

Ordinance No. 68/2025**Of June 9, 2025****issued by the Rector of the Medical University of Lodz
on the announcement of recruitment and limit of admissions to****the International Doctoral School and the list of places at the International Doctoral School
awarded to research and teaching units of the Medical University of Lodz for the academic
year 2025/2026**

Pursuant to Article 23 Item 1 of the Act of 20 July 2018 – Law on Higher Education and Science (Journal of Laws of 2024, Item 1571, as amended), and § 13 Item 2 and § 12 Item 3 of the Statutes of the Medical University of Lodz of June 27 2019, as amended, in connection with § 6 Item 6 of the Resolution No. 68/2024 of December 19, 2024 adopted by the Senate of the Medical University of Lodz on the procedure of recruitment to the International Doctoral School in the academic year 2025/2026, the following Directive is hereby issued:

§ 1

1. The following is hereby announced for the academic year 2025/2026:
 - 1) recruitment to the International Doctoral School, run by the Medical University of Lodz, in the following disciplines: pharmaceutical sciences, medical sciences, health sciences;
 - 2) limit of admissions to the International Doctoral School for each of the disciplines referred to in Point 1, as specified in Appendix No. 1 hereto;
 - 3) list of places at the International Doctoral School awarded to research and teaching units of the Medical University of Lodz, enclosed as Appendix No. 2 hereto.
2. The recruitment to the International Doctoral School is conducted for places awarded to research and teaching units of the Medical University of Lodz, within the limit of admissions referred to in Item 1 Point 2.

§ 2

The Directive becomes effective July 1, 2025.

RECTOR: *prof. Janusz Piekarski, MD, PhD*

Promulgation of the legal act:

- Intranet/Public Information Bulletin

**Admission limits to the International Doctoral School
conducted by the Medical University of Lodz
for the academic year 2025/2026**

Discipline	Admission limit	Program „IMPLEMENTATION DOCTORATE„ admission limit	Competition NCN „OPUS ” admission limit	Competition NCN „SONATA ” admission limit	Competition NCN „PRELUDIUM BIS ” admission limit
Pharmaceutical Sciences	3	1	1	0	0
Medical sciences	45	2	2	3	1
Health Sciences	7	1	1	0	0

**List of places at the International Doctoral School awarded to the University reaserch and teaching units in academic year
2025/2026**

MEDICAL SCIENCES						
No.	Unit	Head of Unit	Number of places	Proposed supervisor	Topic of dissertation	Candidate's profile (completed field of study)
1	Department of Pharmaceutical Biochemistry and Molecular Diagnostics	prof. dr hab. n. farm. Ewa Balcerczak	1	prof. dr hab. n. farm. Ewa Balcerczak	Molecular analysis in glioma.	Medical Analytics
2	Department of Oral Pathology	dr hab. n.med. Sebastian Kłosek	1	dr hab. n.med. Sebastian Kłosek	The role of supportive therapy with hyaluronic acid in oral mucosal and periodontal disease.	Medical and dental
3	Department of Plastic, Reconstructive and Aesthetic Surgery	prof. dr hab. n. med. Bogusław Antoszewski	2	1. dr hab. n. med. Anna Kasielska-Trojan 2. dr hab. n. med. Marta Fijałkowska	1. Analysis of body-perception in women after reconstructive and aesthetic breast surgery using eye-tracking technology. 2. The effect of platelet-rich-plasma on fat graft survival.	Medicine
4	Department of Psychodermatology	prof. dr hab. n.med. Anna Zalewska-Janowska	2	prof. dr hab. n.med. Anna Zalewska-Janowska	1a. Employment of Virtual Reality (VR) in dignostics and treatment of chronic diseases of the skin and nervous system.	Medical, Psychology, Pharmacy, Cosmetology,

