

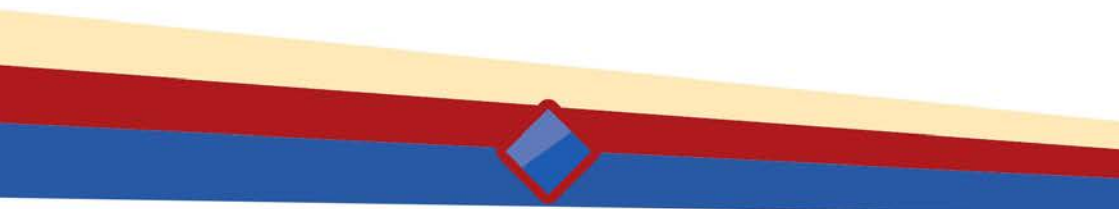


# **URAL STATE MEDICAL UNIVERSITY**

**2018**



**Rector, Professor, Honored Doctor of the Russian Federation,  
Corresponding Member of Russian Academy of Science  
Dr. Olga Petrovna Kovtun**





## University today

- Leader among medical schools in Ural Region
- Coordinator of Ural Medical Scientific and Educational Cluster (order №844 dated ob 26.11.2015)
- Main University of the Ural Scientific and Educational Consortium of Biomedicine, Pharmacy and Medical Engineering (agreement from 26.01.2016)



**Mission of USMU:**  
**We research, cure, and educate to promote health  
and wellbeing of Ural population**

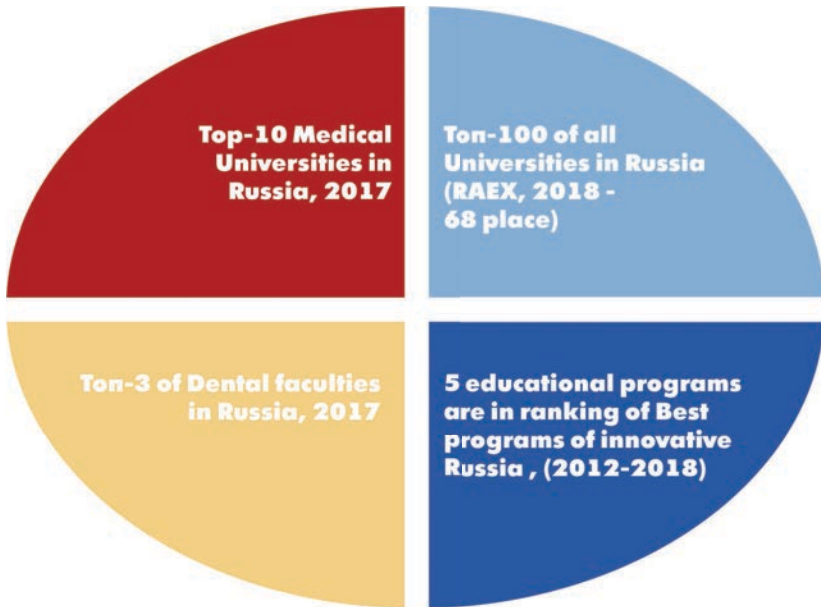


1930 Sverdlovsk State Medical Institute

1995 Ural State Medical Academy

2013 Ural State Medical University

**Ranking of USMU**



**International professional and public accreditation**

# EDUCATION

- More than 5500 students
- More 6000 postgraduates

## 7 faculties:

- General Medicine,
- Pediatrics,
- Preventive Medicine,
- Dentistry,
- Pharmaceutical,
- Psychology and social work and Nursing,
- Advanced training

**Enrolment competition -about 10 applicants per place**

## **USMU has educational programs of all levels:**

- **Bachelor** Social Work and Nursing
- **Specialist Programs** General Medicine Pediatrics, Dentistry, Preventive medicine, Pharmacy, Clinical Psychology
- **Master programs** – Public Healthcare, 3 programs
- **Residency** – 71 specialties
- **Postgraduate studies** – 5 schools, 32 specialties
- **Doctoral programs** 3 specialties
- **Life-long learning** – more than 350 programs with distant training

