MUG STRATEGY

MEDICAL UNIVERSITY OF GDAŃSK

2019-2025


MEDICAL UNIVERSITY OF GDAŃSK

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THE RECTOR'S ADDRESS

The Medical University of Gdańsk is a modern academic centre that for over 70 years has been providing high quality education in all medical professions and conducting world-class scientific research. The highly trained academic staff and constantly modernized infrastructure along with the latest generations of diagnostic tools, all creates excellent conditions for strengthening our organization's position as a research university in national and international levels. This development is a success because it has been based on values that we consider essential.

Every effort that have been made to use all of our Alma Mater's potentials stems from the core of the 2019-2025 Development Strategy for the Medical University of Gdańsk; the key document defining this university's long-term policy adopted for the most crucial areas of activities. It addresses not only the challenges that we will have to face because of the latest governmental higher education system reform in Poland, but also indicates priorities set for the future progress. Our ambition is to make this great university a leading, internationally recognizable medical, scientific and research centre. I am convinced that thanks to this ambitious development programme, the Medical University of Gdańsk will also become an attractive place to work and study and a place to pursue personal aspirations and passions where people meet friendly organizational structures, logistics, accommodation etc. enabling to use their potential at the highest.

The foundation of the Medical University of Gdańsk is the strong, highly-specialized and competent staff. It is because of these people that we keep growing and strengthening our position. Nevertheless, we should be aware of all the limitations in personnel management resulting from shortcomings in organizations, skills and methods inherently related to this process. Remedies must be found in these areas. In order to meet statutory requirements and to change the reality more dynamically, we need to strengthen the synergy existing between teaching, researching and services provision. Efficient and professional management is the best way to achieve this. I do hope that the gradual improvement in administrative procedures will bring tangible benefits to all of us and the anticipated high standards will have a real impact on the quality and comfort of work.

However, we should bear in mind that the Strategy is a joint effort made by the entire academic community. An expert team worked hard to define the strategic and operational goals in the areas of organization, education and scientific and clinical activities, but let me emphasize that the final document is the result of a joint decision-making process and wide consultations within the university's community. I would be happy if values defined in this way were respected when we do our daily work and if we strongly identified ourselves with them. I do believe that through the culture of partnership, mutual respect and the diligence to work as good as possible, we will maintain and strengthen the high ranking of this university and continue its dynamic development.

I express my sincere thanks to all the entire community of the Medical University of Gdańsk for your hard work to prepare this document, for your participation in the consultation meetings and for the valuable comments and suggestions that have enabled us to adapt initial proposals to your needs and expectations.

I do hope that this document will chart the road that we should follow in our future joint activities and that when saying about the efforts that we make every day, the mission *Modern education and research for the health and medical development*' will put across the essence of what we do.

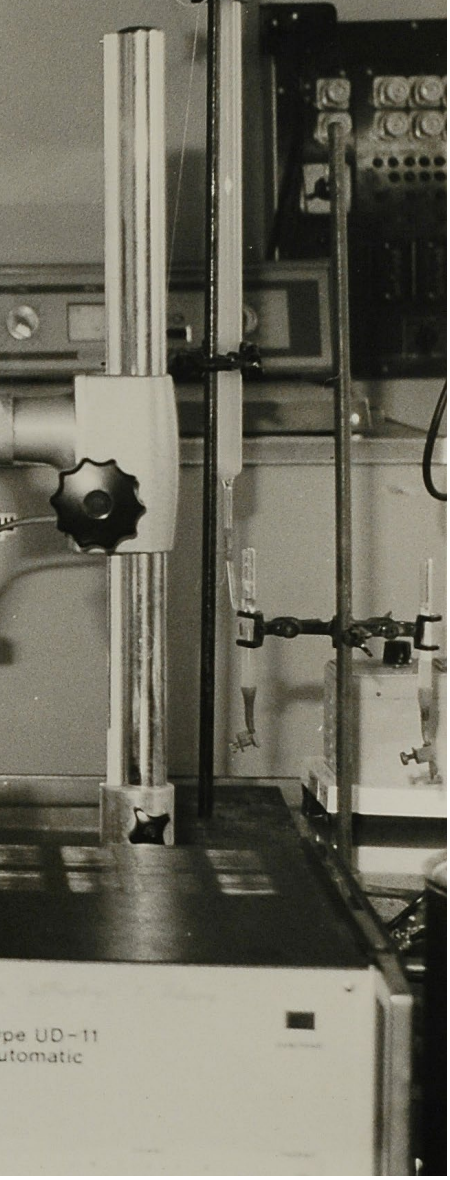
Prof. Marcin Gruchała,
Rector of the Medical University of Gdańsk

fot. Sylwia Mierzewska, UCC

A BIT OF HISTORY

The MUG is one of the oldest medical universities in Poland. Its academic tradition can be traced back to the University of Stefan Batory in Vilnius which was established 100 years ago.

- the Physician Academy of Gdańsk – October 8th 1945
- the Medical Academy of Gdańsk – 1950
- Intercollegiate Faculty of Biotechnology University of Gdańsk and MUG – 1993
- English Division of the Faculty of Medicine – 2001
- The Faculty of Health Sciences with Subfaculty of Nursing – 2006
- the Medical University of Gdańsk – 2009 (Academy changed its status to MUG)
- Faculty of Pharmacy recognized as the Lead National Scientific Centre – 2012-2017
- International Research Agenda – 2018
- Centre of Translational Medicine – 2019
- The Medical University of Gdańsk becomes a research university – 2019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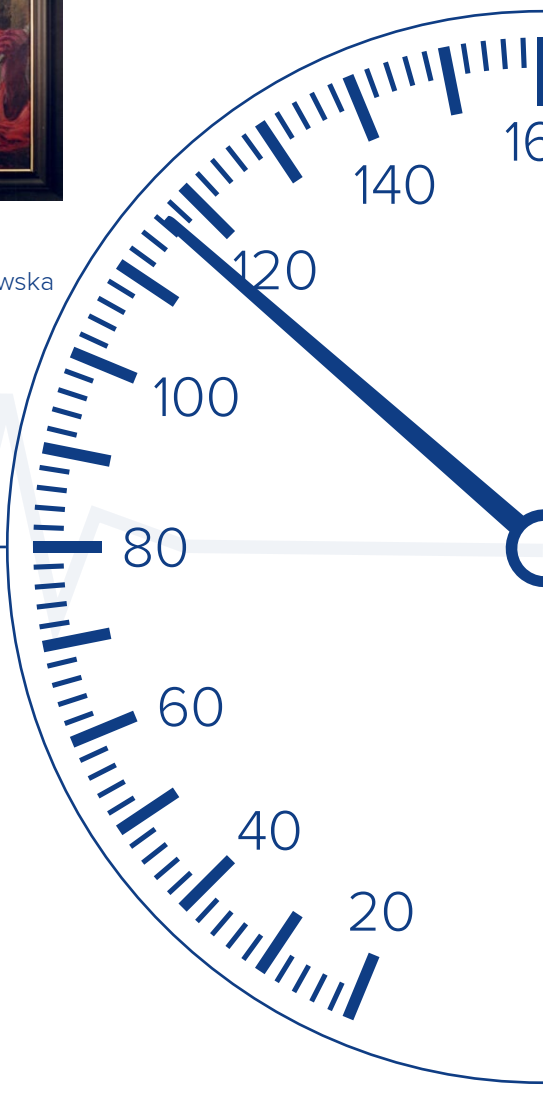
RECTORS OF THE MUG SINCE 1972

Stefan Raszeja
1972-1975

Mariusz Żydowo
1981-1982

Barbara
Krupa-Wojciechowska
1983-1990



Zdzisław Brzozowski
1975-1981

Wiesław Łasiński
1982-1983

Stefan Angielski
1990-1993

Wiesław Makarewicz
1999-2005

Janusz Moryś
2008-2016

Zdzisław Wajda
1993-1999

Roman Kaliszan
2005-2008

THE MUG RECTORS

Prof. Stefan Raszeja

In 2020 it will 75 years since the establishment of a medical university in Gdańsk, then under the name of the Medical Academy. The pioneering and experimental activities of that time were one of the first important achievements of our university. Seventy five years of doctors' and pharmacists' education, renowned scientific researches, and high level of specialist medical practice are noticeable evidences of sacrificial service to society and the homeland.

