ОҢТҮСТІК ҚАЗАҚСТАН
**МЕДИЦИНА**
**АКАДЕМИАСЫ**
«Оңтүстік Қазақстан медицина академиясы» АҚ

SOUTH KAZAKHSTAN
**MEDICAL**
**ACADEMY**
АО «Южно-Казахстанская медицинская академия»

**APPROVED**
**Rector of JSC «SKMA»**
**Seitzhanova Zh.S.**
**_____2026 y.**

# Development program

# JSC «South Kazakhstan Medical Academy» for 2025-2029

# DP 113-2025

**Shymkent**

**Joint Stock Company "South Kazakhstan Medical Academy"**
**Development Program for 2025-2029**

**Content**



The development program of the Joint Stock Company "South Kazakhstan Medical Academy" (hereinafter referred to as SKMA) was developed in accordance with the Order of the Ministry of Internal Affairs of the Republic of Kazakhstan No. 375 dated August 1, 2023 "On Amendments and Additions to the Order of the Minister of Education and Science of the Republic of Kazakhstan dated 10/25/2018. № 590 "On Approval of the structure and Rules for the development of a program for the organization of higher and (or) postgraduate education"", the National Development Plan of the Republic of Kazakhstan until 2025, the Decree of the President of the Republic of Kazakhstan dated October 07, 2021 "On approval of the list of national projects", the National Project "Quality Education "Educated Nation", as well as taking into account the strategic and program documents of the Republic of Kazakhstan and defines its mission, vision, strategic directions, goals and objectives for 2025-2029.

In the Message of the Head of State K.K.Tokayev to the people of Kazakhstan dated September 1, 2022. "A just state. One nation. A prosperous society" it was noted that the harmonious development of society is possible only if the health of the nation is ensured, one of the important conditions of which is the consistent improvement of the system of training doctors."

JSC "South Kazakhstan Medical Academy" is a university that trains medical and pharmaceutical specialists at all levels of higher and postgraduate education in the fields of individual and public health, implements research projects of a fundamental and applied nature, provides medical and laboratory services and has the necessary educational, clinical and scientific infrastructure.

Based on the best traditions of the Academy's 45-year history, as well as using innovations, SKMA is looking for ways that will benefit society, both in Kazakhstan and around the world.

This Program outlines the new stages of the Academy's development for the period 2025-2029. We will monitor the progress of our priorities, directions and goals, using appropriate indicators and benchmarks for comparative analysis. With these tools, we will be able to use resources effectively, respond to environmental challenges, and update the Program while maintaining our commitment to the Academy's mission.

According to the **Concept for the Development of Higher Education and Science in the Republic of Kazakhstan for 2024-2028**, approved by Resolution No. 248 of the Government of the Republic of Kazakhstan dated March 28, 2023, key areas for building human and scientific potential, upgrading infrastructure, and developing a system for commercializing scientific results have been identified. All this is directly related to strengthening national science and improving the quality and accessibility of medical care.

Awarding SKMA the status of a leading regional medical university will allow us to actively develop the integration of scientific research, the educational process and clinical practice. This will lay the foundation for the formation of the academic health and science system in the south of Kazakhstan, and will also contribute to the expansion of international cooperation with universities around the world.

An important step towards the real integration of medical education, science and practice will be the unification of educational institutions, research centers and university clinics on the basis of SKMA. This will make it possible to translate the results of scientific research into educational programs, develop methodological recommendations for the healthcare system, and implement clinical research into treatment protocols.

**SKMA plans further development in the following areas:**

1. **Human resource potential** – quantitative and qualitative strengthening of the teaching staff, taking into account the health needs of the region.

2. **Innovation and technology transfer** – the introduction of advanced teaching and treatment methods, the development of digital medicine, and the improvement of the regulatory framework.

3. **Commercialization of science** – creation of structures to support startups and innovations (technopark, spin-off companies).

4. **Digitalization** – modernization of business processes, digitalization of library stock, formation of a unified digital educational environment.

5. **Personnel policy** – measures to retain and attract qualified personnel (improvement of wages, support in providing housing and social infrastructure).

6. **Financial stability** – diversification of sources of financing (paid medical services, creation of an endowment fund).

7. **Infrastructure** – construction of a modern university clinic, a campus with academic buildings and dormitories, development of simulation centers.

The South Kazakhstan Medical Academy (SKMA) plans consistent development in key strategic areas that meet modern challenges and long-term goals in the field of medical education and science. First of all, special attention is paid to increasing the quantitative and qualitative composition of the teaching staff, which will allow them to focus on the current health needs of the region. Such work involves the training of highly qualified specialists, the involvement of leading domestic and foreign scientists, the development of a talent pool and the formation of a mentoring system. The implementation of this task will ensure the sustainable reproduction of scientific and educational personnel and strengthen the personnel foundation of the academy.

Along with personnel development, the introduction of innovations and the transfer of modern technologies is becoming a priority. SKMA focuses on the integration of simulation learning methods, distance learning platforms, digital VR/AR solutions, as well as the introduction of advanced medical technologies and clinical practices. An important component of this work is the improvement of the regulatory framework in the field of medical education and healthcare, which will allow adapting the educational process to international requirements. Commercialization of scientific activities is an integral part of the Academy's strategy. Creating conditions for the practical application of research results involves the organization of technology parks, the launch of spin-off companies and innovative enterprises. This will increase entrepreneurial activity in the academic environment, promote the

development of start-ups and provide additional contribution to the economy of the region and the country.

Modern development is impossible without digitalization. SKMA consistently forms a unified digital educational environment, encompassing educational programs, library collections, scientific data and administrative processes. Digital transformation provides flexibility and transparency in management, makes educational resources available to students and teachers, and integrates the academy into the global digital space. At the same time, important attention is paid to the personnel policy aimed at retaining and attracting highly qualified specialists. The improvement of the remuneration system, the expansion of social guarantees, the support of young scientists and specialists, the provision of housing and medical conditions create a favorable environment for the professional and personal growth of employees. Financial stability is of fundamental importance for the long-term development of the Academy. The diversification of funding sources includes the development of paid medical services, the implementation of additional educational programs, the creation of an endowment fund and the attraction of international grants and investments. This approach ensures the independence and sustainability of the Academy, reduces dependence on limited budget sources.

The final and no less significant area is the modernization of infrastructure. SKMA sets the task of building a modern university clinic, a campus with academic buildings and dormitories, and the development of simulation centers. These measures will create comfortable conditions for students, teachers and researchers, as well as ensure a high-quality educational and clinical process. Thus, SKMA forms a comprehensive development strategy in which personnel policy, innovation, commercialization of science, digitalization, financial stability and modernization of infrastructure are combined into a single system focused on training competitive specialists and strengthening healthcare in Kazakhstan.