# **USMU is the guarantor of high quality graduate training**



Since 2014 USMU has the system of assessment of education quality of graduates



After first accreditation in 2018 year 99,8 % graduates have work permission



The average score of Final state examination in 2018:

«General Medicine» is 4,3

«Pediatrics» – 4,5

«Dentistry» – 4,6

«Preventive medicine» - 4,4

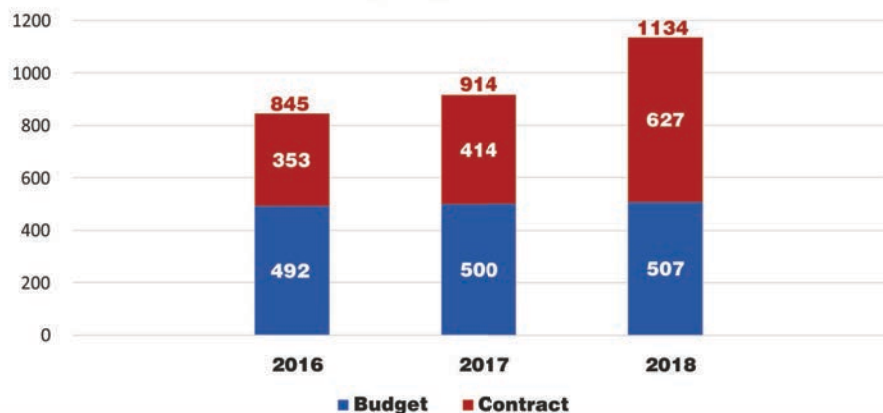
«Pharmacy» - 4,0



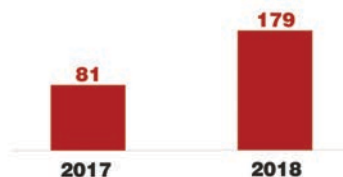
Since 2006 555 doctors were prepared in high school with Regional Ministry of health



## Admission analysis to bachelor, specialist and master programs



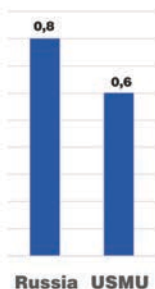
## Increased enrollment of students at the expense of the budget of the Sverdlovsk region since 2018



Enrollment was increased for 98 pers

## Quality of admission

### Medalists and winners, %



Participants of the programs "Sirius", Children's Education Center "Tavatyuy"

Winner of the All-Russian School Olympiad

Winner of the University Olympiad

Winner of the award of the Governor of the Sverdlovsk region

Individual achievement	GM	PF	DF	PrevM	Pharm
Honour certificate	143 (33%)	40 (17%)	41 (29%)	10 (10%)	10 (10%)
Volunteer	41 (9%)	29 (12%)	14 (10%)	7 (7%)	7 (7%)

# University today:

## Teaching staff-

- 5 Academicians of Russian Academy of Science
- 56 Honored Doctors of Russia
- 5 Honored Figures of High School of Russia
- 5 Honored Scientists of Russia
- 75% of USMU staff have scientific degrees
- 20 Honored medical scientific schools
- 47 scientific branched
- 67 educational and scientific departments





# Educational trends

- 1. Practice-oriented approach**– Simulation technologies and cadaver centre
- 2. Information Technology in Education**– E-Learning, M-Learning, online education, telehealth
- 3. Long-life learning**
- 4. The best clinical bases (more 60) and University dental clinic** (more than 100 workplaces, 60 simulators, 140 computers, dentist's automated workplace, 10 technoscopes, CT scanner, RVG, CAD-CAM systems, modern medical and broadcasting equipment)
- 5. Approved with international standards of quality education ENQA** (Sertificate № 1341-08-A069, 27.06.2018)



# SCIENCE AND INNOVATION

## The strategy of scientific and technological development of the Russian Federation (Decree of the President of the Russian Federation, December 1, 2016 No. 642)

- Superiority in research and development
- High rate of knowledge deepening
- Creating innovative products

These are the key factors determining competitiveness. national economies and the effectiveness of national security strategies

## University as a place of advanced development and creation of innovations: training specialists for the markets of Medicine of the future



# Ural Scientific and Educational Consortium of Biomedicine, Pharmacy and Medical Engineering



## Categories of consortium participants:

- Ural state medical university & Ural federal university
- Scientific Institutes, Ural Branch of RAS
- Major medical centers
- Innovative production structures