Throughout its existence, the university has undergone many modifications, but specific successes e.g. in investment or organizational projects, which facilitated the accomplishment of the university's main goals, was, in general, the result of deep involvement of several rector terms. Initiated by the predecessor, projects were completed by his successor, putting him in the limelight at the opening ceremony of a new academic unit or inauguration of a new studies programme.

Many of the new research and educational programmes implemented in 1970s were imposed by the central government of that time and the system of centralized institutional structures. Against all odds, however, our university was capable to use these commonly disapproved structures to its advantage and to establish highly specialized units, currently, essential to its efficient functioning. These include, among others, cardiothoracic surgery, oncological, nephrological surgery, cardiology, and paediatric cardiology clinics. Also, worth to mention is the success of the newly introduced postgraduate studies in the form of the so-called cascade system.

During my tenure as the Vice-rector, I initiated the publishing of the Annales Academiae Medicae Gedanensis, an annual scientific journal, which I also edited for several decades. At that time it enabled to publish many valuable scientific papers, including habilitation thesis. Today, this Journal enjoys the status of international recognition.

At the years of the People's Republic of Poland, during the communists' regime, our Academia had no contacts with foreign leading research centres. It cannot compare with the current circumstances. Today, the University thrives as a dynamic international educational and research centre, successfully realizing the goals set in the 2019-2025 Development Strategy.

Finally, let me express my view that learning about the past and current status of our research units should, undoubtedly, provoke the reflection on the organizations' future. Such a reflection may provide valuable indications on how to develop and upgrade further this University as a whole and, of course, on what the University's scientific staff should do so that the MUG 2019-2025 Strategy was implemented.

Prof. Barbara Krupa-Wojciechowska

Nowadays, sciences, including the medical, are developing so rapidly so it was very good on the part of the current University management to draw up the Strategy document. Previous years of dynamic development, setting up new university buildings and structural units all have created the necessity not only to discuss about current and future challenges, but also to look at all of these from a distance.

I have been associated with the University since 1949 when I started my studies until 2000 year when I retired. For the last dozen or so years, as a volunteer in a scientific association and standing on the sidelines, I have been watching this dynamic development.

As a leader of students' organizations, I had an opportunity to meet up with the old professors' staff, the founding fathers of this University, and to contribute to the social revolution that was made in our country after the Second World War. My lesson learned from the post-war years is that as far the University development is concerned ones attitude toward transformation that a university's community is undergoing is more important than his or her political affiliations. The most prominent pre-war professors like Mozołowski, Czarnocki or Reicher had different life histories and political views, but to rebuild this country from rubble and to establish a University were the most important things to do for them.

It is obvious that, as it is always, the transformation was being made with problems, but the truly active people for whom the good of the University was the highest priority were capable to reach agreements.

During the Solidarity revolt, as a result of discussions and disputes, I was nominated the Rector and then, after winning elections, appointed to this position for the two more three-year tenures of office and began working with all the Solidarity nominated professors. It is clear that similarly to my entire generation I was involved in the political transformation that was being made in our country. But I have also an opportunity to develop further modern departments of cardiology and cardiac surgery, oncology, and anaesthesiology. When I was the Rector I was the opinion that when times are turbulent people should be trained so that they acquire managerial skills. My life experience and monitoring what our successors have achieved and are planning to do prove that managerial activities should be stared as early as when they are in students' organizations. During my Rector's terms of office, I managed to finalize the establishment of the Medical Academy in Bydgoszcz, construction of the Department of Radiology, and organize international student exchange scheme. Now, looking at the dynamically developed University, I think that except the already accomplished or planned development projects about which the University's authority says it transpires that despite all the disputes and problems the people involved in the health care organizations and politics are coming back to the University to create new preventive medicine research projects.

THE MUG RECTORS

Prof. Wiesław Makarewicz

For almost 70 years, I have been watching the changes implemented at the MUG. In fact, there is my share in them: from 1999 until 2005 I was its Rector. The scope of curriculum has extended itself and the number of students grew from 2600 in 1999 to 6360 in 2019. In particular, opening of the English Division for English-speaking students appeared to have been a very important event. The studies in English have developed themselves very dynamically and now, 935 foreign students are studying at the MUG. Also, science and research-related budgets grew significantly, in particular, due to grants won in contests. The growing number of papers promulgated through the most recognized periodicals listed in the so called Philadelphia List proves that scientific research is developing dynamically. The growing number of doctorates, habilitations, and professors' nominations is another measure of progress as well.

In 1970s, the Collegium Biomedicum building was erected providing teaching rooms for the first and second years of the Faculty of Medicine. At its back, with the use of financial resources granted by the National Research Committee, we set up the Tri-City Academic Experimental Animal House, where the Department of Medical Biotechnology found its location as well. Then, with the use of money provided by the Charity Fund Porozumienie bez Barier, the building accommodating the Department of Haematology and Paediatric Oncology was built. We have modernized the historic Old Anatomy. The former splendour of this historic building and lecture hall, now name the Auditorium Primum, has been restored. Now, it is mainly used as a teaching facility and it accommodates the MUG Museum.

A new building was built for the Department of Forensic Medicine, which is the most modern institution of this kind in Poland, and for the Environmental Protection Department. In 2018, we managed to establish a university Sports Centre.

The major modernization of our educational and research base is evidenced by two key investments completed in 2016, i.e. the Medical Simulation Centre and Biobank. From 2002 to 2004, we carried out an operation of merging three clinical hospitals into one structure, the University Clinical Centre. It created the necessary conditions for further development of health care research and education at the MUG. After lengthy negotiations, we also incorporated the Institute of Maritime and Tropical Medicine in Gdynia creating a single, general structure of the University's facilities and opening an independent clinical hospital there.

In order to renovate entirely a clinical hospital occupying the buildings from the beginning of the 20th century we decided to implement the 2005-2019 PLN 1.12 Bn worth of investment project.

The Invasive Medicine Centre was built as the first part of the investment and commissioned in 2011. The construction of the Non-Invasive Medicine Centre, the second part of the project, began in 2015.

As a former Rector, I am very satisfied that these various projects have been recognized by the academic community and appeared to have a measureable success. For years, the MUG has been climbing up in academic rankings occupying a leading position in Poland.

Prof. Roman Kaliszan (1945-2019)

The years from 2005 to 2008 were the time of great changes for the Medical University of Gdańsk or the Medical Academy of Gdańsk at that time. Prof. Roman Kaliszan, an outstanding scientist, a specialist in the field of pharmaceutical sciences, pharmacology and analytical chemistry, managed the University at that period.