**Item 3.** Review of the current state of the South Kazakhstan Medical Academy, including its achievements, problems and challenges:

**3.1. Analysis of the current state**

3.1.1. **Implementation of educational programs.** South Kazakhstan Medical Academy (hereinafter SKMA) is a dynamically developing center for medical education in the region, has a systemic impact on the effectiveness of healthcare in the region, providing training for them, for additional education, implementing programs aimed at the professional growth of medical and pharmaceutical workers.

SKMA's activities are generally determined by the mission that reflects the university's place in the unified educational space of Kazakhstan: "To be recognized as a leader in the field of training competitive personnel!"

The Academy's staff has a clear Vision: "An effective system of medical and pharmaceutical education based on a competence-based approach and the needs of practical healthcare and the pharmaceutical industry, focused on training specialists who meet international quality and safety standards.".

SKMA has sufficient educational, human, logistical and information resources for the implementation of educational programs (hereinafter referred to as the EP). Educational activity license (https://skma.edu.kz/ru/pages/licenziya-2), issued by the Committee for Control in the Field of Education and Science of the Ministry of Education and Science of the Republic of Kazakhstan №KZ36LAA00011387 dated 28.03.2018, confirms compliance with the qualification requirements for educational activities for the implementation of educational programs and their provision with the necessary resources and has the right to issue state-issued educational documents.

SKMA's educational activities ensure continuity of all levels of medical, pharmaceutical, and engineering education, as well as continuous improvement of the competence of practical healthcare and pharmacy personnel in the system of basic and additional education.

SKMA trains specialists in the medical, pharmaceutical and pharmaceutical engineering fields at the level of secondary technical professional education, higher (bachelor's degree, internship), postgraduate education (master's degree, doctoral degree, residency) at the level of continuous professional development of healthcare system personnel (advanced training and retraining of medical and pharmaceutical personnel).

The implementation of the EP is aimed at training qualified specialists for science and practice, which corresponds to the mission and vision and supports the appropriate quality of education.

SKMA provides training in 8 bachelor's degree programs, 3 internship programs, 10 master's degree programs, 31 residency programs, 3 doctoral programs, 1 applied bachelor's degree program, 7 technical and vocational education programs. Over the past 5 years, the number of EP has grown from 35 to 61. In addition, the Faculty of Continuing Professional Education implements 30 additional education programs.

The competence of the university is confirmed by the passage of accreditation procedures and the rating positions of the SKMA by type of activity.

In 2023, SKMA successfully passed the Institutional Re-crediting, which testifies to the quality of the educational, methodological, research, socio-cultural activities of the university (https://skma.edu.kz/ru/pages/institucionalnaya-akkreditaciya).

**Accredited:**

- 87.5% of Bachelor's degree programs https://skma.edu.kz/ru/pages/bakalavriat-svidetelstvo-o-specializirovannoy-akkreditacii,
- 100% of Master's degree programs https://skma.edu.kz/ru/pages/magistratura-svidetelstvo-o-specializirovannoy-akkreditacii,
- 100% of doctoral degree programs https://skma.edu.kz/ru/pages/doktorantura-svidetelstvo-o-specializirovannoy-akkreditacii,
- 93.5% of educational residency programs https://skma.edu.kz/ru/pages/rezidentura-svidetelstvo-o-specializirovannoy-akkreditacii,

which is evidence of the quality of the educational services provided.

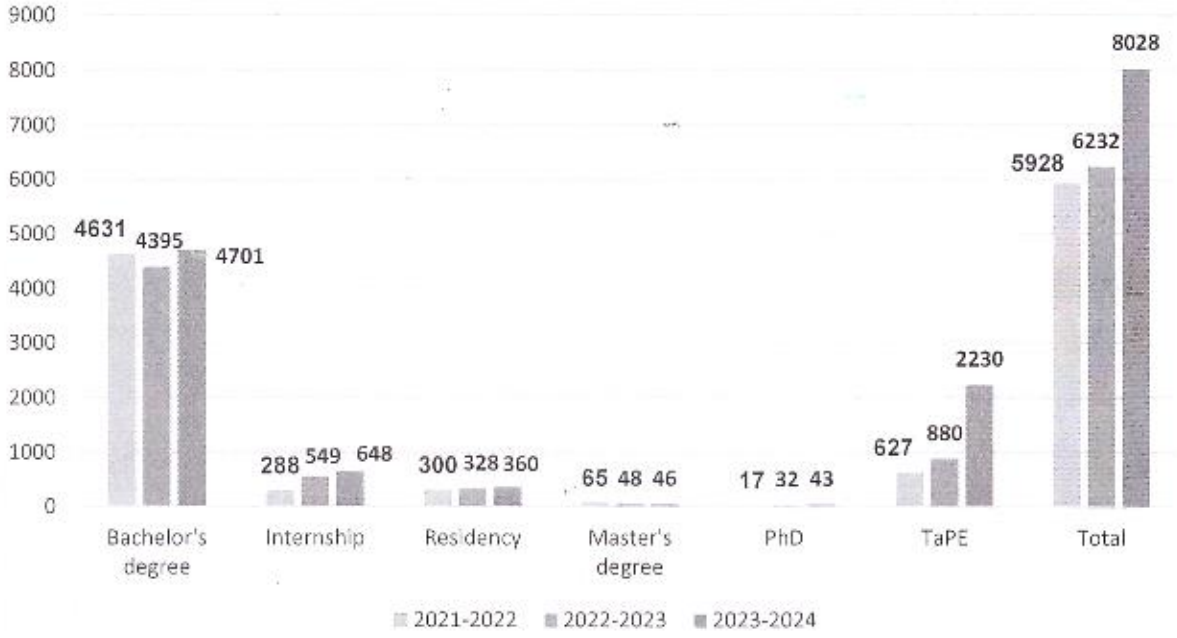
According to the results of the National Ranking of demand for universities of the Republic of Kazakhstan, conducted annually by the NAAR, in 2020 and 2021. SKMA ranks 17th in the General Ranking of universities of the Republic of Kazakhstan "Top-20".

**3.1.2. The formation** of the student body is carried out through budgetary financing, the placement of a state order for training, as well as tuition fees from citizens' own funds and other sources.

One of the conditions ensuring the stability of the recruitment of students for training in the EP is the competitiveness of the university. SKMA has the main set of characterological parameters that enable the university to be one of the country's leading universities in personnel training, namely economic stability and well-being, long-term stable quality of the organization and content of the educational process, available resources to achieve goals, and the image of SKMA.

The number of students has doubled over the past 5 years. Currently, the number of students is about 8000.

**The total number of students in the last 3 academic years (2021-2024)**




The share of international students in the total number of students enrolled in bachelor's degree programs is: 2021-2022 academic year – 31%, 2022-2023 – 33,5%, 2023-2024 – 35%.

SKMA implements the General Medicine Course in English for students from India and Pakistan.

