

*In The Name of God*

*Birjand University of Medical Sciences*

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## *University at a glance*

Birjand University of Medical Sciences was founded in 1365(1985) as a dependent faculty to Mashhad University of Medical Sciences and in 1366(1986) turned into an independent faculty and finally in 1372 (1993) became a university and started its operation with 50 Medicine and 30 Nursing students. At the present time this University is composed of 10 schools as Medicine,Dentistry,Allied medicine, Nursing and Midwifery, Public health, Allied medicine and Public health of Ferdows city, school of Nursing and Midwifery of Qaen City, school of Nursing of Tabas city,Nehbandan Health Education Complex and Public Health branch in sarayan city. This University has about 3613 students in more than 61 majors in different programs (associate degree, BSc, MSc, and PhD) and favors 278 faculty members. It has 6 dormitories (2 for girls,3 for boys and 1 for married students).

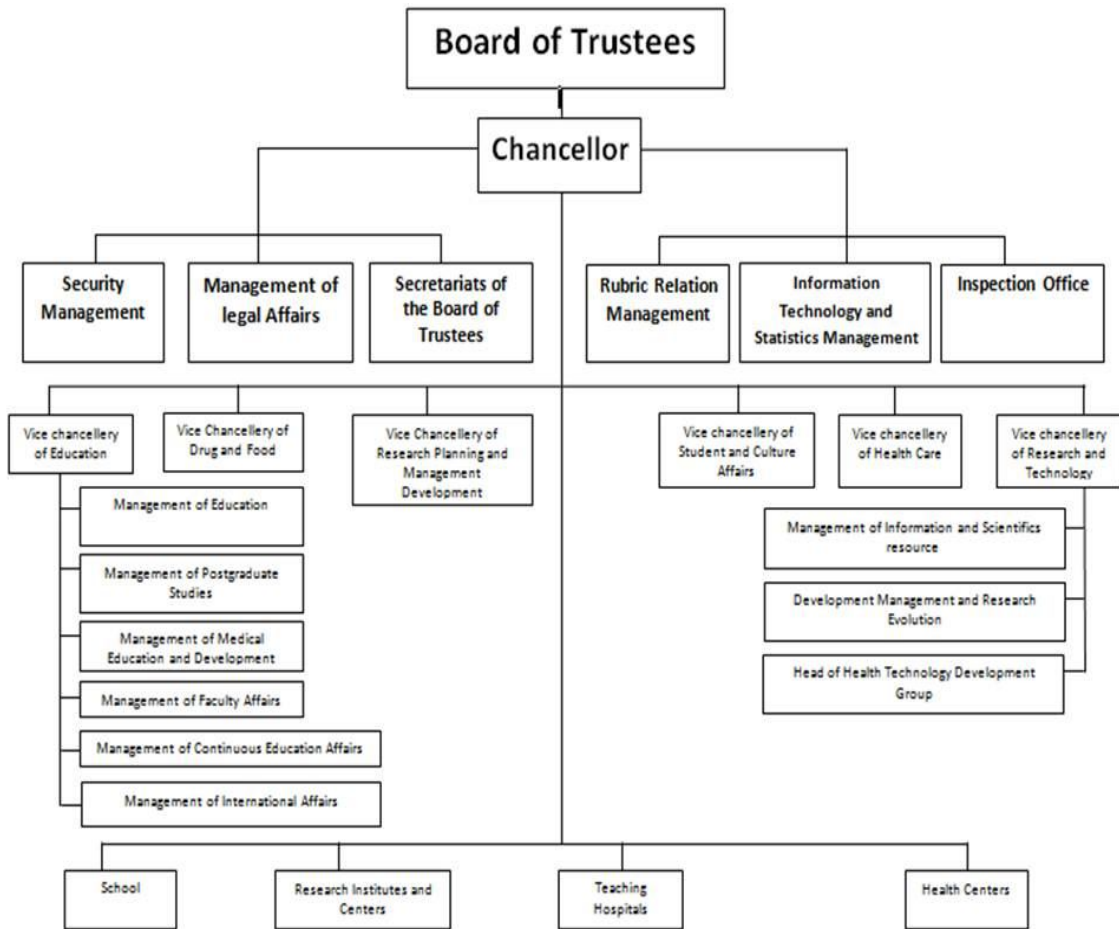


*University Organization*



# Birjand University of Medical Science (BUMS)

## Organization top chart



## *Vice Chancellor for Education*

The Vice Chancellor for education is responsible for academic policymaking, coordination of all educational activities, provision of support for academic activities, supervision over proper enforcement of the assigned responsibilities of the associated institutions, as well as planning to promote educational quality.