During Prof. Roman Kaliszan's tenure of office, the process of transformation of the Academia into a University began officially. In order to meet challenges stemming from the process, the Faculty of Health Sciences was established and along with it the new fields of study. - If the Academy were not renamed, we would end up in a second-rate league, said Prof. Kaliszan back then adding, According to the new findings, an Academy is something inferior to the university. If we do not change the name, it will look like we are the inferior that are not able to meet requirements set up for universities; prestige goes with the university status. However, scientific standards that should be met by organizations like universities go higher; this University must meet them to apply successfully for one. In English, we are the Medical University of Gdańsk; abroad, all medical colleges are universities while academies are schools providing bachelor level of education.

Formally, May 19th, 2009, was the day when the Medical Academy of Gdańsk became the Medical University of Gdańsk.

When Prof. Roman Kaliszan was the Rector, first attempts were made to modernize the university's hospital. As a result of many not easy talks in Warsaw, Professor Kaliszan managed to secure funds for this project allotted from the Polish central Government budget. Thanks to his efforts, the Invasive Medicine Centre could be established, i.e. the current new clinical hospital. The cornerstone of the Invasive Medicine Centre was laid on June 14th, 2008.

Moreover, Rector Kaliszan has not only secured funds from the Ministry of Science and Higher Education, set up the Scientific and Research Centre for Laboratory Medicine, but also modernized scientific laboratories of the Inter-Faculty Institute of Maritime and Tropical Medicine in Gdynia.

Professor Kaliszan was like a stimulus for the scientific development of our University's academic teachers, who began to occupy top positions in national scientific rankings. Scientists and students have achieved significant successes both in Poland and abroad.

During the Rector Kaliszan's tenure, the reconstruction of the so-called Old Anatomy building was being continued, with external funds for this purpose being obtained from the Ministry of Health. The upgraded didactic facility was opened up in 2007. Bearing the named of Prof. Olgierd Narkiewicz, the lecture hall was officially commissioned during the inauguration of the academic year 2006/2007. Furthermore, it was then that idea of opening the MUG Museum came into fruition. The unit, which is housed in the historic Atheneum Gedanense Novum building since 2006, collects and presents objects related to the history and tradition of the University dating back to 1945. The collection also includes exhibits from the Faculty of Medicine of the Stefan Batory University in Vilnius dated back to the period of 1919-1939 and objects related to medical procedures followed in Gdańsk as far back as 16th century.

Prof. Roman Kaliszan died in may 9th 2019 r.

THE MUG RECTORS

Prof. Janusz Moryś

My tenure of office as the University Rector was characterized, on one hand, by the necessity to draw up the strategy, which was to enable the University's subordinated hospitals to pay off huge debt amounting to 300 million Polish Zloty that might well have make the personnel laid off, but first of all, it endangered the stability of operations of the hospitals and University and, on the other hand, by the efforts to make the MUG's teaching, scientific and research potential more competitive. Therefore, the University authority had to focus their efforts on the debt restructuring, increasing the efficiency of the use of financial resources still in their possession, and on creating mechanisms that would enable the personnel to fulfil their clinical and scientific plans.

Construction of the Invasive Medicine Centre, the new hospital, along with the modernization of the rest of it so that the entire facility could meet 21st century standards, and then funds that had been secured and invested in the Non-Invasive Medicine Centre, the second stage of the general project, were the important factors that successfully enhanced the quality of work and patients' safety. In my opinion, with the goals achieved, within just a few years, we were able to improve the quality of the hospitals' medical care, to develop further their medical offer, and what is important in this case, to improve the University's educational offer.

The next challenge was to upgrade the University's teaching base and to improve competitiveness on both the domestic and international markets. The scattered and antiquated teaching base called for decisive actions. That is why the teaching base centralisation process has been triggered, with, among other things, the Department of Microbiology being transferred to the main campus and the old facilities at the Do Studzienki Street being left out. Because of these efforts, the Department of Microbiology has got the up-to-date teaching base and the Medical Simulation Centre has been created, using the US experience in this area, but adapted to the Polish realities along with the Department of Environmental Health. A number of major buildings were renovated and units of the Faculty of Medicine, e.g. the Department of Anatomy and Neurobiology, the Department of Embryology, the Department of Biochemistry, the Department of Hygiene and Epidemiology, and the Department of Preventive Medicine & Education, including its state-of-the art Medical Examination Procedures Simulation Centre used to teach students had their teaching base upgraded. Furthermore, a long-term modernization of the Faculty of Pharmacy units has begun and the Faculty of Health Sciences has been set up a base where, finally, the Nursing Department including its modern Nursing and Obstetrics Simulation Centre along with the Department of Clinical Nutrition found their place. These projects not only increased the University's competitiveness, but also significantly improved conditions and quality of teaching.

The two past rector's tenures were the periods of enormous determination of the University and the hospital authorities supported by the entire academic community and staff. Thanks to their consistency, determination and enormous efforts, we have achieved a success that we are being proud of now.

FROM THE PAGES OF HISTORY

Laying the cornerstone for the construction of the Non-Invasive Medicine Centre

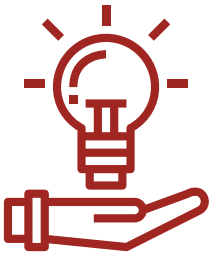
During the inauguration of the 2008/2009 academic year

Laying the cornerstone for the construction of the Invasive Medicine Centre

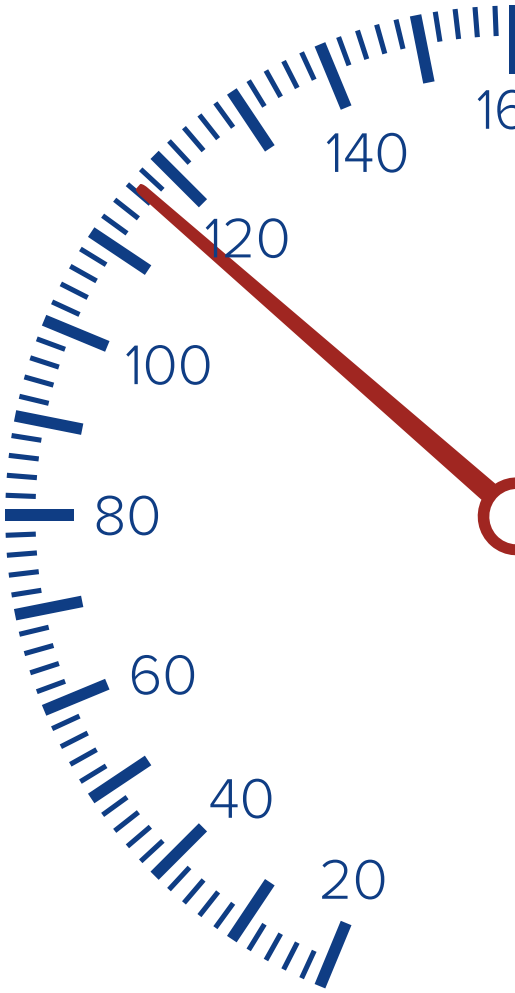
Inauguration of the 2009/2010 academic year

