

Registration form

This is a registration form for Host Institutions wanting to establish a Dioscuri Centre of Scientific Excellence within Dioscuri 4 call.

Registration form for Polish research institution

1. Research institution data (name and address): The University of Rzeszow, Rejtana 16c, 35-959 Rzeszow.
2. Type of research institution¹ (select one from the 9 listed options):
 - 1) **higher education institution**
 - 2) federation of higher education institutions established on the territory of Poland
 - 3) research unit of the Polish Academy of Sciences
 - 4) research institute
 - 5) international research institute
 - 6) Lukasiewicz Centre
 - 7) Institute of Lukasiewicz Centre
 - 8) The Polish Academy of Arts and Sciences
 - 9) other units which carry out independently and continuously mainly research activity
3. Head of the institution: Prof. Sylwester Czopek Ph.
4. Contact information of designated person(s) for applicants and the NCN: first and last name, position, e-mail address, phone number, correspondence address: Prof. Artur Mazur M.D. Ph., The Vice-rector for the College of Medical Sciences, prorektor.cm@ur.edu.pl, phone (17) 872 1153
5. Research discipline in which the strong international position of the institution ensures establishing a Dioscuri Centre (select one from the 25 listed disciplines):

¹ As specified in "Addressees of the call"

Natural Sciences and Technology

- Mathematics
- Fundamental constituents of matter
- Condensed matter physics
- Chemistry
- Materials
- Computer science and informatics
- Systems and communication engineering
- Production and processes engineering
- Astronomy and space research
- Earth sciences

Life Sciences

- Molecular biology, structural biology, biotechnology
- Genetics, genomics
- Cellular and developmental biology
- Biology of tissues, organs and organisms
- Human and animal non-infectious diseases
- Human and animal immunology and infection
- X Diagnostic tools, therapies and public health
- Evolutionary and environmental biology
- Applied life sciences and biotechnology

Arts, Humanities and Social Sciences

- Fundamental questions of human existence and the nature of reality
- Culture
- The study of the human past

- Individuals, institutions, markets
- Norms and governance
- Human nature and human society

6. Description of important research achievements from the selected discipline from the last 5 years including a list of the most important publications, patents, other (*up to one page in A4 format*): Employees of the College of Medical Sciences (KNM), within discipline of “Diagnostic tools, therapies and public health”, with experience gained in Germany as well in Japan, USA, and France, carry out interdisciplinary international projects, the importance of which in science is currently underlined. Within developed university’s research infrastructure including among the others the Natural and Medical Center for Innovative Research Center, the university’s scientific staff conducts research on a global scale on cellular immunotherapy, one of the most modern methods of fighting cancer. College of Medical Sciences received a nomination (as one of three universities) for the Elsevier Research Impact Leaders Award - awards for the greatest impact on the perception of Polish science in the world, in the category of "medical sciences". Elsevier Research Impact Leaders Award is part of a global initiative that aims to support research and the advancement of science across multiple disciplines. The nominations are a recognition of outstanding research institutions that have the greatest impact on scientific research and contribute to better recognition of Polish science in the world.

Among the numerous recognized achievements of the staff of the College of Medical Sciences, which are not technically possible to be listed in that Form for Host Institution, for the purpose of the Dioscuri Centre of Scientific Excellence, we would like to underline that Dr. Paweł Wisz, employee of the College of Medical Sciences and working for the Cracow Hospital “Na Klinach”, is the first specialist that received the qualifications in the field of training in robotic surgery with the use of the da Vinci robotic system in Poland. Dr. Paweł Wisz is a member of the board of the European Robotic Urological Society responsible for the standardization of training in robotic surgery. We believe that the COVID-19 situation is a great opportunity for Polish, emerging centers of surgical robotics and it is really important to adapt and launch a sufficiently large number of such professional medical and surgical training courses for future doctors as soon as possible.

7. List of no more than 3 important research projects from the selected discipline awarded in national and international calls to the institution in the last 5 years (title, name of PI, source of funding, amount of funding):

The College of Medical Sciences headed by prof. Artur Mazur M.D. Ph. and the 1st Department of Paediatrics, Pediatric Endocrinology at the Provincial Clinical Hospital No. 2 in Rzeszów are certified by the reference center in pediatric diabetology.