### *Overview:*

#### *Academic members:*

Professors: 11  
Associate professor: 46  
Assistant professor: 162  
Instructor: 79

*Associate degree:* Medical Emergency.

*Bachelor of Science:* Environment Health, Public Health, Occupational Health, Nursing, Midwifery, Medical Emergencies, Anesthesia, Operating Room Technology, Operating Room, Medical Laboratory Sciences, Radiology, and Health Information Technology

*Master of Science:* Health Education, Internal Surgical Nursing, Psychiatric Nursing, Community Health Nursing, Emergency Nursing, Anatomy, Clinical Biochemistry, Immunology, Medical Biotechnology, Hematology

*MD:* Medicine

*DDS:* Dentistry

*Pharm.D:* Doctor of Pharmacy

*PhD:* Molecular Medicine, Nursing, PhD by research

*MPH:* Family Medicine

*Residency:* Internal medicine, Radiology, Pediatrics, Anesthesiology, General surgery, Neurology, Neurosurgery, Cardiology

#### *Number of students:*

**Undergraduate students:** 3374

**International students:** 44

**Postgraduate students:** 331

**MD and DDS:** 1142

**Residency** 104

**MPH:** 4

**PhD:** 30

**PhD in Research:** 1



## University Schools



## *School of Medicine*

### **Majors:**

Anatomy, clinical Biochemistry, Immunology, Internal Medicine, Radiology, Pediatrics, Molecular Medicine

### **Departments:**

#### **Departments of Clinical sciences:**

Internal, Cardiology, Psychiatry, Neurology, Dermatology, Infectious Diseases, Radiology, General Surgery, Neurosurgery, Orthopedic, Ophthalmology, ENT (otolaryngology), Cardiology Surgery, Anesthesiology, Pediatrics, Obstetrics and Gynecology, Community Medicine, Emergency Medicine, Family Medicine.

#### **Department of Basic Sciences:**

Pharmacology, Physiology, Anatomy, Biochemistry, Molecular Medicine, Immunology, Medical Laboratory Sciences, Microbiology, Islamic Knowledge, Medical Ethics



## *School of Dentistry*

### **Major: Dentistry**

#### ***Departments:***

Endodontics, Restorative Dentistry,, Oral and maxillofacial surgery, Oral medicine, Prosthodontics, Orthodontics, Oral and Maxillofacial Radiology, (Periodontics), Oral and Maxillofacial Pathology, Pediatric Dentistry.





### ***School of Nursing and Midwifery***

Nursing, Midwifery, Internal Surgical Nursing, Psychiatric Nursing, Community Health Nursing, Emergency Nursing, Medical Emergency



### ***School of Allied Medicine***

Anesthesia, Operating Room Technology, Operating Room, Medical Laboratory Sciences, Radiology

### ***School of public Health***

Environment Health, Public Health, Occupational Health, Health Education

### ***Institute for Medical emergencies***

Medical Emergencies

### ***Qaen School of Medical Sciences***

Nursing, Midwifery, Operating Room Technology, Anesthesia, Public Health, Medical Emergency,

### ***School of Nursing of Tabas***

Nursing, Operating Room Technology

### ***School of Allied Medicine and Public Health of Ferdows***

Operating Room, Operating Room Technology, Nursing, Medical emergencies, Health Information Technology

### ***School of Public Health of Sarayan***

Environmental Health

*The achievements of the university's vice chancellor for education in the plan for the development and innovation of medical education at a glance*

# Innovations in Medical Education

Transforming Health Professions  
Education through Innovation



### **Designing a system for monitoring the movement in the direction of scientific authority in medical education**

- Development a scientific authority document of the university with emphasis on capacities and visions
- Codification a scientific development plan of the university based on the tangible and future capacities of the university

