

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

Lp.	PhD Supervisor	ORCID	Contact	Research topics	Language of the doctoral dissertation
1	Dr hab. Jacek Wilczyński, prof. UJK	0000-0003-2564-8623	<a href="mailto:jwilczynski@onet.pl">jwilczynski@onet.pl</a> tel. 603703926	<ol style="list-style-type: none"> <li>1. Body posture defects, postural stability, balance and gait disturbances.</li> <li>2. Body posture defects, postural stability, balance and gait disorders.</li> <li>3. Body posture defects and stress resistance.</li> <li>4. Analysis of spectral postural responses using the Framiral Multitest Equilibre system.</li> <li>5. The importance of vestibulospinal, vestibulo-optic and vestibulo-oculomotor reflexes in controlling balance and postural stability in children with postural defects and scoliosis.</li> <li>6. Body posture defects and scoliosis and vagal tone (polyvagal theory).</li> <li>7. Body posture defects and scoliosis and sympathetic-parasympathetic balance.</li> <li>8. Body posture defects and scoliosis and spectral analysis of sinus rhythm variability.</li> </ol>	Polish
2	dr hab. Ryszard Zarzeczny, prof. UJK	0000-0002-2898-4676	<a href="mailto:ryszard.zarzeczny@ujk.edu.pl">ryszard.zarzeczny@ujk.edu.pl</a>	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 therapies for older people with already impaired functional mobility?	Polish
3	Prof. dr hab. Waldemar Broła	0000-0002-7955-3454	<a href="mailto:waldemar.brola@ujk.edu.pl">waldemar.brola@ujk.edu.pl</a> , tel. 601313415	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	<a href="mailto:gnowakstarz@ujk.edu.pl">gnowakstarz@ujk.edu.pl</a> <a href="mailto:grazyna.nowak-starz@ujk.edu.pl">grazyna.nowak-starz@ujk.edu.pl</a> tel. 600 433 734	<ol style="list-style-type: none"> <li>1. Public health.</li> <li>2. Quality of life in the context of lifestyle diseases.</li> <li>3. Interpersonal competencies, including intercultural ones, of medical students and teamwork for the benefit of patients.</li> <li>4. The healthcare system - management, adverse events, and medical errors.</li> <li>5. The quality of medical services provided in the context of the functioning of medical professions.</li> </ol>	Polish
5	dr hab. Ewa Orlewska, prof. UJK	0000-0001-5731-4316	<a href="mailto:eorl@ujk.edu.pl">eorl@ujk.edu.pl</a>	Health technology assessment, budget impact analysis, utility of health states, genetics of diabetes, cancer epidemiology, the availability of medical services	Polish

6	Prof. dr hab. Zbigniew Siudak	0000-0002-8033-3977	<a href="mailto:zbigniew.siudak@ujk.edu.pl">zbigniew.siudak@ujk.edu.pl</a>	<ol style="list-style-type: none"> <li>1. Obesity</li> <li>2. Heart failure</li> <li>3. Variation in access to medical care and guideline-recommended therapies in cardiology</li> <li>4. Heavy metals and nano-plastics in atherosclerotic material from cadavers</li> </ol>	polish
7	Dr hab. Wojciech Kiebzak prof. UJK	0000-0001-6035-6568	<a href="mailto:wojciech.kiebzak@ujk.edu.pl">wojciech.kiebzak@ujk.edu.pl</a> tel. 501621259	<ol style="list-style-type: none"> <li>1. Determinants of occupational well-being among healthcare professionals in the context of ethical-professional attitudes, perceived ethical climate, and therapeutic team culture - a study of a selected professional group</li> </ol> <p>Requirements:</p> <ul style="list-style-type: none"> <li>• completed Master's degree in Health Sciences, Medical Sciences, or a related field,</li> <li>• basic knowledge of research methodology,</li> <li>• interest in professional ethics and the functioning of healthcare personnel,</li> <li>• ability to critically analyse the scientific literature,</li> <li>• readiness for systematic and independent research work.</li> </ul> <p>Preferred:</p> <ul style="list-style-type: none"> <li>• professional experience in healthcare or empirical research,</li> <li>• a preliminary research concept related to the topic.</li> </ul> <ol style="list-style-type: none"> <li>2. Geometric model for assessing sternum-pelvis-spine relationships in different functional body positions</li> </ol> <p>Requirements:</p> <ul style="list-style-type: none"> <li>• completed Master's degree in Health Sciences, Medical Sciences, Physiotherapy, Biomechanics, or a related field,</li> <li>• basic knowledge of research methodology,</li> <li>• interest in body posture, biomechanics, and movement analysis,</li> <li>• ability to critically analyse the scientific literature,</li> <li>• readiness for systematic research work using diagnostic and measurement equipment.</li> </ul> <p>Preferred:</p> <ul style="list-style-type: none"> <li>• clinical or research experience in postural assessment or musculoskeletal analysis,</li> <li>• basic knowledge of geometry (including Euclidean geometry) or biomechanics,</li> <li>• experience with diagnostic tools (e.g. DIERS Formetric 4, sEMG, Saunders inclinometer) or willingness to acquire such skills,</li> <li>• a preliminary research concept</li> </ul>	Polish / English
8	Dr hab. Monika Szpringer, prof. UJK	0000-0002-6510-5714	<a href="mailto:monika.szpringer@ujk.edu.pl">monika.szpringer@ujk.edu.pl</a>	My research interests focus on issues related to mental health, its determinants, and effective forms of prevention and psychological intervention. The research I conduct is empirical and applied in nature, integrating clinical, social, and public health perspectives:	Polish / English