Only a few dozen hospitals in the world have such a certificate. In Poland, apart from Rzeszów, only Katowice, Warsaw and Opole can boast this certificate.

The College of Medical Sciences of the University of Rzeszów was certified thanks to its participation in the international SWEET project, which is one of the activities of the International Society for Pediatric and Adolescent Diabetes (ISPAD) - an international organization based in Berlin, which aims to promote clinical and basic science, research, education and advocacy in diabetes in children and adolescents.

The certificate confirms belonging to the world leaders in terms of treatment and research in the field of pediatric diabetology. To obtain it, the center must have passed an external audit on medical procedures, competence of personnel and equipment as well as other requirements including the cooperation with patient associations, the possibility of treating foreign patients and conducting educational programs for children and their carers in accordance with international standards

8. Description of the available laboratory and office space for the Dioscuri Centre (*up to one page in A4 format*):

The University of Rzeszow is currently in the process of implementing a few significant projects:

- The University Teaching Hospital;
- Interdisciplinary Centre for Preclinical and Clinical Research that aims to conduct biomedical research, beginning from molecular and biophysical research to include in vitro and in vivo tests. Available modern research infrastructure will enable the establishment and development of cooperation with companies/ institutions from the biomedical, biotechnological and pharmaceutical industries;
- The University's Podkarpackie Athletics Centre – a modern sports and research centre which on the one hand is a fully-fledged sports arena, but on the other hand a modern research laboratory.

The University's existing centers and laboratories:

- Natural and Medical Center for Innovative Research;
- A Multi-purpose Medical Simulation Centre – a facility equipped with highly technologically advanced patient simulators. The simulation rooms are equipped with necessary medical equipment and audio-video system for recording simulation sessions that will enhance students' acquisition of highly specialized skills;
- Interdisciplinary Center for Computer – based Modelling;
- Center for Technological and Basic Research Transfers;
- Aeropolis Plant Biotechnology Laboratory;
- Center for Innovation and Transfer of Technical and Natural Knowledge;
- Center for Innovation and Implementations in Food Industry;
- Center for Technological Innovations;
- Microelectronics and nanotechnology Research and Didactics Center;

- Environment Research and Innovation Center for Biomass and Wastes Processing into Energy.

9. List of the available research equipment for the Dioscuri Centre:

Mentioned in point 8 research infrastructure is equipped with modern test apparatus and aimed at supporting the current staff and students in conducting effective research, as well as attracting future scientific partners including these highly recognized ones.

10. List of the additional benefits (other than listed in call text) that the Institution declares to provide for the Dioscuri Centre (i.e.: additional funds, personal benefits, other) (*up to one page in A4 format*):

The University of Rzeszow will deliver all the required support related with the PI relocation to Rzeszow.

11. Other information about the internationalisation of the research institution, international researchers employed at the institution, the availability of English language seminars etc. (*up to one page in A4 format*):

In 2018, at the College of Medical Sciences, the education of foreign students began under the MD English Division program.

The English-language medicine study program is based on a 6-year European curriculum including pre-clinical and clinical classes and internships conducted exclusively in English, and is identical to the Polish medicine program. Currently, 60 students are studying English Division, including 14 third-year students, 23 second-year students and 22 first-year students mostly with the Germany origins.

The university organizes open lectures and workshops with the active participation of students with outstanding scientists from foreign research centers, incl. University of Foggia, Italy, University of Heidelberg and Medi Start, Hamburg, Germany (September 2018 and the Director of Medi Start visited WM; a mutual cooperation agreement was signed regarding recruitment for medicine in English), Guangdong Pharmaceutical University from China (February 2018, Associate Professor of Guangdong Metabolic Disease Research Center of Integrated Chinese and Western Medicine - during his five-day stay, he did a teaching internship and conducted 8 hours of classes in English for the 2nd and 3rd year of medicine). As part of the Erasmus + program, the University has signed partnership agreements covering the exchange of students for studies and apprenticeships as well as of staff for the purpose of conducting didactic classes and training purposes.