### **Strengthening the capacities of medical education to gain scientific authority in priority areas**

- Supporting the publication of academic books in national priority areas:
  - Collection and publication of the book "Education and health based on distinguished Persian poet; Khaqani"
  - Collection of the book "Humanities in Medicine - Its Necessity and Application"

### **Support strategic research and knowledge management in the field of medical education**

- Approval of 7 development projects in the National Agency for Strategic Research in Medical Education (NASR) on the following subjects:
  - Designing and compiling entrepreneurship-based curriculum indicators in the School of Health and evaluating the quality of curricula in the fields of the School of Health
  - Design and development of virtual reality technology in microbiology education
  - Design of standard tools for evaluating faculty members in a 360-degree manner and provide practical models
  - Designing professional development patterns for professors based on knowledge management
  - Designing and compiling an art-based curriculum with a combined approach to teaching humanities in medical sciences for medical students
  - Designing the organizational structure of entrepreneurial medical universities
  - Development of modular curriculum (MPH) for empowerment of family dentists

**Developing and upgrading the necessary infrastructure to expand new disciplines and educational programs, especially postgraduate education and entering interdisciplinary fields.**

- Construction and equipping of different departments of the School of Dentistry
- Construction and equipping of the Faculty of Pharmacy with 7 specialized laboratories
- Set up a sleep lab
- Establishment of a comprehensive clinical skills training center in an area of 600 square meters
- Update laboratory equipment in postgraduate courses
- Equipping and setting up a specialized hematology laboratory of the School of allied medical sciences
- Equipping specialized postgraduate laboratories of the medical school
- Equipping the specialized laboratories of environmental health and occupational health of the Faculty of Health
- Setting up multi-purpose educational halls in educational colleges and hospitals
- Operation and setting up of a comprehensive center for electronic exams
- Setting up a health skills training center to run short skill courses
- Expanding educational resources at the satellite faculties
- Obtaining a one-year accreditation license in educational and medical centers and obtaining a two-year accreditation license in an institutional and general medical education program accreditation, along with other large universities in the country's regions.
- Quality improvement and educational productivity and obtaining licenses for new fields (development of postgraduate fields from 3 fields [one master's degree in nursing education and two specialized fields of internal medicine and radiology) to 11 master's degrees, 3 PhD and 9 specialist fields by 2019)
- Increasing the number of faculty members along with increasing the number of university students (increasing the number of student admissions by 2.1 times by 2019).
- Obtaining a license for the health higher education complex for Nehbandan county
- Obtaining a license for the MBBS medical education program
- Supporting more than 30 percent of faculty members to pursue master medical education courses since 2016



### **Implementation a faculty member's empowerment program**

- Support faculty members to take e-learning fellowship courses
- Support faculty members to take modular courses in various fields such as educational leadership, entrepreneurship, assessment and evaluation of exams.
- Holding fellowship courses in medical education at the university
- Holding empowerment workshops for professors in the field of medical education, production of electronic content and providing virtual education
- Enable online broadcasting of AMEE International Congress for 2 consecutive years in order to promote medical education activities at the university

### **Develop ethical standards and guidelines in medical education**

- Develop a guide to ethics in traditional medicine
- Develop a guide to ethics and professionalism in nursing



## Development of virtual education based on new educational technologies

- Equipping and launching an e-learning center and developing virtual education with:
  - Studio room and sound recording
  - Distance Learning Room
  - E-learning portal
  - web conferencing system
- Equipping and setting up an electronic exam center with a capacity of over 200 systems at the university and affiliated centers
- Providing the necessary infrastructure to use the virtual platform to provide courses in various fields and holding various academic and regional exams
- Empowering faculty members to take advantage of new educational technologies in accordance with existing standards by holding required specialized training courses
- Development of quantitative and qualitative abilities of students and graduates in the field of e-learning and distance learning
- Holding a neurosurgery educational webinar for international students in the form of tele-education
- Holding a weekly training course on general surgery for international students in the form of tele-education for undergraduate medical students
- Design and implementation of a combined education system for the education of international students in the field of discontinuous bachelor of laboratory sciences
- Leading university in the use of virtual reality technologies in medical education in the country
  - Design and manufacture of virtual reality-based simulators in the field of psychiatric sciences
  - Design and construction of a virtual medical microbiology laboratory
- Design and build educational content on academic skills of infant resuscitation with the help of gamification
- Build a test sample of the Mobile-AR platform to create SOPs for laboratory devices to use augmented reality in medical education
- Development of neuroanatomical training packages in the form of visual atlas and using augmented reality technique for international students
- Designing a virtual pharmacy software model for students
- Setting up a telemedicine system between pre-hospital ambulances and emergency medicine specialists
- Design and manufacture of educational hologram system for teaching medical sciences
- Making a dual extruder 3D printers with two goals:
  - Adopt an innovative strategy and make the most of the opportunities available at the university
  - Develop interdisciplinary cooperation and strengthen industry relations