THE MUG ALUMNI

are the in-demand candidates on the job market

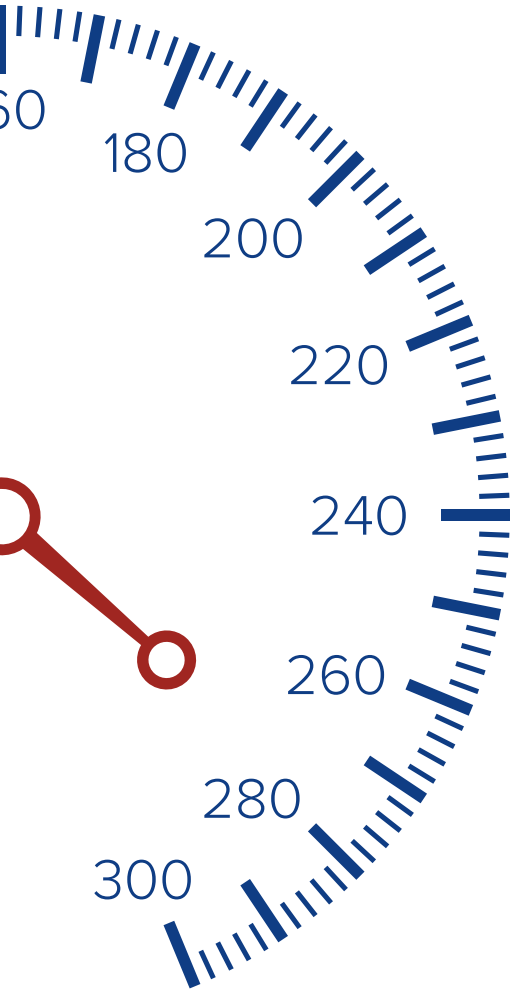


possess high professional qualifications, supported by reliable theoretical knowledge and practical skills



Prof. Anna Dominiczak,
Deputy director and Head of the College of Medical, Veterinary and Life Sciences, University of Glasgow

Wojciech Kuźmierkiewcz, Ph.D.
President of the Board of the Polpharma Scientific Foundation



are professionally successful
both at home and abroad

they actively promote our
university in their daily work

Joanna Drewla, Ph.D.
CEO of Servier Polska

Prof. Barbara Jereczek-Fossa,
Professor at the University of Milan

UNIVERSITY'S INVESTMENTS

Chancellor Marek Langowski

As a part of the consistently implemented strategy of development and centralization of the University's didactic, scientific and clinical base, highly well-served facilities are now being replaced by those fully adapted to the needs of students, employees and patients. Numerous research laboratories and didactic rooms have been modernized, as well as the flagship facilities - Medical Simulation Centre, Sports Centre and buildings of the Invasive and Non-Invasive Medicine Centre that are both parts of the University Clinical Centre. New rooms for the Translational Medicine Centre, the Technology Transfer Centre and the Cardiological Simulation Laboratory were also commissioned. A modern Welcome Point for foreign students has also been set up at the University.

Students can make us of renovated teaching and seminar rooms. They also have modern simulation laboratories at their disposal, including a phantom room in Department of Dental Prosthetics. Specially adapted rooms are equipped with clinical simulation stands (dental unit and head with torso) together with a chair for the operator.

As part of the International Research Agendas programme, the University also established a scientific centre specializing in research on genetic aberrations acquired over the course of life as risk factors for cancer and other diseases. Especially for its needs, the floor of building No. 5 was modernized.

The Invasive Medicine Centre (IMC) is one of the most modern hospitals in Europe. The unit houses 12 treatment departments. At the same time, over 300 patients can be hospitalized in single or double rooms. The building is equipped with a helicopter landing pad, which is directly connected to the Clinical Emergency Department with the use of two elevators. There is also a modern lecture hall available.

The opening of the Non-Invasive Medicine Centre (CMN), the most modern medical complex in Poland, is planned for the first quarter of 2021. It will significantly improve the conditions of hospitalization of patients. Ultimately, the hospital will be able to admit nearly 700 patients. The first part of the investment was commissioned in January 2019. Apart from the fully functional patient treatment rooms and facilities there are also modern lecture and seminar rooms there.

The university's efforts are not only focused on modernizing clinical facilities. In August 2018, the most modern university sports facility in Pomerania - Sport Centre - was opened. It is not only a place for active leisure and integration of both the MUG students and employees. Athletes and residents of our region can also take advantage of the offer. On the two floors of the building you fill find a 1100 m2 sports arena with futsal, handball, basketball and volleyball courts as well as an auditorium with over 700 seats.

In order to improve the quality of education, the Main Library was also modernized. Its space gained a more user-friendly face. As part of the renovation, a new air-conditioned reading room was built with 94 places to study. In the main reading room the table have been arranged in both traditional and private manner. There are also rooms for individual and group work. Cur-

rently, the library has 246 places for readers, i.e. over 100 more than before modernization.

The Medical University of Gdańsk consistently strives to concentrate its units within the campus. Transferring the units of the Department of Microbiology to their new headquarters is a good example of such an endeavour. As part of the investment, the former laundry was rebuilt and redeveloped completely. The building is now serves solely to educational and research purposes. University funded this 15 mln PLN investment from its own financial resources.

The Medical University of Gdańsk is also expanding and redeveloping its infrastructure by setting up modern scientific and didactic facilities. In the building of Integrated Health Care and Telemedicine, students, medical staff and patients will all be able to acquire new skills in analysing data collected in IT systems of healthcare facilities. Our students will learn how to work as a team in rapidly changing hospital conditions. They will also acquire both telecare and teleconsultation skills. The building will house workshops for telemedicine, ICT, teamwork and simulation. Thanks to a folding walls the system the laboratories and research rooms can easily be conjoined into one single room, while the seminar room can be divided into two independent rooms.

The plans to built the new headquarters for the Department of Dentistry are also in motion. We estimate that the building shall be commissioned in 2021. With the beginning of the new academic year 2021/2022 it will be host new classes and workshops for students.

Furthermore, we are also planning on constructing a parking lot for approximately 600 cars. It is to be built on the site of the former Department of Pathomorphology and the current Department of Adult Psychiatry, which will be transferred to the Non-Invasive Medicine Centre. The parking lot's concepts will be developed be the Faculty of Architecture studies at the Gdańsk University of Technology.

PROJECTS

Prestigious grants from the HORIZON 2000 programme

- Project coordinating European research programmes on rare diseases. Almost 100 partners from around the world participate in the project.
- An international research and innovation project (RIA) with the acronym PREFERABLE which rates
- influence of therapeutic exercise on fatigue and quality of life in patients with advanced breast cancer.
- An international research and innovation project (RIA) with the acronym BETTER-B which tests the effectiveness of mirtazapine to relieve the symptoms of breathlessness in patients with COPD or ILD (lung diseases).
- The PRECODE project is being implemented in a prestigious group of units from Germany, Sweden, Great Britain and the Netherlands. The MUG will receive funding which shall be allocated for supervising a Ph.D. student who will participate in the innovative training network within the frame of doctoral research on pancreatic organoids.

International Research Agenda

A scientific centre operating at the MUG, specializing in research on acquired genetic aberrations throughout life as risk factors of cancer and other diseases (partnership with the University of Uppsala).

Nearly 40 mln PLN received from the Foundation for Polish Science.

Prof. Arkadiusz Piotrowski (MUG) i Prof. Jan Dumański (Uppsala University) are the leaders of the 3P-Medicine - Preventive, Personalized, Precision project.