					1b. Bio-psycho-social model in specialist dermatological and psychodermatological care.	Nursing, Midwifery, Physiotherapy, Biology.
5	Clinic of Internal Medicine and Transplant Nephrology	prof. dr hab. n. med. Ilona Kurnatowska	1	prof. dr hab. n. med. Ilona Kurnatowska	The impact of visceral and subcutaneous fat tissue content assessed through radiological imaging methods on the occurrence of urolithiasis.	Medicine
6	Department of Clinical Genetics	prof. dr hab. n.med. Agnieszka Zmysłowska	1	dr hab. n. med. Edyta Borkowska	Application of digital PCR and liquid biopsy to personalize therapy and monitoring of the disease in patients with solid tumors.	Pharmacy
7	Department of Maxillofacial Surgery	prof. dr hab. n.med. Marcin Kozakiewicz	1	prof. dr hab. n.med. Marcin Kozakiewicz	Qualitative evaluation of bone in osteotomy gaps and the influence of cortical substance on the maintenance of skeletal anchorage.	Dentistry, Medical and dental.
8	Department of Gastrointestinal Diseases	prof. dr hab. n.med. Ewa Małecka-Wojcieszko	3	1. prof. dr hab. n.med. Ewa Małecka-Wojcieszko 2. dr hab. n.med. Anna Mokrowiecka 3. dr hab. n.med. Renata Talar-Wojnarowska	1a. Early detection of pancreatic cancer (PDAC) with EUS imaging and new biomarkers:PAC-Mann Assay, Cholinesterase, and N-Glucan. 1b. Search for the new prognostic pancreatic cancer (PDAC) biomarkers 2a. The importance of selected intestinal bacteria in the perception of stress in patients with nonspecific inflammatory bowel diseases - the microbiome-gut-brain pathway. 2b. Early detection of Barrett's esophagus and esophageal cancer using the Cytosponge Cell Collection Device.	Medicine

					3. Clinical significance of selected biomarkers for predicting exacerbation of inflammatory bowel diseases.	
9	Department of Orthopaedics and Traumatology	prof. dr hab. n.med. Marcin Domżański	2	prof. dr hab. n.med. Marcin Domżański	1a. Miniinvasive conservative therapy of osteoarthritis of the knee. 1b. Multifactorial analysis of treatment methods and mortality after proximal femur fractures.	Medicine
10	Department of Paediatrics, Nephrology and Immunology	prof. dr hab. n.med. Marcin Tkaczyk	1	prof. dr hab. n.med. Marcin Tkaczyk	Study of respiratory function in children with severe congenital urinary tract abnormalities.	Medicine
11	Department of Biomedicine and Genetics	prof. dr hab. n.med. Ewa Brzezińska-Lasota	2	1. prof. dr hab. n.med. Ewa Brzezińska-Lasota 2. dr hab. n. med. Karolina Czarnecka-Chrebelska	1. Assessment of the relationship between <i>Fusobacterium nucleatum</i> infection and the activation of the TGF β /SMAD signaling pathway and its epigenetic regulation in intestinal cancer- is there a relationship with cancer progression? 2. SCFAs and their potential therapeutic use in the microbiota gut-brain axis disorders.	Biotechnology, Medical, Biology, Medicine
12	Department of Hemostasis Disorders	prof. dr hab. n.med. Jacek Treliński	1	prof. dr hab. n.med. Jacek Treliński	Haemostasis disorders in blood diseases.	Medicine
13	Department of Biomolecular Chemistry	dr hab. n.med. Katarzyna Gach-Janczak	3	1. dr hab. n.med. Katarzyna Gach-Janczak 2. dr hab. n.med. Renata Perlikowska	1. Study of the anticancer potential of new synthetic heterocyclic compounds.	Pharmacy, Cosmetology, Biotechnology, Medical,

