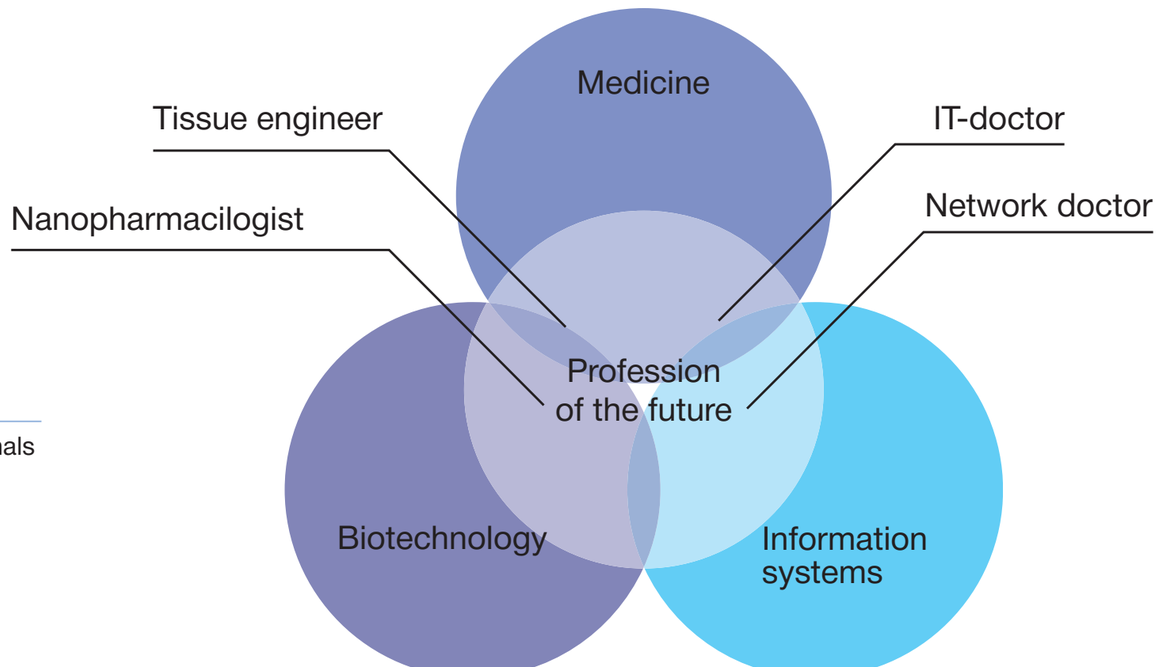
Postgraduate

65 Programs in clinical residency

47 PhD programs

INTERNATIONAL SCHOOL «MEDICINE OF THE FUTURE»

New educational programmes



Goals

- Train the next generation of healthcare professionals
- New models of medical education
- Innovative educational technologies

Advantages

- Novel educational programmes
- International intreship for talented students
- Advanced training in English

4

Novel cross-disciplinary programmes in Life Sciences

- Mechanics and math modelliing
- Information systems and technologies
- Nanomaterials
- Materials Science and Technology

TEACHING CLINICS

est. 1804

3,500+
beds

20
teaching hospitals

71,000
inpatients annually

430,000
outpatients annually

8-2 Trubetskaya st., Moscow
119991, Russia (legal adress)

2-4 Bolshaya Pirogovskaya st.,
Moscow 119991, Russia

+7 495 609 1400

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SECHENOV UNIVERSITY

#1 INTERNATIONAL REFERENCE IN LIFE SCIENCES IN RUSSIA

Sechenov University
CIS's leader of medical education
Moscow – 2018