- Facilitate learning and performance improvement
- Provide accessible educational models with optimal quality
- Increase the cost-effectiveness of using educational technologies
- Utilizing new educational technologies in various university laboratories, such as equipping the medical school's anatomy department with a cadaver simulator (virtual anatomical desk)
- Production of electronic content in the national MOOC platform
- Strengthening the infrastructure of information technology to provide online training in diagnostic (in the pathology department) and clinical (in the surgical department) procedures in educational hospitals
- Design and implementation of telepathology telecommunication services for Afghanistan with the perspective of improving the efficiency of services and operational efficiency at the international level
- Strengthening scientific-educational relations between universities in the macro-region 9
  - Cooperation in providing online general pathology courses for medical students of North Khorasan University of Medical Sciences



## Internationalization of medical education

- Designing an optimal model of international scientific exchanges since 2014
  - Providing conditions for visiting influential people of Afghanistan from Birjand University of Medical Sciences:
    - Visiting of the ambassador of Afghanistan, Dr. Nasir Ahmad Noor, from Birjand University of Medical Sciences in 2015
    - Visiting the officials of Afghanistan universities from the educational and medical centers of Birjand University of Medical Sciences
    - Development of scientific-educational contracts and memorandum of understanding with the Afghanistan universities of Katab, Ghazni and Khatam Al-Nabieen
    - Visiting the UNAMA representative, Ms. Javana Nathan, from Birjand University of Medical Sciences in 2016 and Presenting report to the ministry of foreign affairs
  - Concluding a memorandum of understanding with Afghanistan for an inter-university curriculum in combination and specialized blocks:
    - Put the link of Birjand University of Medical Sciences on the website of Khatam Al-Nabieen University
    - Making the website of the university trilingual
  - Develop a flexibility model in educational curricula to expand the attraction of foreign students
  - Obtaining a license to attract foreign students in excess of capacity at the university:
    - Attract 44 students from Afghanistan to take short-term and long-term courses in various fields in 2018
  - Implementation of training courses and approval of joint research projects with the departments of Afghanistan:
    - Design and development of short-term, long-term, integrated and special courses as a master's degree for Afghanistan
    - Holding a neurosurgery and general surgery educational course for international students via tele-education
  - Launching joint virtual departments for scientific and educational synergies in order to expand international interactions in the field of higher education in both face-to-face and virtual sections
  - Holding face-to-face and virtual courses for professors between Iran and Afghanistan
  - Holding distance learning courses for Afghanistan
  - Launching the first combined training course in the field of discontinuous bachelor of laboratory sciences between Iran and Afghanistan
  - Holding joint scientific conferences with Afghanistan

- Designing and launching a system for providing telemedicine services in the field of pathology (telepathology); Another chapter in the development of international relations with Afghanistan in the field of telemedicine
  - Proposal for launching a system for providing telemedicine services in two fields of pathology and radiology by the esteemed vice chancellor for education of the Birjand University of Medical Sciences to the center of Iran Clinic of Herat city in 2017
  - Holding symposiums with the esteemed officials of center of Iran Clinic of Herat city in Tehran
  - Evaluation of facilities and infrastructure of telemedicine in the field of pathology between the center of Iran Clinic of Herat city of Afghanistan and Birjand University of Medical Sciences in 2018
  - Providing arrangements for setting up and purchasing pathology laboratory equipment in the center of Iran Clinic of Herat city
  - Holding symposiums with the participation of faculty members of the Department of Pathology and esteemed officials of the e-learning center
  - Develop and implement a combined training course to empower laboratory experts at the center of Iran Clinic of Herat city
  - The beginning of providing telepathology services for Afghanistan since 2019
- Designing a scientific-educational networking system for students and professors in Iran and Afghanistan