**Universities as centers of innovation space: joint implementation of a regional project; project session of Sverdlovsk region In EC Sirius (Sochi)**

## Scientific projects STI :

- NeuroNet
- HealthNet

## Technology platform «Medicine of the Future»:

- Genomics, bionics
- Neurotechnology
- Artificial Intelligence
- Additive technology
- Sensory
- Mechanical biotronics

# Scientific trends

## 1. Basic science in medical education (cooperation with the Institutes of Ural Branch of the Russian Academy of Sciences)



## 2. Integration into the global mainstream: publication activities



USMU publishes 4 scientific journals (3 of them are in the list of the Higher Attestation Commission of the Ministry of Education and Science of the Russian Federation, including 1 in PubMed; 1 in the RSCI), newspaper

## 3. Scientific Society of Young Scientists and Students







- 25 agreements of collaboration in science and education together with 25 leading universities
- Net framework for scientific and educational internship for foreign students
- IFMSA internship for students practiced in China, Italy, Serbia, Thailand, Poland, Portugal, Brazil, Montenegro and other countries
- Erasmus+Grant for Credit Mobility with Universities of Transilvania, Serbia, Hungary, Denmark, Portugal

**[www.usma.ru](http://www.usma.ru)**





# University youth school

## «Science of Success»

«International experience in the integration of education, science and practice»



## Atlas of emerging jobs: HEALTHCARE



IT- doctor



Medical equipment  
Designer



Bioethicist



Genetic consultant



Bioinformatician



Medical marketing  
expert



R&D manager in  
healthcare



Molecular nutrition  
expert



Medical robot  
operator



IT-geneticist



Robotic prosthesis  
and implants



Tissue engineer



Medical institution  
life cycle designer



Personalized  
healthcare expert



Old age health  
consultant



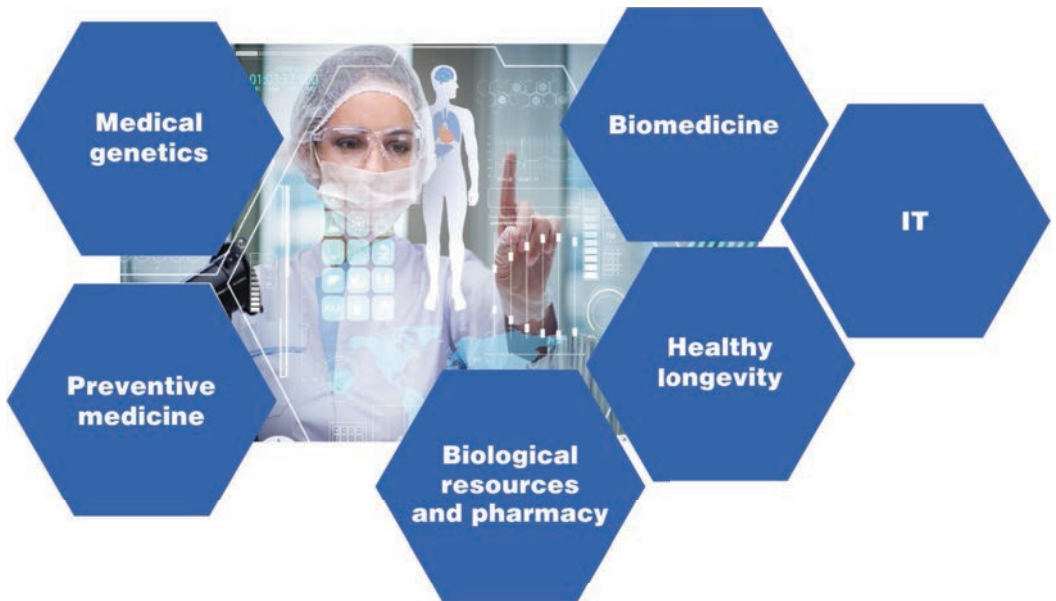
Online doctor

# What is the doctor of the future?



## Changes in the HealthNet medicine market by 2035:

- lifetime and it's quality is increasing significantly
- diagnosis and treatment of diseases becomes personalized
- tele - medicine, IT-technologies in health saving and monitoring





