Research topics in the discipline of Health Sciences in the academic year 2024/2025

| Lp. | PhD Supervisor | ORCID | Contact | Research topics | Language of the doctoral dissertation |
|-----|---|---------------------|---|---|--|
| 1 | dr hab. Jacek Wilczyński, prof. UJK | 0000-0003-2564-8623 | jwilczynski@onet.pl | Body posture defects, postural stability, balance and gait disturbances | Polish language |
| 2 | dr hab. Ryszard Zarzeczny, prof. UJK | 0000-0002-2898-4676 | ryszard.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 therapies for older people with already impaired functional mobility? | Polish language |
| 3 | prof. dr hab. Waldemar Brola | 0000-0002-7955-3454 | wbrola@wp.pl waldemar.brola@ujk.e du.pl | Epstein-Barr virus infection and the pathogenesis of multiple sclerosis | Polish language |

| 4 | dr hab. Grażyna Nowak-Starz, prof. UJK | 0000-0001-7804-2129 | gnowakstarz@ujk.edu. pl grazyna.nowak- starz@ujk.edu.pl | Public health. Quality of life in the aspect of lifestyle diseases. Interpersonal competences, including intercultural ones, of medical students and team work for the patient. Health care system – management, adverse events and medical errors. | Polish language |
|---|--|---------------------|--|--|--------------------|
| 5 | prof. dr hab. Beata Wożakowska- Kapłon | 0000-0003-1409-4362 | bw.kaplon@poczta.on et.pl | Internal diseases, cardiology | Polish language |
| 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, impact of COVID-19 on the availability of medical services | Polish language |
| 7 | prof. dr hab. Zbigniew Siudak | 0000-0002-8033-3977 | zbigniew.siudak@ujk.e du.pl | Obesity Heart failure Variation in access to medical care and guideline-recommended therapies in cardiology Heavy metals and nano-plastics in atherosclerotic material from cadavers | Polish language |
| 8 | dr hab. Wioletta Adamus-Białek, prof. UJK | 0000-0001-6129-0492 | wioletta.adamus- bialek@ujk.edu.pl | The role of the microbiome in multiple sclerosis | Polish language |
| 9 | dr hab. Wojciech Kiebzak, prof. UJK | 0000-0001-6035-6568 | wojciech.kiebzak@ujk. edu.pl | Analysis of the components of the treatment process for central coordination disorders The importance of controlling the setting of biomechanical parameters for the quality of life | Polish language |

| | | | | 3. | The importance of biomechanical parameters in planning the treatment process for physiological spine curvature disorders | |
|----|--|---------------------|---|--|--|--------------------------------|
| 10 | dr hab. prof. UJK Monika Szpringer | 0000-0002-6510-5714 | monika.szpringer @ujk.edu.pl | 1. 2. 3. 4. 6. | Prevention of behavioural disorders and risky behaviors in adolescents and adults. Prevention and therapy of addiction to psychoactive substances. Quality of life in somatic and mental diseases The effectiveness of psychological therapies in reducing anxiety, stress, depressive symptoms and improving the quality of life. Factors influencing the improvement of mental and social functioning. Trauma and its consequences for physical and mental health. | Polish language |
| 11 | prof. dr hab. Andrzej Jaroszyński | 0000 0001 8194 1723 | +48 604 968 724 | 1. | The use of non-invasive parameters of sudden cardiac death in risk prediction in special groups of patients. The role of the heat shock protein HSP-27 in the pathology of selected diseases. | Polish language |
| 12 | dr hab. Piotr Lewitowicz, prof. UJK | 0000-0002-5443-7975 | piotr.lewitowicz@ujk.e du.pl | 1. 2. 3. | The expression level of fibroblast growth factor receptor on the course of colorectal cancer. The role of cancer-associated fibroblasts on the course of colorectal cancer. The role of cancer stem cells in colorectal cancer. | Polish /English language |
| 13 | dr hab. Tomasz Rogula, prof. UJK | 0000-0002-8719-6880 | tomasz.rogula@ujk.ed u.pl tomrogula@gmail.com | 1. | Metabolic Syndrome Prevalence and Response to Medical and Surgical Therapy - Multi Ethnic Longitudinal Study. Machine Learning Image Processing in Recognizing Intra-peritoneal Features of Metabolic Syndrome. | English/ Polish language |

| 3. Artificial Intelligence Algorithms in Search of Early Cardio Metabolic Syndrome and Prediction of Premature Cardiovascular Mortalities. |
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| 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. |
| 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. |