## Entrepreneurship development in the context of third generation universities

- Develop a roadmap to the third generation university
  - Development of standards for entrepreneurial university and feasibility study of moving towards the third generation university
- Developing and revising curricula
  - Adding 2 Entrepreneurship educational units in curriculum for postgraduate students of the school of health
  - Developing entrepreneurial skill courses
  - Holding a summer school in the field of entrepreneurship and familiarity with business
- Attracting the cooperation of all internal and external institutions of health systems in the region
  - Concluding a tripartite memorandum of understanding with the industry to produce a distinguished product
- Supporting faculty members to adopt dual and multiple affiliations at the university and partnership with knowledge-based companies
  - Development of regulations to support the presence of faculty members in knowledge-based companies and growth centers
  - Approval of 16 projects in the field of modern sciences in cooperation with the vice chancellor for research and technology
  - Orientation to postgraduate dissertations towards multicenter research
- Entrepreneurship and the creation of knowledge-based wealth in medical universities in the form of an innovation system
  - Establishment of 4 University affiliated knowledge-based companies with technological products
  - Establishment of 11 technological units with the cooperation of faculty members
- Allocate the share of education from the university's own revenues in accordance with the relevant procedures





### **Identifying and evaluating educational needs based on current and future needs of society, including**

- Develop and revise the evaluation processes of educational programs for accountability to society needs, with a competency-based education approach
- Assessment of regional needs for curriculum revision
- Evaluation of work-place based learning in family medicine education
- Fourth-level prevention assessment in family medicine
- Designing monitoring algorithms in different educational departments in order to adapt taught curricula to approved curricula
- Investigating the time spent in educational activities in learning medical extern / intern students based on the designed CIPP model
- Investigating educational need assessment in two emergency and clinic sections

### **Identify fields for training in the field including:**

- Setting up a specialized family medicine clinic
- Launching training courses in aged care homes and addiction clinics in the field of family medicine
- Launch a pharmacy vigilance for family medicine interns
- Launching a healthcare training center
- Launching a community-based dental center in healthcare centers
- Integration of traditional medicine education in general medicine and general dentistry curricula
- Launching externships / internships for medical students in the field of social medicine in rural and urban health centers
- Setting up a clinic for the prevention and health promotion of social medicine, lipid and blood pressure
- Equipping an emergency training base for medical emergency students

### **Design and establishment of an intermediate forces training system in order to improve the accountability of the higher health education system**

- Launch of oral health technician field at the school of dentistry
- Launching a health skills training center

## *Research Institutes and Centers*



### ***Heart and Disease Research Center***

Based on a research done on the anfractuous condition of people in South Khorasan it was shown that there is an urgent need for a research center to investigate the problems regarding these issues and other Coronary problems. Heart and Disease Research Center was established in 2008. Now the center is helping the individual through doing research and also helps the students in doing their thesis and dissertations in here.

#### ***Objectives:***

- Doing epidemiological, clinical and applied researches on atherosclerosis and coronary artery
- Trying to improve the correct lifestyle of people in the province through doing research and educating individuals
- Collaborating with others in charge of health issues in order to raise awareness about atherosclerosis and coronary artery
- Collaborating with other coronary research centers in the national and international scope to exchange knowledge in research, treatment and education

### ***Infectious Disease Research Center***

Infectious Disease Research Center was founded in 2012 and aims at improving the health condition of Birjand regarding the Hepatitis and other infectious diseases. This center is ready to collaborate with other research centers and those interested in doing research on Hepatitis and infectious problems.