# Model of training new generation medical staff: continuing professional education «Clinician-scientist» (in English)

- Research type of professional activity
- Active involvement of students in project, research, innovation activities

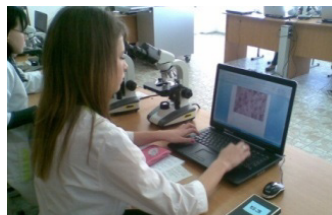
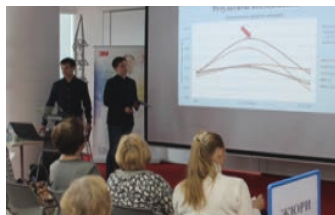
## INCREASED LEVEL OF PROFESSIONAL COMPETENCE

- traditional training in the specialty;
- acquirement of modern information technologies;
- analysis and apply the latest achievements of biomedicine;
- intensive study of foreign languages, preparation for international professional communication;
- leadership development and communication skills;
- participation in international conferences, symposia, internships at leading universities of the world

Specialty educational programs in the  
field of: General Medicine, Pediatrics,  
Dentistry, Preventive Medicine,  
Pharmacy



CPE «Clinician-  
scientist»





# Model of training new generation medical staff:

## CPE 2 «Cellular technologies operator»

- The use of cell technology in clinical practice
- Scientific research

### ADDITIONAL PROFESSIONAL COMPETENCE

- Traditional training in the specialty;
- Acquirement of modern information technologies;
- Analysis and apply the latest achievements of biomedicine;
- Intensive study of foreign languages, preparation for international professional communication;
- Infographics skill development;
- Participation in international conferences, symposia, internships at leading universities of the world

Educational programs in specialties  
clinical and fundamental medicine



CPE 2 «Cellular  
technologies  
operator»





# Training of new generation medical personnel:

## CPE3 «Chinese medicine for Russian doctors»

### Suggested basic disciplines:

- Basic theories of Chinese medicine
- Diagnostics in Chinese medicine,
- Chinese pharmacology,
- Formulas in Chinese medicine,
- Acupuncture and tui na cauterization ,
- Qigong
- Internal Chinese medicine
- In-depth study of Chinese medical language





# THIRD MISSION OF THE UNIVERSITY

**THIRD MISSION OF THE UNIVERSITY** is the promoting the formation of an attractive urban socio-cultural infrastructure, USMU as a driver of positive changes in the social sphere

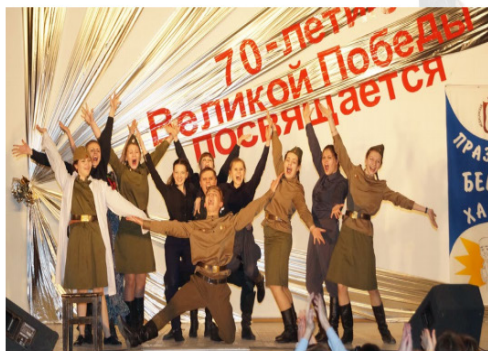


- Preventive medicine
- Conducting health education activities
- Promoting a healthy lifestyle, developing and introducing innovative technologies for health protection
- Support of social projects competitions
- Formation of students' competences in the organization of preventive work through volunteering



- Raising public awareness about disease prevention
- Achievement of target values of adherence to healthy lifestyle in accordance with the project's regional passport

# Student self management



# What does volunteering give a student, a future doctor?

**student**



## Requirements of Federal educational standards



**doctor**

- carrying out activities for the hygienic education and prevention of diseases among adults and adolescents, psychological and educational activities
- ability to act in unusual situations, to be responsible for the decisions
- communication skills, teamwork, tolerance
- participation in the conduct of medical rehabilitation and sanatorium-resort treatment of children and adolescents
- patient care management, delivery of health care services etc

## The project «Volunteering for students, doctors, health care»

**The aim of the project** is to promote the formation of professional competencies among students of the Ural State Medical University, as well as the readiness to carry out preventive activities within the chosen specialty

### Tasks:

- activation and involvement of students in volunteering
- defensive skills development and reducing risky behaviors among young people
- training volunteers to work with different age groups using modern technologies of hygienic education
- improvement of personal qualities (mercy, tolerance, empathy)