**The number of double degree programs in the last 3 academic years**

| № | EP | Name of the partner university | Academic years | | |
|---|---|---|---|---|---|
| | | | 2021-2022 | 2022-2023 | 2023-2024 |
| 1 | 6B10107 General Medicine | Bukhara State Medical Institute | 3 | 3 | 3 |
| 2 | 6B10110 Dentistry | Tashkent State Stomatological Institute | 11 | 11 | 8 |
| 3 | 7M10143 Pharmaceutical ecology | I.M. Sechenov First Moscow State Medical University of the Ministry of Health of the Russian Federation | - | 1 | 5 |
| | **Total** | | **14** | **15** | **16** |

The departments have pharmacological, physiological, and pathomorphological laboratories, an anatomical classroom, and a laboratory for engineering disciplines in accordance with modern requirements, as well as a modern dental clinic for students to master clinical skills. In order to create organizational and educational conditions for improving the quality of students' training, retraining and advanced training, as well as for developing the professional competence of healthcare professionals, a Practical Skills Center is operating.

Educational, industrial, and clinical practices of SKMA students are conducted at clinical bases on the basis of joint activity agreements in accordance with the profile of the trained EP.

**3.1.3. Employment of graduates.** Indicators of the quality of personnel training at SKMA are their demand in the domestic and foreign labor market, from 86.4% (2018) to 98.5% (2023) of graduates were employed in the first year after graduation; achievements in professional careers and a high level of competitiveness of graduates are the result of a competent policy of building relationships with employers. An Alumni Association has been established, and educational programs are coordinated with stakeholders.

Graduates of JSC "SKMA" successfully work in all regions of Kazakhstan, as well as countries near and far abroad. The percentage of graduates employed remains at a high level from year to year, which undoubtedly indicates the recognition, demand and competitiveness of our specialists in the labor market.

**Employment indicators of SKMA graduates in comparison for 3 years**

| №№ p.p. | EP | Employment indicators of SKMA graduates by year, %/person. | | |
|---|---|---|---|---|
| | | 2020-2021 year | 2021-2022 year | 2022-2023 year |
| 1 | Bachelor | 78,7 | 93,8 | 100 |
| 2 | Internship | 99 | 99 | 94 |
| 3 | Master's degree | 100 | 94,7 | 97,05 |
| 4 | PhD | - | - | 100 |
| 5 | Residency | 100 | 100 | 100 |
| 6 | TaPE | 81,6 | 81,6 | 94 |
| | **Total** | **94,4%** by academy **91,9%** TaPE | **96,9%** by academy **93,8%** TaPE | **98,2%** by academy **97,5%** TaPE |

To meet the social, financial and personal needs of students, the academy has student service services: student service center; Department of Social Affairs and Youth Policy; library and information center; computer testing and publishing center; student dormitories with reading rooms, wireless Internet Wi-Fi; medical centers; canteens; buffets, etc.

The Bolashak student government is successfully functioning at the university, which includes: the League of Volunteers volunteer movement; the student council of the dormitory; the representative office of the Zhastar Rukhy MC; the branch of the Kazakhstan Medical Student Association (KazMSA); the branch of the Alliance of Students of Kazakhstan; the Birlesu Peoples' Friendship Club; the CCR team; the debaters club Ziyaly Kazak"; committee "Kazakhstan medicine zhastary"; sports club "Barys"; creative group "Shabyt", women's council "Aykorkem". SKMA students are members of the student scientific circle, actively participate in scientific conferences, subject Olympiads, and other events where they take prizes and receive awards.

**3.1.4. Human resources** are the basis for the successful development of SKMA. The teaching staff has grown 1.5 times over the past five years, and the number of departments has increased from 33 to 46.

During the reporting period, the quantitative and qualitative indicators of teaching staff are presented as follows: the total number of full-time teachers increased from 344. (in 2018-19 academic year) to 428 people (in 2023-24 academic year), the number of doctors of sciences increased from 15 to 18 people (4.2%), candidates of sciences – from 112 to 124 people (28.9%), doctors of philosophy (PhD) – from 13 people to 19 people (4.4%), masters – from 116 people to 158 people, specialists with the highest qualification category of a doctor – from 99 people to 105 people, settling down is 37.6%.

In addition, specialists with medical and pedagogical education from other universities and medical organizations, as well as representatives of pharmaceutical companies with academic degrees,

academic titles and medical categories are involved in the educational process in order to integrate practical skills and work experience into the educational and scientific activities of the University, namely: during the reporting period, the total number of part-time employees- teachers increased from 96 people (in 2018-19 academic year) to 302 people (in 2023-24 academic year); specialists with the highest qualification category of a doctor – from 38 people to 107 people, in 2023-24 academic year the balance between full–time teachers and part-time teachers is 41.7%.

SKMA has a system of remuneration for teachers for pedagogical skills, scientific and clinical results and dedication, and by the Decision of the Board of Directors of SKMA, starting in 2022, a remuneration system has been introduced for teachers who have defended the degree of Doctor of Philosophy (PhD) in the form of a monetary award on behalf of the Founder of SKMA, Scitzhanov S.S. in the amount of 2,000,000 (two million) tenge.

Since 1998, the Faculty of Continuous Professional Development has been established at SKMA. More than 3,000 healthcare workers from Turkestan, Zhambyl and Kyzylorda regions and Shymkent city are trained and retrained annually.

The founder of the Academy is implementing the investment project "Construction of a university multidisciplinary hospital with 800 beds and a clinical diagnostic center (polyclinic) for 700 visits per shift in Shymkent." This project will contribute to the development of higher medical education, will provide the population with high-quality medical services with modern equipment, and will also solve the problem of shortage of beds in the region. The project is being implemented within the framework of a public-private partnership mechanism, jointly with the Ministry of Health of the Republic of Kazakhstan.

**3.1.5. Scientific activity** At the South Kazakhstan Medical Academy, all conditions have been created for the realization of the scientific potential of students and staff of the Academy. The organization of a strong and effective research environment consists in a combination of a competent level of teaching staff, a high-tech research resource base, which includes a Clinical Diagnostic Laboratory, officially named the South Clinical & Genetic Laboratory (SK&GL) (https://skma.edu.kz/ru/pages/south-clinical-genetic-laboratory-pri-ao-yukma), this happened as a result of the merger of the Scientific Research Laboratory for Genomic Research (SRLGR) and the Clinical Diagnostic Laboratory (CDL), as well as the Research Laboratory of Medicinal Plants. The results of the ranking of universities by the Salidat Kairbekova National Scientific Center for Healthcare Development (hereinafter NSCHD) indicate an increase in publications of SKMA in publications indexed in the international databases Web of Science, Scopus, Springer, Google Scholar, RSCI, etc. Thus, during the 2022-2023 academic year, 56 scientific articles were published by the staff and students of the Academy in journals indexed in the Scopus database, 47 scientific articles in journals indexed in the Web Of Science database. At the same time, the number of citations increased from 3,622 (2021) to 4,379 (2022), which confirms the growth dynamics. And this dynamics is also noted in relation to security documents - over the past 5 years, SKMA Teaching Staff has received 116 patents, including 2 international patents, 32 patents of the Republic of Kazakhstan, 82 copyright certificates; 120 books, monographs, textbooks. It should be noted that most of the teaching staff involved in the implementation of the EP and/or who are consultants to master's theses have a Hirsch index (Scopus, Web of Science, Google Scholar, RSCI). According to the Kazakh National H-index Ranking 2023, the overall Hirsch index of the academy is 14, which corresponds to 42 positions among 148 universities and organizations of the Republic of Kazakhstan.