#### ***Objectives:***

- Using the recent technologies and facilities to prevent, diagnose, and cure Hepatitis.
- Taking part in accredited scientific societies and journals
- Doing clinical applied and epidemiologic researches and also fundamental studies to improve the health care condition of the society
- Establishing a complete data base for patients with Hepatitis
- Guiding the University Students to do research on Hepatitis and the related illnesses

### ***Social determinants of health research center***

This research center started to work as the Center for Family Health with the aim to improve the health care of families and also as platform for doing research for faculties and researchers. In May 2011 the center changed its name to "Social determinants of health research center" and in 2012 was accredited.

### ***Other research centers***

- Cellular and Molecular research center
- Medical Toxicology & Abuse Drug Research Center

## *Comprehensive center of electronic test room*

The construction of a hall with a party of one hundred people in the area of 275 square meters was launched in August. So far, various exams have been held, which can be used to point 84 internal examinations, MHLEexam, pre-internships exam, virtual medical education exam and master s electronic tests. The purpose of the launch of this center is conducting national examinations of the Ministry of Health and Medical Examination Organization electronically.



## ***Integrating virtual education and promoting educational technology based on modern technologies***

Virtual education has become a great use and importance after the Internet boom and increasing its influence among people. Many organizations and scholars have shown interest in using virtual education and this category has become a growing area. Therefore, Birjand University of Medical Sciences with a 10-year history of electronic learning is one of the claimants of this field among the medical universities of the country.

The University's Electronic Learning Unit introduces the following successes to its unique potential, based on the potential of the university.

1. Setting up an electronic test hall
2. Launch of the virtual laboratory of microbiology
3. Moddarres project in the production of high-quality electronic content
4. Production and manufacturing of 3D printers





*University Campus and Facilities*



## *Facilities*

The university provides its students with different facilities and services including the following:

Single and married student housing, transportation, food services and cafeterias, counseling center, health center, student loans, banking, shops, computer center, sporting venues, scientific and cultural visits, mosque, etc.



## ***Housing***

This University owns 4 dormitories (2 for girls, 1 for boys, and 1 for married students) which accommodates 850 students, and also for settling 400 students signed a contract with 2 private dormitories for girls and 1 for boys.



## ***Food services***

In the dining hall meals are served every day and the price is adjusted according to the ministry rules. Also breakfast bonus is given to students monthly according to university budget.

## ***Financial Aides***

According to the rules of welfare student- related affairs and the budget, university can favor the students with different loans including, housing, tuition, health insurance, etc.

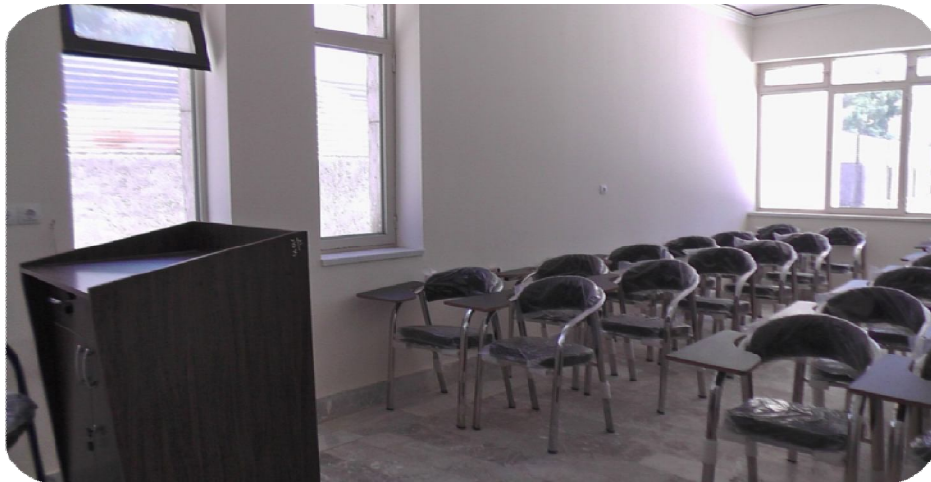
## ***Student's transportation***

Based on university contract with private sector, students can use transportation for free to commute between university, dorms, and hospitals.

## ***Cultural, art, and entertainment competitions***

In different occasions university provides the students with exhibitions, education a classes, camping, festivals and ceremonies

*Qaen School of Medical Sciences in the picture frame*





*School of Allied Medicine and Public Health of Ferdows  
In the picture frame*