## **Permanent partners and sites for the implementation of preventive measures**

### **YEKATERINBURG**

- Department of coordination of work on the prevention and fight against drug addiction of the Administration of Yekaterinburg
- Youth friendly clinic for children # 13 «Territory of Freedom»
- City Center for Medical Prevention
- Pediatric chest ward of TB Dispensary, Yekaterinburg
- Department of Palliative Medical Care Hospital # 2 («Hospice»)

### **SVERDLOVSK REGION**

- Ministry of Health in Sverdlovsk region «Recreation centre AIDS»
- Department of youth policy of the Sverdlovsk region
- Drug Control Department of the Sverdlovsk region
- Multidisciplinary Clinical Medical Center «Bonum»
- State Budgetary Health Institution “Sverdlovsk Regional Center for Medical Prevention”

### **RUSSIA**

- Scientific Research Institute of Hygiene and Health Protection of Children and Adolescents «Children’s Emergency Information Centers»
- All-Russian social movement «Volunteers - doctors»
- All-Russian public organization «All-Russian Society for the Development of School University Medicine and Health»
- Charitable Fund «Sheredar»
- Health Foundation «FOCUS-media»

## Ongoing projects and programs

### YEKATERINBURG

- **“Singing Clowns”** is an art therapy project for children and adults undergoing treatment or rehabilitation.
- **“I breathe freely!”** - the program of primary prevention of smoking tobacco and electronic cigarettes for teenagers and young people from 13 years old.
- **“Drink tea - you fly like an eagle!”** Is an interactive lesson aimed at preventing alcohol consumption for teenagers from 14 years old.

### SVERDLOVSK REGION

- **“Schoolchildren’s Health”, “Healthy Baby”** are the hygienic education programs for children and their parents.
- **“Your life is your responsibility: # take an HIV test”** - an equal-to-equal HIV prevention program
- **Quests «HIV through the eyes of young people», «Indian Day», «Healthy Extreme», «The Alphabet of Health», etc.**
- **Dance4life** is an international project on reproductive health and the rights of adolescents and young people.

### RUSSIA

- Participation in the rehabilitation programs of the camp **«Sheredar»** for children who have suffered oncological discases (oncology and hematology).
- **Participation in All-Russian actions: “STOP HIV / AIDS”**
- **“May 31, the Day of quitting smoking. Forever», «All-Russian day of sobriety» and others.**
- Participation in the provision of the World Cup in Yekaterinburg (2018)



# Project

## «Your life is your responsibility: # take an HIV test»

### Main events:

- Additional training of students of the USMU for the follow-up of HIV prevention
- Screening for HIV infection and informing adolescents and young people aged 15 to 35 years studying in educational institutions of the Sverdlovsk region
- Quest «HIV through the eyes of young people» between teams of educational institutions - project participants
- Evaluation of the effectiveness of the strategy of professional crews to work in the different areas of the Sverdlovsk region

### Results

**Participants:**  
76 volunteer medical  
students

**Peer Testing and Peer  
Counseling - More  
10,000 people**

**Informing -  
over 16,000 people**



# The project «I breathe freely!»

## Results

**Participants:  
5 staff and 35  
volunteer students**

**45 classes in the  
program,  
280 teenagers**

**13 schools, 1 youth  
athletic school, 1  
club at the place of  
residence**



# Project «Schoolchildren Health»

## Results

**Participants: more than 80  
students annually**

**Coverage: more than 10,000  
students and parents, 150  
schools annually**



# USMU is a healthy university

Plaquelet of the Administration of the City of Yekaterinburg for the work of the HLS sector with the wording "The Ural State Medical University is the basic preventive platform for the city of Yekaterinburg (presented on October 27 at the Coordination Council for the Prevention of the Administration of the City of Yekaterinburg



USMU is the winner of the Russian competition «Healthy University» in 2017

## **The main platform EC»Sirius» and EC «Golden Section» in the Ural region:**

- Identification and development of gifted schoolchildren in the Ural region, expansion of geography
- Organizing and conducting project sessions on the basis of the Tavatyu Children's Education Camp (2017, 2018), on the basis of the EC Sirius (2018), on the basis of the EC Golden Section (2018)
- Development of a model of support for this category of children at school and university levels as part of the School-University-Clinic, Pharmaceutical Enterprise model.