SKMA participates in international forums and conferences on the development and implementation of international education standards, global internationalization of research for successful solutions to health problems. The staff of SKMA carries out 18 scientific and technical projects that have passed state registration in JSC National Center for State Scientific and Technical Expertise.

As part of the national subscription, the Ministry of Internal Affairs of the Republic of Kazakhstan has provided access to the international Web of Science databases of Clarivate Analytics and Elsevier Scopus, which helps to increase publication in publications indexed in the above databases.

In the period from December 5 to December 8, 2023, the First International forum of young scientists and students was held within the walls of SKMA. Within the framework of the Forum, the X international scientific conference of young scientists and students "Prospects for the development of biology, medicine and pharmacy" and the first international Olympiad in surgical disciplines were held; a competition for the best scientific project.

**Currently, all employees and students have access to international databases** – Web of Sciense, Cochrane Library, Scopus (agreement No. 1-24646499181 dated 04/25/2025), eBook Medical Collection EBSSO, Medline Ultimate EBSSO (agreement No. 62 dated 04/11/2025; to domestic electronic resources – Republican Interuniversity Electronic Library (agreement No. 84 dated 01/05/2025Moscow), the Digital Library "Aknurpress" (agreement No. 3 dated 01/25/2024), the Electronic Library "Epigraf" (agreement No. U1/02 dated 02/27/2025), the information and legal system "Zan" (agreement No. 01-25/sh dated 01/05/2025.), the Republican Interuniversity Electronic Library (agreement No. 84 dated 01/05/2025), EBS IPR SMART (agreement No. 12760/25K dated 04/21/2025), Epigraf - portal of multimedia textbooks (agreement No. 15/12-1-2 (Y) dated 12/15/2022).

Since September 2022, SKMA has been operating a Commercialization and Project Management Office, whose tasks include supporting the publication activity of students and staff of the Academy. The office staff provides comprehensive consulting assistance in writing, editing and publishing scientific articles, helps with statistical calculations and with the selection of journals for publication.

By the Day of Science, the Department of Scientific and Clinical Work, Doctoral and Master's Degrees, together with representatives of Springer Nature, Clarivate and Elsevier, organized 5 webinars and 2 seminars for employees and students of the Academy, such topics as: "Publications in foreign rating journals: how to avoid predatory journals", "Writing and publishing articles in international journals", "Choosing a relevant topic using Scopus and ScienceDirect", "Scopus and ScienceDirect – search for a journal to publish", "Search for collaboration and preparation of materials for a literary review".

There are currently two scientific journals in SKMA:

1. The Kazakhstan Journal of Medicine and Pharmacy (KJMPh) is an open peer-reviewed journal in the field of medicine, pharmacy and healthcare. It has been published since 1998, with a quarterly publication frequency. The journal publishes scientific articles containing new methods of development of medical science and pharmacy, as well as advanced ideas, medical problems of research and publications in the Republic of Kazakhstan.

2. Central Asian Journal of Medical Hypotheses and Ethics (CAJMHE) is an online platinum peer-reviewed open access journal in the field of medicine and health policy. It has been published since 2020, with a quarterly publication frequency. The journal publishes scientifically based articles representing innovative ideas, medical hypotheses, as well as issues of research and publication ethics in Central Asia.

In accordance with the Order of the Ministry of Science and Higher Education of the Republic of Kazakhstan dated July 14, 2023 No. 344, South Kazakhstan Medical Academy has opened a Dissertation Council on the educational program 8D10141 – "Medicine". On December 25, 2023, the successful defense of the dissertations of the first two PhD students of the academy took place.

Starting from the 2022-2023 academic year, SKMA introduced a regulation on remuneration of academy staff for publications in rated peer-reviewed scientific journals. According to the Regulation, remuneration is paid based on the percentile of the scientific journal, if it concerns the Scopus database; if there is a publication in a journal reviewed by WoS, remuneration is paid in accordance with the quartile of the journal. At the same time, if the article is published in a journal reviewed by both Scopus and WoS, the highest remuneration rate is taken into account when paying.

Since the beginning of the 2023-2024 academic year, SKMA has been operating a Regulation on Postdoctoral studies, which regulates the program for attracting researchers on a competitive basis to continue research activities on the topic of doctoral dissertation as part of research teams within the framework of the Academy's research projects.

**3.1.6. International relations and foreign policy**. SKMA carries out active international cooperation in the field of medical education, science and practice with medical universities and scientific centers of the CIS and far abroad countries. SKMA's partners include universities such as the Institute of Neurology, University College of London, UK; the Institute of Neurology, University College London, and the Pharmaceutical Research Center of the University of Medical Sciences. Shahida Beheshti, Iran; Academy of Higher Education & Research, Mysuru, India; St. Petersburg State Pediatric Medical University, Sechenov University, Bashkir State Medical University, Russia, Uzbekistan and others.

Today, the Academy develops and strengthens cooperation with more than 30 major scientific and technical centers and universities of advanced foreign countries: USA, China, Great Britain, Russia, Iran, India, Korea, France, Malaysia, Turkey, etc. International cooperation is aimed at the development of joint educational, scientific and clinical activities, the implementation of academic exchange of students and teachers, internships, the development and implementation of joint educational programs, and events.

As part of the Erasmus+ scholarship program, 1 doctoral student and 1 Master's student completed a semester of study at the Jullu Hatieganu University of Medicine and Pharmacy, Cluj-Napoca, Romania in 2021. As part of the Erasmus+ AccelEd Capacity Building project, 2 doctoral students and 2 undergraduates completed a seven-week internship at the Lithuanian University of Applied Sciences, Kaunas, Lithuania in 2022.

As part of academic mobility, the Academy is actively engaged in inviting foreign scientists to gain advanced experience in the field of medical science and education. Lectures are given in accordance with the main directions of the Academy. In 2023, SKMA was visited by 14 foreign scientists from Great Britain, Malaysia, India, Russia and Ukraine.

In the 2021-2022 academic year, the World Bank completed a project with the Tajik State Medical University (TSMU), in which SKMA served as a consultant.

In the 2022-2023 academic year, the implementation of Erasmus+ educational projects continued according to the project application plan:

- «Accelerating Master and PhD level Nursing Education Development in the Higher Education System in Kazakhstan» (AccelEd), a consortium of universities from Lithuania, Finland, the Netherlands, Kazakhstan;

- «Licence, Master professionnel senformation ouverteet à distance pourleman agementstraté giquedelaqualité etlagestion desrisquesensanté en Russie, au Kazakhstan eten Azerbaïdjan– LMQS» («Professionalization of bachelor's and master's degrees for strategic risk management and quality of healthcare services within the framework of open distance education in Russia, Kazakhstan and Azerbaijan – LMQS"); a consortium of universities from Countries: Greece, Romania, Russia, Azerbaijan, Kazakhstan.