				3. dr hab. n. med. Justyna Piekielna-Ciesielska	2. Peptides in the regulation of cellular processes: therapeutic potential. 3. Searching for new peptide ligands with analgesic and anti-inflammatory activity.	Chemistry, Medical Analytics, Electroradiology, Physiotherapy, Biology, Environmental protection, Environmental protection engineering, Nursing, Public health, Genetics, Microbiology, Dietetics.
14	Department of Non-Invasive Cardiology	prof. dr hab. n.med. Małgorzata Lelonek	2	prof. dr hab. n.med. Małgorzata Lelonek	1a. Impact of iron deficiency in all spectrum of heart failure. 1b. New prognostic algorithms including AI in heart failure.	Medicine
15	Department of Functional Genomics	dr hab. n.med. Elżbieta Płuciennik	2	dr hab. n.med. Elżbieta Płuciennik	1a. Analysis of central nervous system tumors based on deconvolution methods and predictive algorithms. 1b. Functional characterization of AP-2 transcription factors family using in silico analyses and molecular research.	Biotechnology
16	Department of Surgical and Oncological Gynaecology	prof. dr hab. n.med. Jacek Wilczyński	2	1. prof. dr hab. n.med. Jacek Wilczyński 2. dr hab. n.med. Maria Szubert	1. The activity of the JAK/STAT pathway and its potential role in the treatment of endometriosis. 2. Value of ultrasound examination for diagnosis of adenomyosis and for monitoring of pharmacological therapy efficacy.	Medicine

17	Department of Immunopathology	prof. dr hab. n.med. Rafał Pawliczak	3	1. prof. dr hab. n.med. Rafał Pawliczak 2. dr hab. n.med. Paulina Kleniewska 3. dr hab. n.med. Joanna Wieczfińska	1. Molecular mechanisms in airway inflammation. 2. The probiotics role in inflammation regulation. 3. Oxidative stress in airway inflammation.	Cosmetology, Nursing, Midwifery, Biotechnology, Medical, Electroradiology, Laboratory Medicine, Biochemistry, Biology, Chemistry
18	Department of Biochemistry	prof. dr hab. n.med. Jakub Fichna	4	1. prof. dr hab. n. med. Urszula Lewandowska 2. prof. dr hab. n.med. Jakub Fichna	1a. Evaluation of the anticancer potential of natural extracts in 3D cell culture models. 1b. Evaluation of the anti-inflammatory potential of natural extracts in 3D cell culture models. 2a. Dietary habits in patients with Parkinson's disease - role in the course and therapy of the disease. 2b. Study of the mechanisms of metastasis in colorectal cancer with liver metastases.	Biotechnology, Medical, Biology, Pharmacy, Dietetics.
19	Department of Cell Culture and Genomic Analysis	prof. dr hab. n. med. Agnieszka Piastowska-Ciesielska	1	dr hab. n. med. Aleksandra Piechota-Polańczyk	Search for new mechanical and hemodynamic markers for analyzing the progression of aortic aneurysms before and after surgical repair, using numerical tools including artificial intelligence models	Pharmacy, Nursing, Physiotherapy, Biotechnology, Medical, Biology, Medical Engineering, Veterinary.
20	Department of General and	prof. dr hab. n.med. Janusz Strzelczyk	1	prof. dr hab. n. med. Adam Durczyński	Evaluation of bacteriological tests results and multifactorial analysis of clinical and pathophysiological	Medicine

	Transplantation Surgery				parameters in patients operated for appendicitis.	
21	Department of Biomedicine and Experimental Surgery	dr hab. n.med. Zbigniew Pasieka	3	1. dr hab. n.med. Zbigniew Pasieka 2. dr hab. inż. Radosław Wach	1a. Implementation of tools for developing therapeutic prototypes using computational methods. 1b. Abdominal injuries in the context of postoperative complications. 2. Evaluation of the relationship between the properties of the selected polysaccharide and its antimicrobial activity, confirmation of the safety and biological activity of the biomaterial based on the polysaccharide with precisely defined properties in in vitro and in vivo studies towards its potential use in wound healing.	Medical, Biotechnology, Pharmacy, Materials Engineering, Chemistry, Biomedical Engineering.
22	Department of Infectious Diseases and Hepatology	prof. dr hab. n.med. Anna Piekarska	1	prof. dr hab. n.med. Anna Piekarska	Elstographic evaluation of the spleen as a prognostic of liver cirrhosis.	Medicine
23	Department of Pathology of Pregnancy and Gynaecology	prof. dr hab. n.med. Piotr Sieroszewski	1	prof. dr hab. n.med. Piotr Sieroszewski	Obesity and diabetes as risk factors of late-onset pre-eclampsia.	Medicine