International Research Agendas, IRA, is a special programme drawn up by the Polish Science Foundation, the purpose of which is to create innovative research centres in Poland, enabling scientists coming from all over the world to conduct high-quality scientific researches over the most challenging scientific problems. By means of scaling effect, the International Research Agenda enables to implement extensive and representative researches, says Arkadiusz Piotrowski, Ph.D., D.Sc. Associate. Prof. at the MUG and continues, Thanks to the cooperation with an experienced foreign institution, we will gain support in the commercialization of results and implement effective project management standards. For our postgraduate and doctoral students, the IRA opens a unique opportunities to participate in the so-called dual Ph.D. programme jointly implemented by the Medical University of Gdańsk and the University of Uppsala.

The goal of our 3P-Medicine - Preventive, Personalized, Precision project is to investigate genetic anomalies that have been acquired during lifetime and becoming risk factors of cancer and other diseases. Our research team deals primarily with the analysis of the development of breast cancer in women, prostate cancer in men, colon and bladder cancer in both sexes, and with Alzheimer's disease in men when caused by the loss of Y chromosome. These studies may well lead to the discovery of new biomarkers of cancer development risks and to enable to better understand the first stages of the Alzheimer's disease.

Arkadiusz Piotrowski, Ph.D., D.Sc.
Assoc. Prof. at the MUG

UNIQUE UNITS

Medical Simulation Centre

The students of the Medical University of Gdańsk improve their practical skills in a high-tech Medical Simulation Centre.

Unique equipment with high projection simulators enabled the implementation of a new form of education – interdisciplinary didactic classes with the possibility of observing the consequences of clinical decisions and takin up multi-threaded discussions.

This is where to students acquire valuable skills in gathering medical history, carrying out physical examination or communicating with the patient and his family. Hence, they can be better prepared for clinical classes and a real-life contact with a patient.

Equipment

- fully equipped ambulance simulator
- patient simulator for anaesthesiological and rescue learning procedures
- adult patient simulators
- delivery and baby simulators
- surgical anatomical simulator
- ultrasound simulators
- phantoms to basic and advanced treatments life support
- phantoms and models for learning medical procedures
- devices for spatial anatomical visualization with the possibility of reconstruction based on computed tomography and magnetic resonance imaging
- defibrillators
- cardiomonitors
- ECG devices
- infusion pumps

MSC structure:

- hospital emergency room
- intensive care room
- operating block
- labour ward
- nursing room
- virtual reality lab
- BLS and ALS simulation rooms
- technical skills teaching room
- clinical skills teaching room
- surgery skills teaching room
- standardized patient training room
- computer-aided teaching lab

Medical simulation is the fastest growing field of medical education, using new technologies and the most advanced patient simulators. The Medical Simulation Centre at the MUG allows for a real-time recreation of the activities carried out in the conditions that prevail in the hospital emergency room, ward or outpatient clinic. The investment itself has highly improved the efficiency of clinical-based teaching.

The didacting classes concentrate on students' activite participation in clinical scenarios with the use of advanced patient simulators mirroring the cardiovascular and respiratory functions. Due to their high-tech sophistication these simulators allow for realistic imaging of a bleeding injury.

Conducting an ECG test, handling a defibrillator, performing intubation or intravenous injections on the simulator allows students to improve their clinical skills and be prepared to act efficiently in direct contact with patients.

Under controlled and monitored conditions the students are able to perfom a simulated rescue operation, e.g. after a car crash: from resuscitating a „patient" in situ, to transporting him in an ambulance to the emergency room at CSM. Whereas, the simulation of events in an operating room helps to familiarize oneself with the specifics of working in such a place, including the including preparations for surgery, behavior in an operating block or team cooperation.

After the realization of the scenario the students can watch or listen to their recorded performance. During the discussion with their academic supervisor they elaborate on both the correctly conducted action and those who recquire correction. It is an excellent way of acquiring knowledge, allowing one to be better prepared for the challenges of the doctors' face every day.

prof. Leszek Bieniaszewski,
Head of the Medical Simulation Centre

UNIQUE UNITS

Translational Medicine Centre

Implementation of innovative interdisciplinary projects focused on personalized medicine.In the 1st stage of its development modern imaging centre of the cardiovascular system with a back-up facility (the so-called co-working space) was opened and thereby, enabling joint work of representatives of various scientific fields and the Technology Transfer Centre;

In subsequent stages, the following units are planned to be established: Laboratory of Imaging, Laboratory of Functional Tests, Department of Clinical Research, Laboratory of Advanced medical analytics, Laboratory of Cellular and Tissue Culture GLP, Laboratory of GMP, Laboratory of Technology and Analysis of the Drug GLP.

The Bioinformatics and Biostatics Laboratory, Laboratory of Bioengineering, Laboratory and Office space for rent will also have its headquarters here.

Translational Medicine Centre is a place where the word of co-operation has got special value and significance. By placing the inventory of state-of-the-art equipment in a single area a core facility in its own right has been created, available not only to specific units, but also, first and foremost, to all employees intending to carry out innovative research projects, and enabling them to use of the dispersed potential of individual research groups efficiently within the university's strategic research areas.

Research projects are carried out in the centre through the implementation of the concept of translational medicine meant as a seamless way of transferring knowledge acquired during experiments to everyday clinical practice. In order to achieve the centre's main objectives, a proper infrastructure has been set up including spaces for clinical researches, laboratories providing latest imaging methods, laboratory, office, and commercial spaces facilitating innovative activities. Moreover, the proximity of the MUG's Technology Transfer Center (CTT) contributes to the efficiency of knowledge transfer.

The centre is located in the University Clinical Centre (UCC) compound, in the vicinity of modern clinical hospitals: CIM and CNM. As next stages, the following units are planned to be established: Laboratory of Imaging, Laboratory of Functional Tests, Department of Clinical Research, Laboratory of Advanced Medical Analytics, Laboratory of Cellular and Tissue Culture GLP, Laboratory of GMP, Laboratory of Technology and Analysis of the Drug GLP.

Experts of international recognition like Prof. Paul Grundeman of the Utrecht University and Prof. Anna Dominiczak, Deputy Director and Head of the College of Medical, Veterinary and Life Sciences of the University of Glasgow are directly involved in activities of the TMC, sharing their extensive experience in medical innovations and implementing the concept of personalized medicine into clinical practice.

Prof. Krzysztof Narkiewicz,
Chairman of the Centre's Scientific Council

UNIQUE UNITS

Early Phase Research Centre

The aim of the center is to conduct scientific research evaluating safety and efficiency of modern therapies in all therapeutic groups, in particular oncological, cardiological and cardiovascularin the early stages of development.

To conduct first-stage clinical trials is the main of goal our Centre. These trials evaluate new therapeutic substances in terms of their behaviour in the body and safety. They are also to determine a dose optimal for subsequent research stages.

Stage I research is an indispensable element in the development of any drug. The first administration of any new substance to a human undergoes particular supervision. Therefore, these tests are carried out in selected facilities equipped with appropriate infrastructure, medical instrumentation, and expert personnel. The University Clinical Centre (UCC) of the Medical University of Gdańsk is one of the largest clinical research centres in Poland. So far, however, mainly Stages II and III researches have been conducted there. The establishment of the First-Stage Research Centre provides the UCC with a unique opportunity to widen its offer by the Stage I research and to position our clinical hospital among the few selected, national institutions that have implemented this procedure. Currently, most clinical trials conducted at the UCC are either oncological or hematological. It is expected that by setting up this Centre other medical branches will get opportunities to be researched over. The unit operates based on its own operational procedures integrated with quality assessment system applying for the entire hospital.