## Ural Project Session at the Sirius (January 2018)

<http://sirius.urfu.ru/pages/ural/>

### 5 project areas:

- «Medicine of the future and neurotechnology»
- «Designing complex systems and objects»
- «Information Technology»
- «Energy and Automation»
- «New materials»



## Recognition - USMU is the winner of Ural project session “Sirius”/Sochi

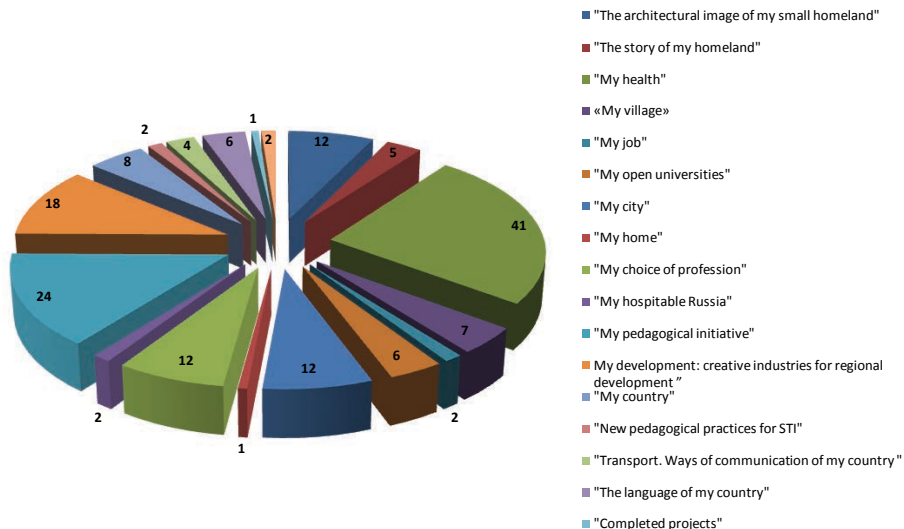
### 2 project of the USMU became winners of the Ural project sessions:

- “A software package for early diagnosis of melanoma” (head: Dr. M. Ufimtseva, A., curator A. Shubina)
- “Non-invasive health assessment based on the neural network” (the head is Professor Bazarny V.V., curator A. Yu. Maksimova)



# USMU acted as the coordinator of the regional stage of the competition «My country is my Russia»

A total of 165 applications were filed, 41 in the nomination “My Health”.  
For expert examination 69 experts were involved



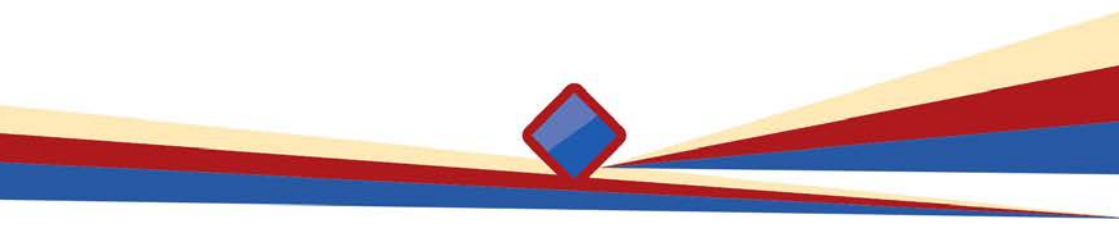
## REGIONAL STAGE OF “MY COUNTRY IS MY RUSSIA” COMPETITION IN SVERDLOVSK REGION

Awarding of the winners of the regional stage took place on April 24, 2018 at Ural State Medical University





**Our target is  
concentration the competence of scientists,  
staff, partners to identify talented youth, make  
a successful career, develop intellectual  
potential, fill medicine with qualified doctors  
in order of preserving and strengthening the  
health of the population**





**URAL STATE  
MEDICAL UNIVERSITY**

**WELCOME TO**  
**THE 90<sup>th</sup>**  
**ANNIVERSARY OF URAL STATE  
MEDICAL UNIVERSITY**

**2020**