

Research topics in the discipline of health sciences
In the academic year 2025/2026

Sg.	PhD Supervisor	ORCID	Contact e-mail	Research topics	Language of the doctoral dissertation
1.	Dr hab. Jacek Wilczyński, prof. UJK	0000-0003-2564-8623	jwilczynski@onet.pl	<ol style="list-style-type: none"> 1. Body posture defects, postural stability, balance and gait disturbances. 2. Body posture defects, postural stability, balance and gait disorders. 3. Body posture defects and stress resistance. 4. Analysis of spectral postural responses using the Framiral Multitest Equilibre system. 5. The importance of vestibulospinal, vestibulo-optic and vestibulo-oculomotor reflexes in controlling balance and postural stability in children with postural defects and scoliosis. 6. Body posture defects and scoliosis and vagal tone (polyvagal theory). 7. Body posture defects and scoliosis and sympathetic-parasympathetic balance. 8. Body posture defects and scoliosis and spectral analysis of sinus rhythm variability. 	Polish
2.	dr hab. Ryszard Zarzeczny, prof. UJK	0000-0002-2898-4676	rysard.zarzeczny@ujk.edu.pl	Research interests currently focus on two areas of applied physiology. In the first area, the research interests are in adaptive capabilities to systematic muscular work of the human body in different age groups. In this case, research efforts are focused on identifying the age-related physiological effects of different training methods in relation to exercise intensity and mode. The second area concerns the comprehensive search for factors which are able to modify functional capability in elderly. The main questions in this area are: 1) what factors determine "healthy aging" in older individuals? and 2) what are the most effective	Polish

				therapies for older people with already impaired functional mobility?	
3.	Prof. dr hab. Waldemar Broła	0000-0002-7955-3454	waldemar.brola@ujk.edu.pl	Epstein-Barr virus infection and the pathogenesis of multiple sclerosis	Polish
4.	Prof. dr hab. Grażyna Nowak-Starz, specialist in the field of public health	0000-0001-7804-2129	gnowakstarz@ujk.edu.pl grazyna.nowak-starz@ujk.edu.pl	<ol style="list-style-type: none"> 1. Public health. 2. Quality of life in the aspect of lifestyle diseases. 3. Interpersonal competences, including intercultural ones, of medical students and team work for the patient. 4. Health care system – management, adverse events and medical errors. 	Polish
5.	Prof. dr hab. Beata Woźakowska-Kapłon	0000-0003-1409-4362	bw.kaplon@poczta.onet.pl	Internal diseases, cardiology	Polish
6.	dr hab. Ewa Orlewska, prof. UJK	0000-0001-5731-4316	eorl@ujk.edu.pl	Health technology assessment, budget impact analysis, utility of health states, genetics of diabetes, cancer epidemiology, the availability of medical services	Polish
7.	Dr hab. Wojciech Kiebzak prof. UJK	0000-0001-6035-6568	wojciech.kiebzak@ujk.edu.pl	<ol style="list-style-type: none"> 1. Civilization-related, multi-factor health hazards resulting from the use of mobile devices. 2. The importance of the relationship between the setting of biomechanical body parameters and the quality of life. 3. The importance of biomechanical body parameters in planning the treatment process of physiological spine extension disorders. 	Polish
8.	Dr hab. Monika Szpringer, prof. UJK	0000-0002-6510-5714	monika.szpringer@ujk.edu.pl	<ol style="list-style-type: none"> 1. Prevention of behavioural disorders and risky behaviors in adolescents and adults. 2. Prevention and therapy of addiction to psychoactive substances. 3. Quality of life in somatic and mental diseases 4. The effectiveness of psychological therapies in reducing anxiety, stress, depressive symptoms and improving the quality of life. 5. Factors influencing the improvement of mental and social functioning. 	Polish

				Trauma and its consequences for physical and mental health.	
9.	Dr hab. Piotr Lewitowicz, prof. UJK	0000-0002-5443-7975	piotr.lewitowicz@ujk.edu.pl	<ol style="list-style-type: none"> 1. The expression level of fibroblast growth factor receptor on the course of colorectal cancer. 2. The role of cancer-associated fibroblasts on the course of colorectal cancer. 3. The role of cancer stem cells in colorectal cancer. 	Polish / English
10.	Dr hab. Tomasz Rogula, Prof. UJK	0000-0002-8719-6880	tomasz.rogula@ujk.edu.pl tomrogula@gmail.com	<ol style="list-style-type: none"> 1. Metabolic Syndrome Prevalence and Response to Medical and Surgical Therapy - Multi Ethnic Longitudinal Study. 2. Machine Learning Image Processing in Recognizing Intra-peritoneal Features of Metabolic Syndrome. 3. Artificial Intelligence Algorithms in Search of Early Cardio Metabolic Syndrome and Prediction of Premature Cardiovascular Mortalities. 4. Short and Long Term Effects of Bariatric and Metabolic Surgery in South Texas vs Polish Patients. 5. Robotic Surgery - Multi Specialty Analyzes of Potential Benefits, Risks, Costs and Perspectives. 6. Gastro-Esophageal Reflux in Obese Patients Undergoing Bariatric Surgery: Prevalence, Outcomes of Surgical and Medical Therapies, Prevention and Management. 7. Prevention and Management of Medical and Surgical Complication in Cardio Metabolic Surgery. 8. Short and Long Terms Outcomes of Bariatric Surgery in Patients with End Stage Renal Disease Undergoing Renal Transplantation. 9. Non-Alcoholic Fatty Liver Disease and Steatohepatitis - Prevalence in Different Ethnical Groups and Long Term Outcomes of Metabolic Surgery. 	English / Polish

				10. Cardiovascular Outcomes in Obese Patients Undergoing Metabolic Surgery. 11. Diabetes Control in Patients Undergoing Various Types of Bariatric Surgery in a Large Population; Short and Long Term Study.	
11.	dr hab. n. o zdr. prof. UJK Beata Szczepanowska-Wołowiec	0000-0002-7051-3042	beata.szczepanowska-wolowiec@ujk.edu.pl	The main research interests focus on the broad issues of body posture, balance among children, adolescents and adults, issues in the field of physical therapy, neurology, orthopedics and geriatrics.	Polish
12.	Dr hab. n. med. Piotr Kędzierawski	0000-0002-1835-8794	piotr.kedzierawski@ujk.edu.pl	Oncology, quality of life during and after oncological treatment	Polish / English
13.	Dr hab. Sylwia Terpiłowska	0000-0002-2988-9443	sylwia.terpilowska@ujk.edu.pl	1. Micronutrient metabolism and interactions in an <i>in vitro</i> system. 2. Preclinical studies of new drugs and biologically active substances using <i>in vitro</i> cell cultures. 3. Mechanisms of action of potential drugs. 4. Study of biocompatibility of biomaterials used in medicine and biotechnology. 5. Assessment of the toxicity of xenobiotics. 6. Determination of biomarkers in the diagnosis and treatment of diseases.	English