Carefully selected staff has been trained in pharmacokinetics - they determine the mechanism and effects of every substance - in pharmacodynamics - they determine the effectiveness and adverse effects of the substances - in interpretation of preclinical results, and in providing guidelines for Stage I studies. The unit's employees have visited similar institutions abroad. In order meet the Centre's requirements, a Scientific Council has been appointed. The Council consists of the UCC's physicians with outstanding scientific achievements. It supervises the safety of patients participating in the research trials, the overall quality of the research process and identifies new research areas.

Prof. Jacek Jassem
Head Department of Oncology&Radiotherapy
Chairman of the Centre's Scientific Council

Rare Diseases Centre

Rare Diseases Centre was established at the Medical University of Gdańsk in 2019 with the purpose of coordinating scientific, didactic and organizational activities in the field of diseases classified as rare. It also aims at promoting the activity of the University in that respect, on both national and international scale.

Rare diseases are defined as the ones occurring in less than 5 people in the population of 10,000 (<1: 2,000 people). It is estimated 38 million people in Europe are affected. These are often congenital or genetically conditioned diseases, manifesting themselves either in childhood or adult life.

The establishment of the Centre will allow the MUG to adapt to the legislative and organizational regulations set by the European Union which aim to reduce the observed discrimination of patients with rare diseases in national healthcare systems and scientific research. It will also facilitate the implementation of the recently approved National Program for Rare Diseases and help in developing their common names and classifications (ORPHA numbers www.orpha.net).

The goal of the Centre is to consolidate the activities of the European reference centres established at the MUG (ERKNet, PaedCan, eUrogen) in terms of organization and funding solicitation for scientific and clinical research, education, creating registers, as well as in cooperation with existing Polish and international patient organizations.

The Rare Diseases Centre cooperates with a unit of the same name established within the structure of the University Clinical Centre (UCC), focused on integrated care of patients with selected rare diseases. This cooperation will result in acquiring new knowledge about rare diseases, creating new registers, facilitating access to complex diagnostic procedures and to the European Consultation Platform, and in developing contemporary methods of treatment. Providing both patients and doctors with the results of new scientific studies will consitute a value of its own.

Prof. Aleksandra Żurowska
Head of the Department of Paediatrics,
Nephrology and Hypertension

HOSPITAL

The immediate vicinity of the MUG and the University Clinical Centre favours mutual cooperation and realization of innovative scientific and implementation projects.

Advanced medical procedures

- multi-organ transplants
- multi-profile transplant centre: heart,
- kidneys, lungs, liver, pancreatic islands, cornea, medulla
- mechanical thrombectomy - the first child procedure in Poland
- radiotherapy and oncological chemotherapy
- hyperbaric medicine
- hematology for children and adults
- invasive cardiology and electrocardiology

Medical offer

- Treating patients in one the most modern hospital complexes in Europe
- top-class hospital equipment
- unique treatment opportunities in Northern Poland
- innovative methods of diagnosis and treatment
- hospital base: hospitals: University Clinical Centre, University Centre of Maritime and Tropical Medicine, University Centre of Family Medicine, University Dental Centre

Unique treatment facilities

- AO Spine Center – first in Central-Eastern Europe
- Centre for Treatment of Obesity and Metabolic Diseases
- Children's Intensive Therapy Department
- Early Phase Clinical Research Centre
- Rare Diseases Centre
- Familiar Hyperchilesterolemia Unit
- Coordinated treatment – Breast Cancer Unit, Prostate Unit
- Supraregional Centre for the Treatment of Drug-Resistant Epilepsy

THE MUG HOSPITAL

fot. Sylwia Mierzewska UCC

Jakub Kraszewski, CEO of the UCC

fot. Sylwia Mierzewska, UCC

The University Clinical Centre provides a complex medical infrastructure for the Medical University of Gdańsk. Cooperation with the University is part of our hospital's mission, Effectively treat, provide excellent education and support science. Our two insitutions both carry out similar tasks in the same place and at the same time, while pursuing two different, yet deeply connected social goals: patient care and training new medical staff.

The efficiency of the University Clinical Centre corresponds directly to the efficiency of the University. Stable financial situation, exceptional in comparison with other large clinical hospitals in Poland, gurantees both stable functioning of all our units as well as multiple development opportunities. The UCC is an innovative hospital in which new medical projects and clinical research are carried out.

With over 40 different medical specialties gathered under one roof, we have managed to achieve a synergy effect. Cooperation between clinics results in the exchange of knowledge, experience and information about individual patients. In the diagnostic and therapeutic process, we use new technologies and innovative treatment methods, drawing on the University's scientific potential.

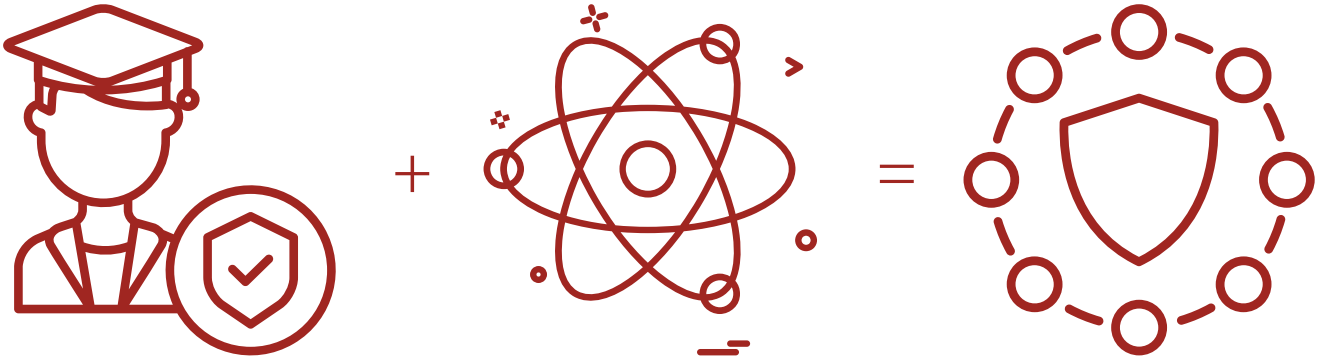
We live in symbiosis with the Medical University of Gdańsk - our effort to provide patients with the best possible care triggers the development of both science and education. This, in turn, is a part of our strategy, which guarantees that all patients shall be treated by specialists with the best educational background.

The future of our hospital is secured by a highly qualified staff whose knowledege and experience will be optimally used in the treatment of patients.

fot. Sylwia Mierzewska UCC

MISSION, VISION AND VALUES

MODERN EDUCATION AND RESEARCH FOR HEALTH AND THE DEVELOPMENT OF MEDICINE



MODERN EDUCATION

RESEARCH

FOR HEALTH AND THE DEVELOPMENT OF SCIENCE

Vision of the MUG in 2025:

- We are the leading medical university in the country and recognisable in the world, providing high quality education and research.
- We care about health and the development of medicine thanks to our graduates, employees and partners.
- We make up a modern and efficient organisation, inspiring students, doctoral students and employees to engage and develop.

Humanism

We care about better living conditions and needs of man, whether it is a student, a professor or a patient, because we are aware of our rights and duties.

Professionalism

We strive to achieve high quality results by doing our job diligently. We maintain effective communication; thus, we are able to efficiently cooperate among our associates, students and partners.

Proactivity

In carrying out our daily tasks, we are open to seeking unusual solutions to emerging research, teaching and organisational challenges. We are not afraid of problems; we treat them as an opportunity to improve ourselves and our University.