### 3.2. Analysis of trends and challenges

All countries of the world at all levels of socio-economic development face difficulties in the field of education, employment, placement, retention and effectiveness of their healthcare staff. The lack of investment in education and training of health workers in some countries, and the mismatch between education and employment strategies in relation to the health system and the needs of the population contribute to a persistent shortage of staff. The situation in our country is aggravated by the difficulties in sending graduates of medical schools to rural, remote and underserved areas. In addition, the growing international migration of health workers may exacerbate the shortage of health personnel, especially in low-income and lower-middle-income countries.

One of the objectives of the Healthcare Development Concept of the Republic of Kazakhstan until 2026 is to provide qualified personnel, especially in rural areas, to the implementation of which every medical university in the Republic of Kazakhstan makes a significant contribution.

Economic conditions and global trends, such as the development of technology, have led to changes in the nature of the required competencies of specialists – there is an ever-growing need for interdisciplinary and related specialties, digital skills to work on modern equipment using IT technologies, the ability to adapt quickly and continuously learn. According to McKinsey research, basic skills are defined in four categories – cognitive, digital, interpersonal, and independent leadership, which together will increase the chances of employment, higher incomes, and job satisfaction in the world of work of the future.

Despite the successes achieved, SKMA still faces a number of challenges related to both the general problems typical of Kazakhstani medical universities and the expectations of the state and society regarding the quality of training specialists for the Kazakh healthcare system:

1) timely adaptation of educational programs to the requirements of the rapidly changing labor market and international standards is difficult due to the lack or untimely updating of professional standards. Maintaining the quality of healthcare professionals' training at a high level, namely the effective integration of science and practice into the educational process, the use of modern technologies and teaching methods, and qualified teaching staff require high costs;

2) the sustainable development of scientific activity is hindered by the fact that the main source of income for scientific research are projects and programs within the framework of program-targeted and grant funding received on the basis of a competition, biomedical and pharmaceutical research themselves are expensive and time-consuming, there are high risks of not completing research and obtaining significant results over a three-year funding period. The insufficient level of scientific infrastructure and resources to attract and support talented scientists significantly limits the possibilities of scientific research, and as a result, the results of research conducted by universities may not always qualify for the international level, and scientists cannot achieve high external competitiveness, their publication activity is not high enough;

3) despite the targeted policy of developing human resources, the problem of accumulating a critical mass of qualified personnel to solve strategic tasks remains urgent, mainly due to the continued outflow of qualified specialists due to the lack of attractiveness of teaching staff, limited training of scientific staff in doctoral studies PhD, insufficient staff proficiency in English and digital skills, unattractive work in Kazakhstan university for foreign specialists;

4) insufficient integration of the information base, business processes and information technologies complicates the process of operational decision-making based on data analysis, and leads to a high expenditure of human and time resources.

SKMA has achieved certain results during the implementation of the Development Program for 2019-2023. However, the influence of external factors caused the incomplete implementation of some expected results, such as the commercialization of scientific and (or) scientific and technical activities, obtaining international patents and entering the QS ranking of the best universities.

The Academy is actively working on the commercialization of developments, but no tangible results have been achieved so far, including due to the unwillingness of potential investors in Kazakhstan to invest heavily in domestic developments in the field of pharmacy and biomedicine due to the risks of high competition in international markets for the sale of products and the need to certify manufactured products to higher standards. than for other industries.

Obtaining patents is the final result of research projects. So, in 2021, 1 international patent was obtained. Since 2021, new projects have been launched based on the results of tenders for national funding, and their results in the form of industrial property and copyright objects are possible upon completion of research with a duration of up to 3 years.

The entry of SKMA into the ranking of the 700 best universities according to QS (by Subject) in the main fields of activity – medicine and life sciences, where the position in the ranking depends on 60% of scientometric indicators, is hindered by the high competition of world universities. Achieving results that are competitive with global universities requires the active involvement of management and teaching staff in the processes of responsible performance of educational and research activities, as well as external financial support.

Nevertheless, JSC "South Kazakhstan Medical Academy" is confidently moving towards the realization of its goal of becoming a university through the integration and development of its educational and research activities. For difficult-to-achieve tasks, a solid foundation has been laid for their implementation in the future.

**3.3. Development forecast and identification of possible development scenarios and their impact on the university.**

Higher education is a driver of the economic competitiveness of the state and its systemic development is facilitated by rapid response to the challenges of the time, the prerequisite for which is flexibility in the approach to financial regulation, internationalization, improving the quality of education and research, and adapting educational programs in accordance with the demand for knowledge and skills in the modern labor market.

The long-term goals of SKMA are to strengthen its position in the field of medical education both in the Republic of Kazakhstan and in the Central Asian region, to introduce the latest technologies into the educational process, research and clinical activities. The Academy will continue to strengthen its international ties and cooperation with the world's leading medical universities, which will help attract talented students and teachers and ensure the Academy's international reputation.

In recent years, the Academy has carried out a number of activities to transform educational programs in accordance with the challenges of modern medicine. The main goal of the transformation of medical and pharmaceutical education at the Academy remains to improve the quality of education and improve the training of future doctors. For this purpose, new teaching methods are being introduced based on a project-oriented approach, the use of information and simulation technologies that allow students to acquire practical skills and work experience in clinical situations. The Academy adheres to the principles of academic integrity, transparency and responsibility as the basis of the quality of education and scientific research. The SKMA has a Code of Academic Integrity aimed at preventing plagiarism and other forms of unfair academic practice. As part of the institutional development, the system of ensuring academic integrity is being improved through the introduction of modern monitoring tools and bringing internal processes in line with national and international standards, which helps to strengthen trust and academic reputation. The range of subjects studied in the framework of science-oriented education has been significantly expanded, and students have completed research projects under the guidance of teachers. Students and teachers of the university are working on solving urgent problems in the field of medicine and developing new methods of diagnosis

and treatment of various diseases. The Academy works closely with medical institutions so that students can gain work experience in real clinical settings. Thanks to this, they can gain not only theoretical knowledge, but also practical skills in working with patients.

The prospects for further development will be related to:

- expansion of the research base and infrastructure to attract leading scientists and ensure a high level of research;
- strengthening international relations with leading universities and research centers to ensure access to the latest scientific technologies and knowledge;
- by attracting the best students, teachers and scientists through the improvement of motivational mechanisms for attracting talented personnel and ensuring a high level of education and research;
- expansion of cooperation with innovative technology centers to ensure the introduction of new technologies in healthcare in Kazakhstan.

Recognizing the global challenges of the 21st century, the Academy integrates the Sustainable Development Goals (SDGs) The United Nations is involved in its educational, scientific, clinical and social activities. The Academy strives to make a real contribution to the formation of an inclusive, equitable and environmentally sustainable society, based on the international obligations and priorities of the Republic of Kazakhstan. SKMA promotes social justice by providing access to education and health services for vulnerable and socially vulnerable groups, contributing to reducing poverty and inequality. The Academy actively develops programs aimed at improving nutrition and the health status of mothers, children and the elderly, thereby contributing to the elimination of hunger and strengthening public health.