24	Department of Chemistry and Clinical Biochemistry	prof. dr hab. n.med. Ireneusz Majsterek	1	prof. dr hab. n.med. Ireneusz Majsterek	Studying the neuroplasticity model of attention deficit hyperactivity disorder in vitro.	Medicine, Biotechnology, Pharmacy
25	Department of Haemostasis and Haemostatic Disorders	prof. dr hab. n.med. Cezary Watała	2	1. prof. dr hab. n.med. Cezary Watała 2. dr hab. n. med. Tomasz Przygodzki	1. The effect of antipsychotic drugs on platelet activation and reactivity in patients with schizophrenia. 2. Monitoring of the procoagulant phenotype of platelets in various pathological conditions characterized by increased risk of cardiovascular disease.	Pharmacy, Biotechnology and all fields of study with a biological-medical profile of education
26	Clinic of Neurosurgery, Spine Surgery and Peripheral Nerves	dr hab. n.med. Maciej Radek	1	dr hab. n.med. Maciej Radek	Analysis of risk factors for delirium in the perioperative period in patients surgically treated for spinal diseases.	Medicine
27	Department of Internal Diseases and Clinical Pharmacology	prof. dr hab. n. med. Marlena Broncel	1	prof. dr hab. n. med. Marlena Broncel	Effect of Lp(a) on the development of polyarteriosclerosis and vascular endothelial dysfunction.	Medicine
28	Immunology and Allergy Clinic	dr hab. n.med. Maciej Chałubiński	2	1. dr hab. n. med. Aleksandra Wardzyńska 2. dr hab. n.med. Marcin Kurowski	1. The influence of biological treatment of severe bronchial asthma on the immunological mechanisms of inflammation and antiviral response. 2. Assessment of the inflammatory process in the respiratory tract in adults with food allergy.	Medicine
29	Department of Genetic Cancer Predisposition	dr hab. n. med. Agata Pastorczak	1	dr hab. n. med. Agata Pastorczak	Whole-genome identification of structural variants and sequence mutations predisposing to acute lymphoblastic leukemia in children	Biotechnology, Laboratory Diagnostics.

					uniformly treated according to AEIOP-BFM 2017 protocol.	
30	Department of Haematology	prof. dr hab. n.med. Agnieszka Wierzbowska	3	1. prof. dr hab. n.med. Agnieszka Wierzbowska 2. dr hab. n. med. Bartosz Puła 3. dr hab. n. med. Agnieszka Pluta	1. The use of cladribine in the treatment of acute myeloid leukemia with particular focus on IDH1 and IDH2 mutations – an in vitro study. 2. Clinical and molecular factors determining the effectiveness of treatment of chronic lymphocytic leukemia and its aggressive variants. 3. The assessment of immunological system in bacterial infection in acute myeloid leukemia patients with posttreatment aplasia.	Medicine
31	Department of Radiotherapy	prof. dr hab. n.med. Jacek Fijuth	1	dr hab. n.med. Leszek Gottwald	To assess the correlation of the dose absorbed by selected heart structures and the limitation of their functions assessed by ECHO before and after radiochemotherapy of stage III lung cancer. Application of the STAR autocontouring algorithm to optimize contouring of radiosensitive critical organs in radical radiation therapy of lung malignancies.	Medicine
32	Department of Biomedical Chemistry	dr hab. n. med. Katarzyna Lubecka-Gajewska	1	dr hab. n. med. Katarzyna Lubecka-Gajewska	Peptide lunasin as a promising anticancer "epi-drug" modulating the epigenetic machinery and its beneficial effects in adjuvant therapy: validation of hypothesis and design of novel chemopreventive strategies.	Biotechnology, Dietetics.