Partnership

We build a culture of partnership based on mutual respect between superiors and subordinates. We take responsibility for decisions and share authority in the development of our employees. We treat the diversity of individual members of the academic community as a source of innovation and creativity.

Common good

In our daily work, we strive for our own development; therefore, we contribute to the development of the entire community of our University. Academic tradition is our strength; it does not limit us in our search for new solutions. We strive to make all members of the academic community proud to be part of it.

STRATEGIC OBJECTIVES AND INITIATIVES

Strategy is the art of choice; it shows priorities but also areas that will not be developed. Defining strategic objectives, the authors of the Strategy were guided by the needs of students and doctoral students, employees, clinical units and the environment broadly understood (local community, authorities, patients and business partners).

The strategic vision presenting the image of the University in 2025 will be pursued through five strategic objectives. Therefore, the Strategy will be sustainable, and its result will be the development of the University in all key areas.

Education

The University offers the students high quality education, including soft skills, thanks to modernised curricula and education methods

Clinical activity

The stronger position of health care organisations and intensified cooperation with them in order to improve the quality of teaching, research and treatment

Research

The established position in education owing to the increase in the number of significant grants, publications, internationalisation of cooperation and effective commercialisation of research results

Organisation and people

The MUG is an efficient university relying on high organisational culture, supported by modern management methods

The employees are successful professionals who develop and use the support of the University and motivation and remuneration systems

STRATEGIC OBJECTIVE 1

The University offers the students high quality education, including soft skills, thanks to modernised curricula and education methods

STRATEGIC OBJECTIVE 2

The established position in education owing to the increase in the number of significant grants, publications, internationalisation of cooperation and effective commercialisation of research results

STRATEGIC OBJECTIVE 3

The stronger position of health care organisations and intensified cooperation with them in order to improve the quality of teaching, research and treatment

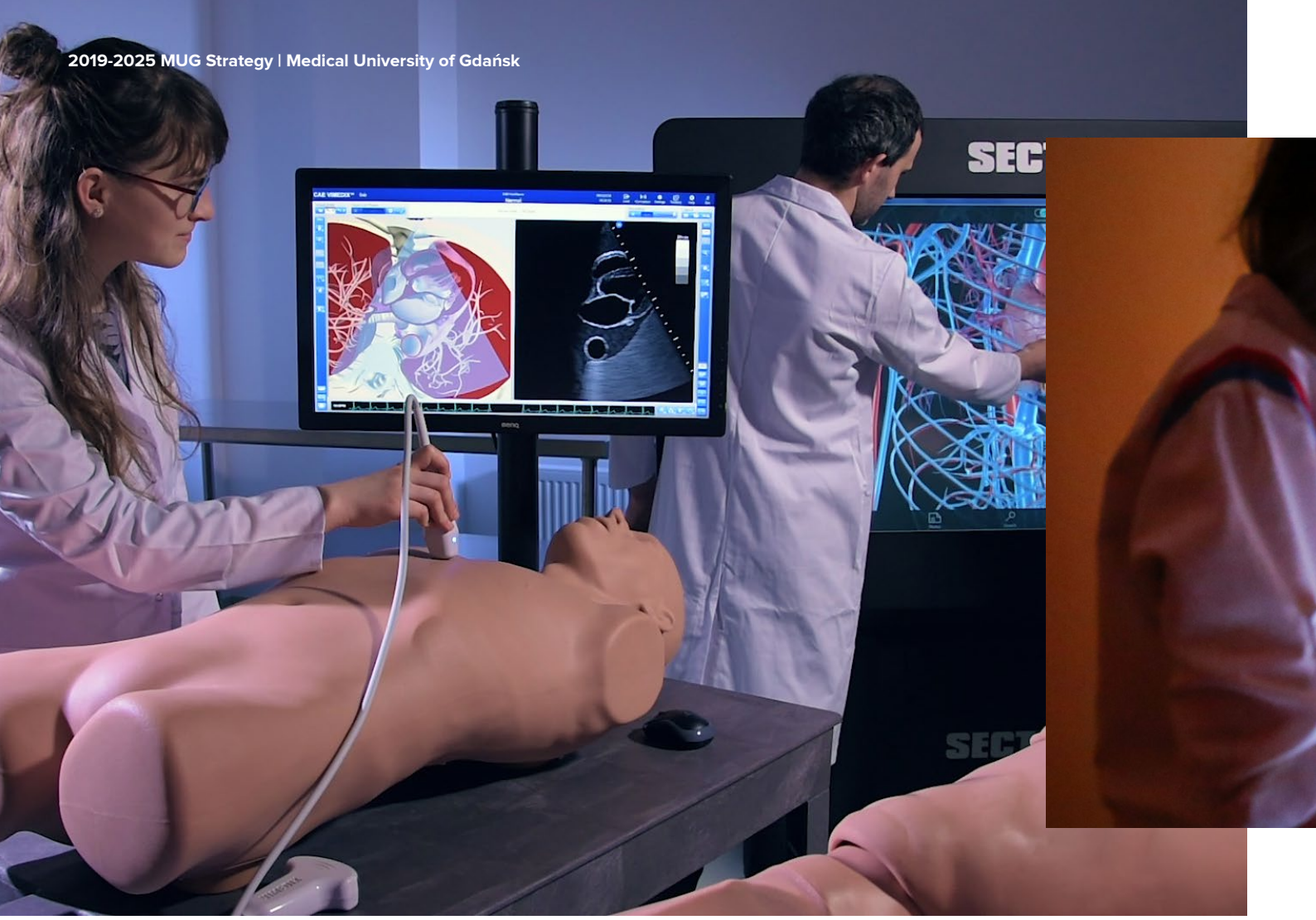
STRATEGIC OBJECTIVES AND OPERATIONAL AND SAMPLE STRATEGIC INITIATIVES FOR THE YEARS 2019-2025

STRATEGIC OBJECTIVE 4

The MUG is an efficient university relying on high organisational culture, supported by modern management methods

STRATEGIC OBJECTIVE 5

The employees are successful professionals who develop and use the support of the University and motivation and remuneration systems



STRATEGIC OBJECTIVE 1

THE UNIVERSITY OFFERS THE STUDENTS HIGH QUALITY EDUCATION, INCLUDING SOFT SKILLS, THANKS TO MODERNISED CURRICULA AND EDUCATION METHODS

Example of strategic initiatives

Diagnosis of teachers' didactic competences

Launch of a didactic course for university teachers and doctoral students taking into account soft competences

Dissemination of new methods and concepts of teaching, including e-learning and problematic, interdisciplinary and practical teaching

OPERATIONAL OBJECTIVE 1.1

Improvement of teaching competences of university teachers, including soft skills