The main focus of SKMA's activities corresponds to the goal of "Good health and well-being", implemented through the training of qualified medical specialists, the introduction of simulation technologies, the development of scientific research in the field of medicine and the implementation of preventive measures. At the same time, the academy guarantees access to quality education, including digitalization of education, inclusive programs and continuous professional development.

In the field of gender equality, SKMA ensures equal rights and opportunities for women and men in academic, scientific and managerial spheres. Initiatives to prevent discrimination and develop an inclusive environment are supported. Programs on sanitary culture, prevention of infectious diseases and provision of safe conditions for all participants of the educational process are also being implemented.

In the context of decent work and economic growth, the Academy creates jobs, invests in the professional development of staff and supports student initiatives. Special attention is paid to reducing inequality through access to education and medical care, regardless of origin or social status.

SKMA is also actively involved in the development of sustainable urban infrastructure, including mobile clinics and regional prevention programs. The Academy implements projects on environmental education, reducing the carbon footprint and rational use of resources. Ecological culture is being promoted, the practice of separate waste collection is being introduced, and natural biodiversity is being preserved through campus initiatives.

## Item 4. The Program's vision, mission and values

4.1. **The Program's vision** The implementation of this Program is aimed at becoming SKMA, an innovative student-oriented university, continuously developing on the principles of the academic healthcare system and science, in which professionals who share the same values join forces to generate, transfer and use knowledge about health and for the sake of human health.

The contribution of SKMA to the development of the national context of health and education is based on the high quality of training of medical and pharmaceutical specialists based on a modern education system using progressive forms of education, the latest technologies, fundamental and applied scientific research and the provision of medical care to the population of the Republic of Kazakhstan by highly qualified teaching staff.

**4.2. The mission and values of the Program** are determined by the mission of SKMA: "To be a recognized leader in the field of training competitive personnel!"

When implementing the mission, the university is guided by the following corporate values: people, professionalism, teamwork, commitment to tradition and openness.

**Item 5. Strategic priorities of the South Kazakhstan Medical Academy:**

**5.1. Academic activities**

The strategic priority in the academic activities of SKMA is to achieve high quality at all levels of professional education that meets the needs of the labor market, society and the state, as well as in line with the best international practices. The Academy aims to comply with the following guiding principles of academic activity:

- ✓ training specialists who meet the requirements of the national health system and international standards through the introduction of innovations in education, science and practice;
- ✓ Providing academic freedom to students in choosing individual learning paths and developing the necessary skills by choosing elective subjects;
- ✓ observance of the principles of academic integrity, enshrined in the relevant Code, and zero tolerance for any type of deception, fraud, plagiarism or falsification of results at all stages of scientific and educational activities;
- ✓ Providing equal opportunities for all students to receive high - quality and affordable education;
- ✓ Non-discrimination against students with special needs based on race, nationality, ethnicity, religion, gender, social status, physical abilities, age, and other subjective criteria;
- ✓ development of digitalization of the educational process and provision of services to students;
- ✓ Develop cognitive, digital, and interpersonal skills, as well as the ability to lead independently and foster a culture of honest work to enhance graduates' opportunities to build successful careers.

The Academy systematically improves academic activities, updates them in accordance with the expectations and needs of stakeholders, primarily students and teachers. As part of the development and movement towards university status, academic policy has consolidated the opportunities of students and teachers to help them realize their scientific potential, as well as ensure direct participation in administrative and managerial decision-making within the framework of the Academy's activities.

**5.2. Scientific activity**

According to the Concept for the Development of Higher Education and Science in the Republic of Kazakhstan for 2023-2029, approved by Resolution of the Government of the Republic of Kazakhstan No. 248 dated March 28, 2023, SKMA follows a strategy of academic excellence through the

implementation of research projects and innovations, the development of research infrastructure, laboratories, and centers of first-class science.

The strategy "Kazakhstan-2050" indicates the need and notes: "to give priority to the practical research component of the work of medical universities. It is the universities that should concentrate the latest knowledge and technological achievements of mankind.".

The implementation of these tasks also corresponds to the direction "Improving the system of medical and pharmaceutical science" of the Healthcare Development Concept of the Republic of Kazakhstan until 2026 and is based on strict observance of research ethics and standards of academic integrity, which excludes data manipulation and copyright infringement in the scientific community. Improving the efficiency and quality of scientific activities will strengthen the sustainable development of the Academy, enhance its status in the international scientific community, and make it attractive for cooperation and investment.

The Academy will continue to create conditions for attracting and supporting new ideas, developing innovative technologies and commercializing scientific research, which will allow the Academy to remain competitive and make a significant contribution to the development of higher education and science in Kazakhstan. As part of the implementation of this Program, the Academy will build further cooperation with business incubators, technology parks, innovation centers and laboratories that will support the ideas and projects of students, scientists and entrepreneurs. Much attention will be paid to attracting investments in innovative activities, including through participation in government grant and program-specific financing programs for the development of innovative projects and research. The Academy will continue to develop an innovative culture among students and staff, train qualified specialists in commercialization, and partner with the industry.

### 5.3. The third mission of the South Kazakhstan Medical Academy

The third mission is a natural and necessary way of university development in the modern world, which is determined by the quality of educational and scientific programs, that is, the first and second missions. Each university chooses its own list of areas in which it interacts and cooperates with the outside world.

SKMA focuses on three main aspects of its activities: technology transfer and innovation, continuing education, and social engagement.

With the advent of the third mission, SKMA's activities are part of the corporate brand and the personal characteristics of each employee in order to convey our vision of the third mission to the educational community.

The third mission is the contribution of SKMA to the socio–economic development of the country and regions of the Republic of Kazakhstan through the implementation of volunteer and charity projects, strengthening the relationship between ongoing activities and the Academy's Development Program, as well as initiatives of the Ministry of Science and Higher Education of the Republic of Kazakhstan, the Ministry of Health of the Republic of Kazakhstan, M&E and the support of partner universities.

**Item 6. Ways to achieve the set goal of the Program;**

The purpose of the Development Program is to establish SKMA as a university through the integration and development of its educational and research activities.

To achieve the goal, the following tasks will be implemented:

**Task 1. Advanced staffing through strengthening the integration of education, science and practice, integration into the international educational space**

In this direction, measures will be continued to develop integrated educational programs that include scientific and practical components, expand dual education, and introduce digital educational technologies and methods of active project-based learning into educational programs.

Strengthening cooperation with practical healtheare will improve the conditions for the integration of clinical practice into the educational process, the introduction of new technologies into medical practice and training, and the development of a base for clinical research and innovation.

The internal quality assurance system will be improved in accordance with the national model of education quality assurance, specialized accreditation of educational programs will be conducted according to international standards.