33	Department of Geriatrics	prof. dr hab. n.med. Tomasz Kostka	1	prof. dr hab. n.med. Tomasz Kostka	Evaluation of the effectiveness of functioning assessment methods in older adults.	Medicine
34	Department of General Dentistry	prof. dr hab. n.med. Jerzy Sokołowski	1	dr hab. n. med. Kinga Bociong	Analiza potencjału remineralizacyjnego oraz wybranych właściwości eksperymentalnego żywiczego kompozytu stomatologicznego zawierającego dodatki biaktywne.	Medical and dental.
35	Department of Neurology and Stroke	prof. dr hab. n.med. Andrzej Głąbiński	1	prof. dr hab. n.med. Andrzej Głąbiński	Molecular and cellular mechanisms of polyphenols and their metabolites impact on glial cells.	Biotechnology.
36	Department of Orthodontics	dr hab. n.med. Konrad Małkiewicz	1	dr hab. n.med. Konrad Małkiewicz	Assessment of selected properties of composite materials used in orthodontic treatment.	Medical and dental.
37	Department of Molecular Neurochemistry	dr n.med. Malwina Lisek	1	dr hab. n.med. Tomasz Boczek	The impact of mycotoxins in food on the functioning and development of central nervous system neurons.	Dietetics
38	Department of Affective and Psychotic Disorders	dr hab. n.med. Dominik Strzelecki	2	dr hab. n.med. Dominik Strzelecki	Biomarkers of psychiatric crisis and suicide risk in patients with borderline personality disorder. Ghrelin in immunometabolic depression and microbiota.	Medicine
39	Department of Molecular Mechanisms of Cell	dr hab. n. med. Katarzyna Sobierajska	2	dr hab. n. med. Katarzyna Sobierajska	1a. Impact of Gallic Acid Metabolites on the Invasive Phenotype of Abdominal Tumours.	Biotechnology, Biology.

					1b. Evaluation of the Potential of Selected Ferulic Acid Derivatives to Modulate the Invasive Capacity of Solid Tumours.	
40	Department of Clinical Toxicology	prof. dr hab. n. med. Tadeusz Pietras	1	dr hab. n. med. Marcin Kosmalski	Assessment of the correlation between pancreatic cancer and carbohydrate metabolism disorders.	Medicine
41	II Department of Cardiology	prof. dr hab. n.med. Jarosław Drożdż	1	prof. dr hab. n.med. Jarosław Drożdż	Transthyretin amyloidosis is one of known causes of heart failure with preserved ejection fraction...	Medicine
42	Department of Endocrinology and Metabolic Diseases	prof. dr hab. n.med. Małgorzata Karbownik-Lewińska	2	prof. dr hab. n.med. Małgorzata Karbownik-Lewińska	1a. Molecular and biochemical markers of oxidative stress in women of reproductive age and in experimental hyperestrogenism – effects of thyroid hormone imbalance, Endocrine Disruptors and Thyroid Function – Clinical and Experimental Insights into Thyroid Dysfunction.	Pharmacy, Biotechnology, Medical, Biology, Chemistry, Biophysics.
43	Department of Pharmacology and Toxicology	prof. dr hab. n.med. Edward Kowalczyk	1	dr hab. n. med. Michał Karbownik	Extracellular vesicles and secondary metabolites – new therapeutic strategies in neuropsychiatry.	Medical, Pharmacy, Biotechnology.
44	Rheumatology Clinic	dr hab. n.med. Joanna Makowska	4	1. dr hab. n.med. Joanna Makowska 2. dr hab. n.med. Anna Lewandowska-Polak	1a. Assessment of gastrointestinal involvement and integrity of intestinal epithelial barrier in patients with scleroderma. 1b. Analysis of factors influencing persistent with biologic therapy in patients with arthritis. 2a. Interdisciplinary cooperation of pulmonologist and rheumatologist in the diagnosis and treatment of interstitial lung diseases. New approaches and challenges.	Medicine