OPERATIONAL OBJECTIVE 1.2

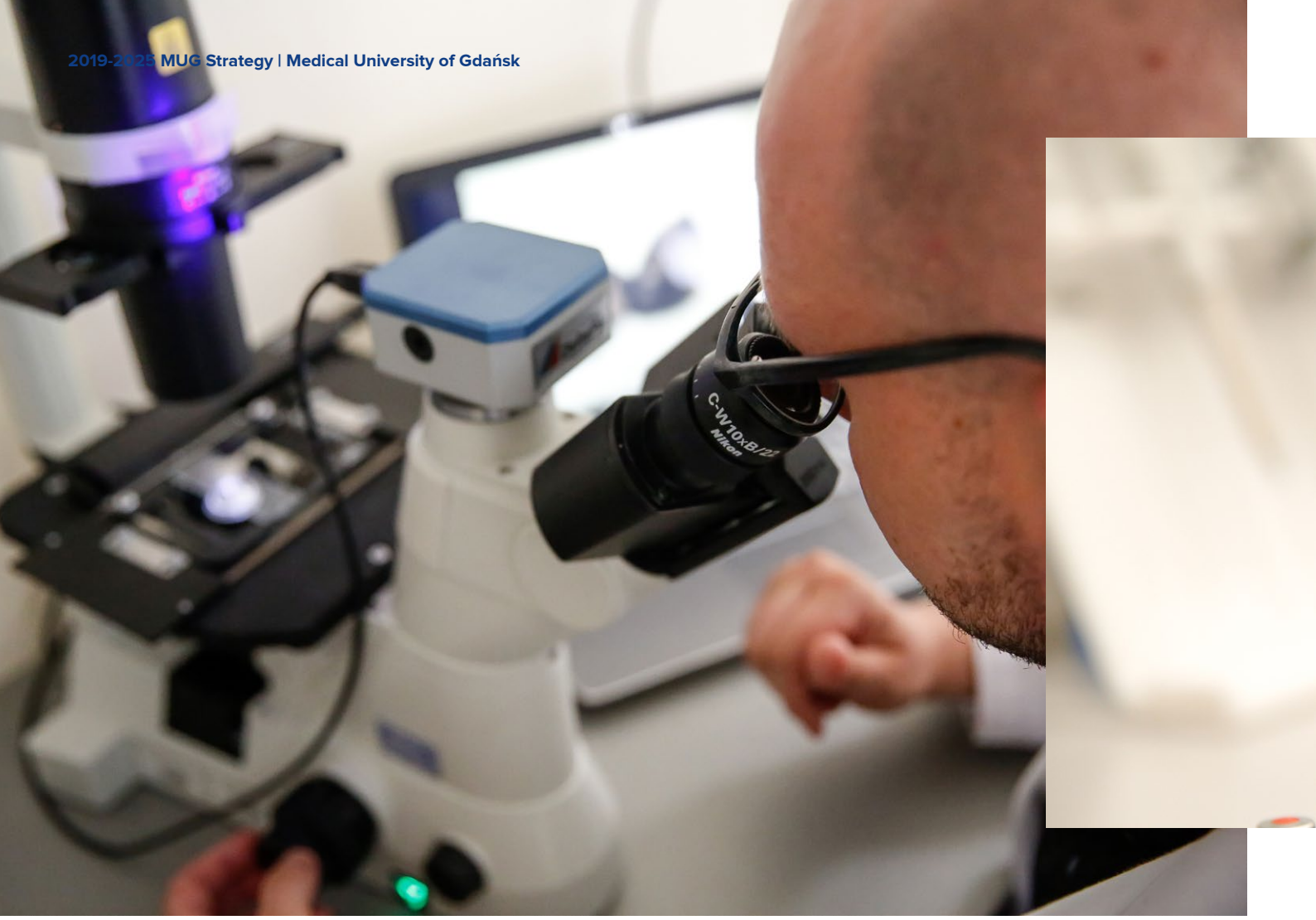
Modernisation of curricula and forms of education

OPERATIONAL OBJECTIVE 1.3

Ensuring the effective use of infrastructure, teaching process management systems and mechanisms of cooperation with external stakeholders

OPERATIONAL OBJECTIVE 1.4

Increasing student support and improving conditions for studying



STRATEGIC OBJECTIVE 2

THE ESTABLISHED POSITION IN EDUCATION OWING TO THE INCREASE IN THE NUMBER OF SIGNIFICANT GRANTS, PUBLICATIONS, INTERNATIONALISATION OF COOPERATION AND EFFECTIVE COMMERCIALISATION OF RESEARCH RESULTS

Example of strategic initiatives

Provide linguistic and statistical support to researchers

Selection of strategic directions of research

Development of research infrastructure in the strategic directions of the University, including through core facilities

OPERATIONAL OBJECTIVE 2.1

Definition and support of strategic research directions

OPERATIONAL OBJECTIVE 2.2

Increase of motivation and support of employees in scientific activity

OPERATIONAL OBJECTIVE 2.3

Internationalisation of scientific and research cooperation

OPERATIONAL OBJECTIVE 2.4

Intensification of commercialisation of study results

STRATEGIC OBJECTIVE 3

STRENGTHENED POSITION OF THE UNIVERSITY'S HEALTH CARE INSTITUTIONS AND INTENSIFIED COOPERATION WITH THEM IN ORDER TO IMPROVE THE QUALITY OF TEACHING, RESEARCH AND TREATMENT

Example of strategic initiatives

Development of a system for conducting scientific research, including non-commercial clinical research by MUG employees in clinical units

Completion of construction and fitting of the Centre for Non-Invasive Medicine

Promoting forms of employment in clinical institutions conducive to the achievement of the University's objectives

OPERATIONAL OBJECTIVE 3.1

Improvement of cooperation between health care institutions and the University

OPERATIONAL OBJECTIVE 3.2

Support for the development of commercial and non-commercial scientific research

OPERATIONAL OBJECTIVE 3.3

Support for development of clinical infrastructure and offer of health services

OPERATIONAL OBJECTIVE 3.4

Improvement of the image, maintaining the position of the regional and national leader in health care and an observable participation in shaping system changes

STRATEGIC OBJECTIVE 4

THE MUG IS AN EFFICIENT UNIVERSITY RELYING ON HIGH ORGANISATIONAL CULTURE, SUPPORTED BY MODERN MANAGEMENT METHODS

Example of strategic initiatives

Improvement of information flow at the University

Implementation of electronic document workflow

Implementation of the administrative process management system in order to optimise their work

OPERATIONAL OBJECTIVE 4.1

Modernisation of the organisational structure and adaptation to the University's strategy and the requirements of the Act 2.0

OPERATIONAL OBJECTIVE 4.2

Improvement of administrative processes

OPERATIONAL OBJECTIVE 4.3

Development of the infrastructure of management systems/IT systems

OPERATIONAL OBJECTIVE 4.4

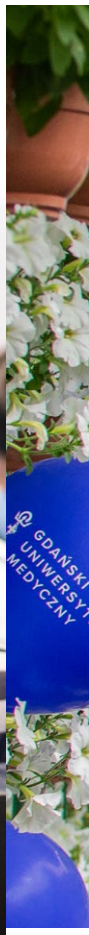
Improvement of the University's organisational culture

OPERATIONAL OBJECTIVE 4.5

Introduction of voluntary elements of external evaluation of the University's activity

OPERATIONAL OBJECTIVE 4.6

Administrative support for the process of internationalisation of the University



STRATEGIC OBJECTIVE 5

EMPLOYEES ARE SUCCESSFUL PROFESSIONALS AND DEVELOP WITH THE UNIVERSITY'S SUPPORT, MOTIVATION AND REMUNERATION SYSTEMS

Example of strategic initiatives

Establishment of an employee competence development system

Building a new motivation system for all employees

Creation of new career paths for university teachers, in accordance with the Act 2.0

OPERATIONAL OBJECTIVE 5.1

Professional organisation of human capital management

OPERATIONAL OBJECTIVE 5.2

Professional human capital management processes

OPERATIONAL OBJECTIVE 5.3

Strengthening the competences and role of the University's managers


MEDICAL UNIVERSITY OF GDAŃSK