It is planned to expand international cooperation with foreign universities on the development of joint educational programs and the implementation of academic mobility of students and teaching staff.

The Academy will increase opportunities to provide students with free access to global digital libraries and online courses, as well as modern equipment for educational laboratories and a practical skills center.

Much attention will be paid to the social and academic support of students, including providing students with places in the dormitory, creating conditions for inclusive education.

The flexibility of educational services will be achieved by recognizing the results of informal and non-formal education, providing wider access to education for various groups of the population, and acquiring microqualifications.

The Academy will continue to develop the principles of lifelong learning, and will make efforts in cooperation with local executive authorities to provide the region with qualified medical personnel.

It is planned to expand international cooperation with foreign universities on the development of joint educational programs, dual degree programs and the implementation of academic mobility of students and teaching staff.

The practice of attracting foreign specialists to teaching from leading foreign universities will be expanded.

**Task 2. Improving the efficiency and quality of scientific activity within the framework of the innovative development model**

As the main research areas of SKMA, it is planned to continue the development of molecular genetic research (identification of cellular and molecular genetic features of processes occurring in the body), cytogenetic research, development of effective and safe medicines, as well as the development of scientific and publication ethics (Central Asian Journal of Medical Hypothesis and Ethics).

In order to increase participation in research funding competitions, including international ones, and increase efficiency, priority areas of scientific research will be updated. Measures are planned to increase the number of applications on relevant topics, including regular trainings for faculty and administrative staff, as well as students on the procedures for submitting, reviewing and ensuring the quality of applications for research projects. Digitalization and improvement of management processes in the scientific activity of the university will continue with the analysis of the effectiveness of scientific achievements and decision-making. The development of an open model of science will be promoted, cooperation with technology parks will be strengthened, and patent activity for the commercialization of scientific developments will be intensified. For this purpose, the organization has a commercialization and project management office, where applications for financing are processed and carefully checked. The office's function includes conducting seminars, as well as training employees on applying for government and other types of grants. The department works closely with

renowned scientists abroad and actively involves them in the daily work process of the office. Currently, there are 35 scientific programs with different sources of funding. It is planned to expand this list in the future.

The active involvement of staff in scientific activities, mainly young people, will continue through the further implementation of effective motivational mechanisms. The access of university researchers to modern databases of scientific data and scientific internships will be provided.

The Academy's "Council of Young Scientists" will move the organization's science forward and help aspiring scientists take their first steps.

Doctoral studies will be expanded, foreign partners will be involved in the development and implementation of doctoral programs, as well as the involvement of master's and doctoral students in the creation and implementation of research projects using external funding. The successful practice of postdoctoral studies will be continued both within the framework of the programs developed by the Academy and within the framework of grant financing programs for young scientists of international scientific and educational organizations. In addition, cooperation with foreign universities will actively continue, including the conclusion of new memoranda and agreements between organizations will be a priority. This will help to further exchange experiences between employees, as well as activate the mobility program among students.

Participation in advanced scientific research requires a high level of development of the research infrastructure. SKMA plans to attract investments from various sources to improve the scientific infrastructure.

The achievement of scientific results is aimed at the prevention, early diagnosis and treatment of diseases and conditions affecting the life expectancy and quality of life of the population. In addition, working on the development of scientific and publication ethics will help young scientists not to repeat the mistakes of other scientists and always conduct research in good faith.

**Task 3. Commercialization of scientific and technical developments of SKMA**. The current stage of global development places new demands on national health, education, and science systems. Today, specialists who conduct research at the intersection of disciplines such as medicine, bioinformatics, biophysics, biochemistry, robotics and cybernetics are especially in demand. SKMA intends to actively develop its activities in this area, based on the needs of the region and the country, as well as its own capabilities, including through creating conditions for the launch and development of startups, as well as training new generation specialists. According to the Law of the Republic of Kazakhstan "On the commercialization of scientific and (or) scientific and technical activities", there is a legal framework for combining science and business, financing and supporting projects for the commercialization of scientific and technical developments (CSTD). However, in order to effectively realize these opportunities, it is necessary to develop conditions for entrepreneurial activity (start-ups), as well as provide researchers with access to depersonalized databases of the Ministry of Health of the Republic of Kazakhstan. The concept of the science and technology park being created on the basis of the SKMA should include the functions of a business incubator, accelerator and commercialization center.

The Academy will strive to increase the share of applied research co-financed by the private sector, develop translational medicine, modernize research and production infrastructure, and obtain certificates of international conformity and accreditations. This will allow SKMA to act as a base platform for conducting the second and third phases of clinical trials, which is of particular importance for cooperation with pharmaceutical companies. An important area will be the development of cooperation with public and private organizations to increase the involvement of young people in entrepreneurial activities and support student and teaching startups. In the future, SKMA plans to conclude cooperation agreements with regional entrepreneurship centers and international technology

parks, including Astana Hub and the Nazarbayev University Technology Park, in order to introduce technological entrepreneurship courses (Startup Academy) free of charge.

**Task 4. Digitalization.** To achieve the strategic goal of the Academy in the field of digitalization and the introduction of modern technologies into the educational process and healthcare, consistent and systematic steps are envisaged, implemented within the framework of the Roadmap of SKMA for Digital Transformation and the introduction of artificial intelligence for 2026-2029. This Roadmap defines the phased formation of the Academy's digital ecosystem and the integration of intelligent technologies into educational, scientific and clinical activities.

In 2026, designated as the year of digitalization and artificial intelligence, it is planned to introduce an integrated digital Academy process management platform. In 2025-2026, an IT system will be selected and configured, an audit of existing digital solutions will be conducted, and the AiSana program will be implemented within the Academy and pilot projects on the use of artificial intelligence in educational and clinical practice will be launched. At the same time, the concept of the Big Data Center will be developed and priority areas of its activities will be identified. At the first stage, the basic server platform will be designed and implemented. Ensuring information security and compliance with requirements will be a key aspect. The server infrastructure will be deployed based on the principles of "default security" (Security by Design) and "multi-level protection" (Defense-in-Depth).

In 2027, focused on scaling artificial intelligence in education and the clinic, it is planned to gradually introduce an integrated IT system in all structural divisions of the Academy. In 2027-2028, the introduction of certain artificial intelligence tools into the educational process, including academic performance analytics and adaptive digital solutions, as well as into clinical practice, in the form of medical decision support systems and medical analytics, will begin. During the same period, the Big Data Center's infrastructure will be launched, providing the collection, storage and processing of large amounts of medical and educational data. Infrastructure scaling and Big Data support will continue. As part of the development of the Big Data Center, it is planned to expand the server infrastructure, which will ensure the processing of large amounts of data in a local secure circuit, excluding the output of sensitive information outside the Academy.

In 2028, the integration of the Academy's digital solutions with national information platforms in the field of education and healthcare will be a key focus. The development of analytical tools, the expansion of the functionality of AI systems and the introduction of forecasting mechanisms will continue. The Big Data Center will move to the active phase of analytical support for management decisions based on big data processing.