				<ul style="list-style-type: none"> <li>• prevention of behavioral disorders and risk behaviors among children, adolescents, and adults,</li> <li>• determinants, prevention, and treatment of substance use disorders as well as behavioral addictions (addictive behaviors),</li> <li>• quality of life in somatic and mental illnesses,</li> <li>• effectiveness of psychological interventions and therapies in reducing anxiety, stress, and depressive symptoms, as well as in improving quality of life,</li> <li>• factors promoting mental health, well-being, and social functioning,</li> <li>• the experience of trauma and its consequences for mental and physical health,</li> <li>• psychiatric and somatic comorbidity and its significance for treatment and rehabilitation processes.</li> </ul> <p>Fluency in Polish is required, as it is essential for conducting research.</p>	
9	Dr hab. Piotr Lewitowicz, prof. UJK	0000-0002-5443-7975	<a href="mailto:piotr.lewitowicz@ujk.edu.pl">piotr.lewitowicz@ujk.edu.pl</a> , 604420369	<ol style="list-style-type: none"> <li>1. The expression level of fibroblast growth factor receptor on the course of colorectal cancer.</li> <li>2. The role of cancer-associated fibroblasts on the course of colorectal cancer.</li> <li>3. The role of cancer stem cells in colorectal cancer.</li> </ol>	Polish / English
10	Dr hab. Tomasz Rogula, Prof. UJK	0000-0002-8719-6880	<a href="mailto:tomasz.rogula@ujk.edu.pl">tomasz.rogula@ujk.edu.pl</a> <a href="mailto:tomrogula@gmail.com">tomrogula@gmail.com</a> tel. +1(216)2969053	<ol style="list-style-type: none"> <li>1. Metabolic Syndrome Prevalence and Response to Medical and Surgical Therapy - Multi Ethnic Longitudinal Study.</li> <li>2. Machine Learning Image Processing in Recognizing Intra-peritoneal Features of Metabolic Syndrome.</li> <li>3. Artificial Intelligence Algorithms in Search of Early Cardio Metabolic Syndrome and Prediction of Premature Cardiovascular Mortalities.</li> <li>4. Short and Long Term Effects of Bariatric and Metabolic Surgery in South Texas vs Polish Patients.</li> <li>5. Robotic Surgery - Multi Specialty Analyzes of Potential Benefits, Risks, Costs and Perspectives.</li> <li>6. Gastro-Esophageal Reflux in Obese Patients Undergoing Bariatric Surgery: Prevalence, Outcomes of Surgical and Medical Therapies, Prevention and Management.</li> <li>7. Prevention and Management of Medical and Surgical Complication in Cardio Metabolic Surgery.</li> <li>8. Short and Long Terms Outcomes of Bariatric Surgery in Patients with End Stage Renal Disease Undergoing Renal Transplantation.</li> <li>9. Non-Alcoholic Fatty Liver Disease and Steatohepatitis - Prevalence in Different Ethnical Groups and Long Term Outcomes of Metabolic Surgery.</li> </ol>	English / Polish

				<p>10. Cardiovascular Outcomes in Obese Patients Undergoing Metabolic Surgery.</p> <p>11. Diabetes Control in Patients Undergoing Various Types of Bariatric Surgery in a Large Population; Short and Long Term Study.</p>	
12	dr hab. n. o zdr. prof. UJK Beata Szczepanowska- Wołowiec	0000-0002- 7051-3042	<a href="mailto:beata.szczepanowska-wolowiec@ujk.edu.pl">beata.szczepanowska-wolowiec@ujk.edu.pl</a> tel. 604 144 751	<p>My research interests focus on body posture and balance control in children, adolescents, and adults at various stages of life:</p> <ol style="list-style-type: none"> <li>1. Analysis of the mechanisms and risk factors for posture and balance disorders.</li> <li>2. Neurological and orthopedic issues related to posture and balance disorders and their functional consequences.</li> <li>3. Research on the development and structure of the lower limbs, with particular emphasis on the anatomy and biomechanics of the foot.</li> <li>4. Analysis of foot load distribution and loads on individual foot zones under static and dynamic conditions.</li> <li>5. Assessment of the relationship between posture defects, foot defects, BMI, foot loading patterns, and balance.</li> <li>6. Geriatric research, focusing on aging processes, fall prevention, and maintaining functional capacity in older adults.</li> <li>7. Research in physical therapy, including the evaluation of the effectiveness of therapeutic and rehabilitation interventions for musculoskeletal dysfunctions.</li> </ol>	Polish
13	Dr hab. Sylwia Terpilowska	<u>0000-0002- 2988-9443</u>	<a href="mailto:sylwia.terpilowska@ujk.edu.pl">sylwia.terpilowska@ujk.edu.pl</a>	<ol style="list-style-type: none"> <li>1. Micronutrient metabolism and interactions in an <i>in vitro</i> system.</li> <li>2. Preclinical studies of new drugs and biologically active substances using <i>in vitro</i> cell cultures.</li> <li>3. Mechanisms of action of potential drugs.</li> <li>4. Study of biocompatibility of biomaterials used in medicine and biotechnology.</li> <li>5. Assessment of the toxicity of xenobiotics.</li> <li>6. Determination of biomarkers in the diagnosis and treatment of diseases.</li> </ol>	English
15	prof. Edyta Suliga	0000-0003- 3063-0380	<a href="mailto:edyta.suliga@ujk.edu.pl">edyta.suliga@ujk.edu.pl</a>	<p>Nutritional status and health behavior related to nutrition and physical activity of adults and older people in health and disease.</p> <p>This offer is exclusively for people with a master's degree in dietetics. Fluency in Polish is required, as it is essential for conducting research.</p>	Polish / English