No.	Unit	Head of Unit	Number of places	Proposed supervisor	Topic of dissertation	Candidate's profile (completed field of study)
1	Coordinated Care	dr n.med. Katarzyna Wielemborek-Musiał	1	dr hab. n. o zdrowiu Dorota Kilańska	Assessment of digital competencies in healthcare.	Nursing
2	Department of Nutrition and Epidemiology	dr hab. n.med. Ewelina Gaszyńska	2	1. dr hab. n.med. Ewelina Gaszyńska 2. dr hab. n.med. Małgorzata Godała	1. The influence of intrauterine programming on the development of gut microbiota in newborns 2. Assessment of the role of diet and nutritional status for the course of systemic diseases.	Dietetics
3	Psychosocial Rehabilitation Department	dr hab. n. o zdrowiu Magdalena Wrzesińska	2	dr hab. n. o zdrowiu Magdalena Wrzesińska	1a. Psychosocial and cultural determinants of the conduct of clinical trials. 2. Socio-cultural and ecological determinants of equal access to health and well-being.	Medical, Physiotherapy, Veterinary.
4	Department of Gerontology	dr hab. n. o zdrowiu Joanna Kostka	1	dr hab. n. o zdrowiu Joanna Kostka	The use of physiotherapeutic methods to improve the functional capacity of the elderly.	Physiotherapy
5	II Department of Cardiology	prof. dr hab. n.med. Jarosław Drożdż	1	dr hab. n.med. Katarzyna Piestrzeniewicz	Quality of life in patients with heart failure.	Management and Marketing.
6	Department of Geriatrics	prof. dr hab. n.med. Tomasz Kostka	2	1. dr hab. n. o zdrowiu Anna Gawron-Skarbek 2. dr hab. n. o zdrowiu Agnieszka Guligowska	1. The role of the gut microbiome in the health of older adults – assessment of biomarkers, modulating factors and the impact of selected functional food ingredients. 2. Development and evaluation of the effectiveness of methods for preventing malnutrition and	Medical, Physiotherapy, Dietetics, Public health, Rescue, Biological sciences.

No.	Unit	Head of Unit	Number of places	Proposed supervisor	Topic of dissertation	Candidate's profile (completed field of study)
1	Department of Medical Biology	dr hab. n.farm. Przemysław Sitarek	1	dr hab. n.farm. Przemysław Sitarek	Production of biologically active compounds and recombinant proteins in different cellular models.	Biotechnology, Pharmacy, Biology.
2	Department of Pharmaceutical Chemistry, Drug Analysis and Radiopharmacy	prof. dr hab. n.farm. Paweł Szymański	2	prof. dr hab. n.farm. Paweł Szymański	1a. Evaluation of new histidine derivatives as potential therapeutic agents in neurodegenerative disease. 1b. Novel cholinesterase inhibitors and their activity evaluation as potential therapeutic agents in the treatment of Alzheimer's disease.	Pharmacy
3	Department of Cosmetic Raw Material Chemistry	prof. dr hab. n.farm. Elżbieta Budzisz	1	dr hab. n.farm. Urszula Kalinowska-Lis	Development of innovative cosmetic recipes for the care of problematic skin.	Cosmetology, Pharmacy, Biotechnology.
4	Department of Pharmacognosy	dr hab. n.farm. Monika Olszewska	1	dr hab. n.farm. Monika Olszewska	Phytochemical profile and molecular mechanisms of biological activity of selected plant products.	Pharmacy

List of places at the International Doctoral School awarded to research and teaching units of the Medical University of Lodz for the academic year 2025/2026 in connection with financing from external sources

MEDICAL SCIENCES

No.	Unit	Head of Unit	Project	Number of places	Proposed supervisor	Topic of dissertation	Candidate's profile (completed field of study)
1	Department of Cell Culture and Genomic Analysis	prof. dr hab. n. med. Agnieszka Piastowska-Ciesielska	SONATA	1	dr hab. n. med. Aleksandra Piechota-Polańczyk	Search of an interplay between total and local inhibition or NRF2 transcriptional factor and the level and activity of estrogen signaling, as well as their impact on development and function of intestines.	Pharmacy, Nursing, Midwifery, Biotechnology, Medical, Physiotherapy, Biology, Veterinary.
2	Department of Cell Culture and Genomic Analysis	prof. dr hab. n. med. Agnieszka Piastowska-Ciesielska	SONATA	1	dr hab. n. med. Karolina Kowalska	Evaluation of the effectiveness of organic sulfur in reducing inflammation in benign prostatic hyperplasia induced by a high-fat diet.	Pharmacy, Nursing, Midwifery, Biotechnology, Medical, Physiotherapy, Veterinary, Biology.
3	Department of Cell Culture and Genomic Analysis	prof. dr hab. n. med. Agnieszka Piastowska-Ciesielska	SONATA	1	prof. dr hab. n. med. Agnieszka Piastowska-Ciesielska	Environmental modulation of CDK4/6 inhibitor efficacy: Impact of mycotoxin alternariol exposure on anti-cancer therapies.	Pharmacy, Biotechnology, Medical Physiotherapy, Management in Medical Services, Biology