By 2029, defined as the stage of leadership and international integration, it is planned to complete the transition to a fully integrated digital management model. This will ensure one hundred percent digitalization of the Academy's educational and administrative processes with documentation of the implemented systems. Full-featured artificial intelligence-based projects will be implemented, contributing to improving the effectiveness of educational, scientific and clinical activities, as well as strengthening the Academy's international competitiveness in the field of digital medicine. By 2029, it is also planned to achieve full autonomy and maturity of the server infrastructure.

Special importance is attached to the creation of a Big Data Center as a key element in the development of medical analytics within the framework of the Roadmap. In 2025-2026, it is planned to develop a concept and identify priority areas of work, in 2027-2028 — the formation of infrastructure, and by 2029-2030 — the transition to full-fledged activities. The Center will provide analytical support, development of forecasting tools and management decision-making based on comprehensive data analysis.

Additionally, it provides for the introduction of electronic medical records and telemedicine services. At the first stage, in 2025-2026, the appropriate software package will be selected and configured, in 2027-2028 it will be implemented in all departments, and by 2029-2030 the project will be fully completed. This will ensure the clinic's transition to electronic document management, integration of telemedicine technologies, improvement of the quality of medical care, as well as training of students and medical staff to work with modern digital tools in healthcare.

In order to achieve digitalization targets, the Academy is implementing a system of key performance indicators (KPIs) based on the best practices of leading universities. The assessment will be based on the level of digital maturity, the proportion of digitalized processes, the degree of implementation of artificial intelligence in educational and clinical activities, as well as the effectiveness of data use. The KPI data is integrated into the strategic management and monitoring system of the Program implementation. At the same time, the Academy focuses on the introduction of advanced international approaches in the field of medical artificial intelligence, including solutions implemented within the framework of the AI Sana project aimed at developing intelligent medicine and clinical decision support systems. This will ensure that digital transformation meets global standards and strengthen the Academy's international competitiveness.

The implementation of these measures will make it possible to create a unified digital educational and clinical environment, increase the manageability of processes, transparency of decision-making and sustainability of the Academy's development in the context of digital transformation.

**Task 5. Increasing the potential of the teaching staff**

A long-term human resource development program is being implemented at SKMA to increase its human resources potential. The program provides for advanced training of scientific and pedagogical staff, including internships at leading foreign universities, creating conditions for the development of both professional and linguistic competencies, information skills, management skills, and involvement in scientific activities.

It is planned to use all available motivation methods to attract and retain teachers and researchers, such as a differentiated approach to salary levels, remuneration on behalf of Shareholders for employees who have defended doctoral theses, flexible working conditions based on individual employee capabilities, creating conditions for self-development, involving staff in the corporate governance system and increasing participation in life. universities and societies.

Special attention will be paid to the training of the personnel reserve.

A separate area for the development and innovative potential of scientific and pedagogical staff is the involvement of staff in research in the field of medical education. The academic staff of the Academy will be actively involved in the development and implementation of innovative teaching methods, improving the effectiveness of medical education, and forming and discussing concepts and directions for further development of the industry.

**Task 6. Financial stability.**

To ensure the financial stability of the Academy, a set of measures is being implemented aimed at diversifying sources of income and improving the efficiency of resource management.

Of particular importance is the development of additional education and professional development programs. The organization of courses and trainings both on a commercial basis and with the support of the local budget will generate additional financial flow and strengthen academic potential. The creation of the endowment fund will be an important step to ensure stable financing of the Academy's strategic initiatives, including support for scientific research, infrastructure development and expansion of international cooperation. At the same time, optimization of internal financial planning and control processes is envisaged. The introduction of modern budgeting tools, as well as income and expense monitoring systems, will increase the transparency of financial activities and ensure the rational use of resources.

The consistent expansion of the range of services, the development of educational programs, the formation of an endowment fund and the improvement of the resource management system create a solid foundation for the financial stability of the Academy and its independent development.

**Task 7. Creation of a modern medical technological infrastructure of the university to provide conditions for obtaining knowledge.**

The construction of a modern multidisciplinary university clinic of SKMA will be completed, which will significantly improve the quality and volume of medical care provided in the region, become a methodological and scientific center for the development and implementation of innovative technologies and methods of diagnosis, treatment and rehabilitation at the level of international standards of medical care, and increase the effectiveness of using the trinity of science, practice and education.

**Item 7. Description of the expected results of the Program implementation**

The result of the Development Program will be a high level of scientific research, education, and project work, recognized globally for joining SKMA among the world's leading universities as a medical university, which is one of the engines of modernization of the national system of medical education and science and making a significant practical contribution to the innovative development and global competitiveness of Kazakhstan.

The predicted results of the Program are:

- - high demand for SKMA graduates and high satisfaction of stakeholders with the quality of specialist training;
- increasing the level of provision of the region with qualified personnel. Quality staff;
- high academic reputation of SKMA;
- high attractiveness for students, including foreign ones;
- growth of scientific and innovative activity (publications, citations);
- increasing the reputation of university scientists as a whole in the global scientific community;
- commercialization of research results (income and patents, cooperation with technology parks);
- increasing the share of funding for scientific and innovative activities, including external investments and research grants. High staff satisfaction with working conditions;
- high involvement of scientific and pedagogical staff in corporate governance and public life of the Academy;
- digital monitoring of all Academy processes;

- promotion of the university's position in international rankings;
- high satisfaction of the population with the quality and accessibility of medical services;
- effective assistance to the country and the region in implementing the policy of providing high-quality services in the field of education, science, and healthcare;

**Item 8.** Monitoring and evaluation of the Program's progress by year, indicating target indicators and an action plan (appendix 2, 3).

Vice Rector for Science and Strategic Development _____ Aukenov N.Y.

**Appendix 1**

to the structure of the program
for the development of higher and
(or) postgraduate education

Passport of the Development Program of JSC "SKMA"

| | |
|---|---|
| Name of the program | JSC "South Kazakhstan Medical Academy" Development Program for 2025-2029 |
| The basis for the development of the Program | Order of the Ministry of Education and Science of the Republic of Kazakhstan No. 375 dated August 1, 2023 "On Amendments and Additions to the Order of the Minister of Education and Science of the Republic of Kazakhstan dated 10/25/2018 No. 590 "On Approval of the Structure and Rules for the development of a program for the development of higher and (or) postgraduate education" |
| Program Developer | JSC "South Kazakhstan Medical Academy". |
| Program Objectives | The formation of JSC "SKMA" as a university. |
| Program Tasks | 1. Staffing and integration of education<br>2. scientific activity<br>3. Commercialization of science<br>4. Digitalization<br>5. development of teaching staff<br>6. Financial stability<br>7. Infrastructure |
| Terms of the program implementation | 2025-2029 years. |
| Sources of financing | - the republican budget;<br>- extra-budgetary funds of the university;<br>- funds from scientific and technical programs, international and domestic grants;<br>- funds from the commercialization of innovative developments |