4	Department of Biochemistry	prof. dr hab. n.med. Jakub Fichna	OPUS	1	prof. dr hab. n.med. Jakub Fichna	Development of novel potential therapeutics in inflammatory bowel diseases based on nanoformulations employing senomodulators.	Pharmacy, Biotechnology, Medical, Biology.
5	Department of Molecular Biology of Cancer	prof. dr hab. n.med. Małgorzata Czyż	OPUS	1	prof. dr hab. n.med. Małgorzata Czyż	The role of EZH2 activity in the development of resistance to targeted therapy in melanoma.	Biotechnology, biology, pharmacy
6	Department of Biochemistry	prof. dr hab. n.med. Jakub Fichna	PRELUDIUM BIS	1	prof. dr hab. n. med. Maciej Sałaga	The role of free fatty acid receptors in pathophysiology of the functional gastrointestinal tract disorders: new therapies for leaky gut syndrome and irritable bowel syndrome.	Pharmacy, Biotechnology, Medical, Biology.
7	Department of Cell Culture and Genomic Analysis	prof. dr hab. n. med. Agnieszka Piastowska-Ciesielska	IMPLEMENTATION DOCTORATE	1	dr hab. n. med. Aleksandra Piechota-Polańczyk	Scaling up the pembrolizumab manufacturing process in CHO DG 44 line using single-use bioreactors: analysis of metabolite profile and post-translational modifications and product quality in relation to the reference biologic drug.	Pharmacy, Biotechnology, Medical, Biology.

8	Department of Cell Culture and Genomic Analysis	prof. dr hab. n. med. Agnieszka Piastowska-Ciesielska	IMPLEMENTATION DOCTORATE	1	dr hab. n. med. Aleksandra Piechota-Polańczyk	Development of a tool optimizing the selection of process conditions in bioreactor cultures, taking into account the methods of planning experiments (DoE) in order to produce a product in optimal quantity and quality using conventional predictive methods and those based on artificial intelligence.	Pharmacy, Nursing, Biotechnology, Medical.
PHARMACEUTICAL SCIENCES							
No.	Unit	Head of Unit	Project	Number of places	Proposed supervisor	Topic of dissertation	Candidate's profile (completed field of study)
1	Department of Pharmacodynamics	dr hab. n. farm. Jakub Wojcieszak	OPUS	1	dr hab. n. farm. Jakub Wojcieszak	Assessment of long-term effects of semaglutide administered in repeated short cycles in obese mice.	Pharmacy, Biotechnology, Biology, Medical Analytics, Veterinary, Other related.
2	Department of Cosmetic Raw Material Chemistry	prof. dr hab. n. farm. Elżbieta Budzisz	IMPLEMENTATION DOCTORATE	1	prof. dr hab. n.farm. Elżbieta Budzisz	Implementation of technology for manufacturing a dermocosmetic preparation for the skin care of diabetics and patients with selected metabolic and inflammatory dermatoses.	Cosmetology, Pharmacy.
HEALTH SCIENCES							

No.	Unit	Head of Unit	Project	Number of places	Proposed supervisor	Topic of dissertation	Candidate's profile (completed field of study)
1	Department of Genetic Cancer Predisposition	dr hab. n. med. Agata Pastorczak	OPUS	1	dr hab. n. med. Agata Pastorczak	Epigenetic determinants of chromothripsis and its impact on the chemosensitivity of acute lymphoblastic leukemia.	Biotechnology, Diagnostics Laboratory,
2	Department of Hygiene and Health Promotion	prof. dr hab. n.med. Dorota Kaleta	IMPLEMENTATION DOCTORATE	1	prof. dr hab. n.med. Dorota Kaleta	Development of a therapeutic pathway to combat obesity for implementation in a coordinated care model.	Sociology.