Candidate supervisor's information summary form

Name and surname, degree, title: Tomasz Sadkowski, PhD, DSc, Associate Professor	
Academic discipline/disciplines	Veterinary medicine
Professional development (degrees and titles) in chronological order	2019 – DSc 2008 - PhD 2003 - veterinarian
Most important publications/ patents in the last 3 years (maximum 10)	1. Ebrahimpourgorji, A., Roudbari, Z., Ahmadian, K., Razban, V., Shirali, M., Hasanpur, K., & Sadkowski, T. (2025). Exploring lncRNA-Mediated Mechanisms in Muscle Regulation and Their Implications for Duchenne Muscular Dystrophy. International Journal of Molecular Sciences, 26, Article 13. https://doi.org/10.3390/ijms26136032 2. Ebrahimpourgorji, A., Kliczkowska, K., Ollik, M., Le Guiner, C., Wilczak, J., Bielecki, W., Ostaszewski, P., Shirali, M., Roudbari, Z., & Sadkowski, T. (2025). Transcriptomic profiling of skeletal muscle in the DMDmdx rat model of Duchenne muscular dystrophy. Scientific Reports, 15, Article 1. https://doi.org/10.1038/s41598-025-14756-9 3. Ciecierska, A., Ebrahimpourgorji, A., Majewska, A., & Sadkowski, T. (2025). Expression of miRNA in the Semitendinosus Muscle of Cattle Breeds with Varying Intramuscular Fat Deposition. Genes, 16, Article 8. https://doi.org/10.3390/genes16080969 4. Nasab, S. E., Dashab, G. R., Rokouei, M., Roudbari, Z., & Sadkowski, T. (2025). Unveiling Conserved Molecular Pathways of Intramuscular Fat Deposition and Shared Metabolic Processes in Semitendinosus Muscle of Hereford, Holstein, and Limousine Cattle via RNA-Seq Analysis. Genes, 16, Article 8. https://doi.org/10.3390/genes16080984 5. Roudbari, Z., Dasiewicz, K., Gorji, A. E., & Sadkowski, T. (2025). Impact of Pre-Slaughter Stress on Meat Quality in Beef Cattle: A Gene Expression Analysis. Livestock Science, 302, 1–13. https://doi.org/10.1016/j.livsci.2025.105851 6. Ebrahimpourgorji Abdolvahab, Ahmadian Kasra, Roudbari Zahra, Sadkowski Tomasz: Identification and analysis of differentially expressed lncRNAs and their ceRNA networks in DMD/mdx primary myoblasts, Scientific Reports, Nature Publishing Group, vol. 14, nr

	1, 2024, 23691, 1-14, DOI:10.1038/s41598-024-75221-7, 7. Ebrahimpourgorji Abdolvahab, Ciecierska Anna, Leontowicz Hanna, Roudbari Zahra, Sadkowski Tomasz: Impact of Kiwifruit Consumption on Cholesterol Metabolism in Rat Liver: A Gene Expression Analysis in Induced Hypercholesterolemia, Nutrients, MDPI, vol. 16, nr 23, 2024, 3999, 1-22, DOI:10.3390/nu16233999, 8. Gozdek Marta, Mucha Sebastian, Prostek Adam, Kamola Dariusz, Sadkowski Tomasz: Distribution of Recessive Genetic Defect Carriers in Holstein Friesian Cattle: A Polish Perspective, Animals, Multidisciplinary Digital Publishing Institute (MDPI), vol. 14, nr 22, 2024, 3170, 1-12, DOI:10.3390/ani14223170, 9. Gozdek Marta, Mucha Sebastian, Prostek Adam, Sadkowski Tomasz: Selected Monogenic Genetic Diseases in Holstein Cattle—A Review, Genes, MDPI, vol. 15, nr 8, 2024, 1052, 1-11, DOI:10.3390/genes15081052, 10. Ebrahimpourgorji Abdolvahab, Ostaszewski Piotr, Urbańska Kaja, Sadkowski Tomasz: Does β-Hydroxy-β-Methylbutyrate Have Any Potential to Support the Treatment of Duchenne Muscular Dystrophy in Humans and Animals?, Biomedicines, Multidisciplinary Digital Publishing Institute (MDPI), vol. 11, nr 8, 2023, 2329, 1-25, DOI:10.3390/biomedicines11082329
Experience in work with doctoral students (defended doctoral dissertations, initiated doctoral procedures) in chronological order	1. Farideh Tahmoresi, supervisor (2025-) 2. Marta Gozdek, supervisor (2021-) 3. Abdolvahab Ebrahimpour Gorji, supervisor (2021-) 4. Dr Dariusz Kamola, supervisor (2024) 5. Dr Karolina Chodkowska, auxiliary supervisor (2019) 6. Dr Katarzyna Antonina Szcześniak, auxiliary supervisor (2017) 7. Dr Anna Ciecierska, auxiliary supervisor (2016)
Achievements in the area of projects/grants (in the last 5 years)	1. Grant of the National Science Center 2020/37 / B / NZ5 / 01744 - Molecular basis of beta-hydroxy-beta-methylbutyric acid in supporting the treatment of muscular dystrophies - in vivo and in vitro studies, PI, 2021-2027.
Subject area of the research project for which the candidate student is being recruited	The PhD candidate will investigate the molecular mechanisms of action of beta-hydroxy-beta-methylbutyrate (HMB) in supporting the therapy of muscular dystrophy at the metabolome level. The main focus of the project will be metabolomic analysis, with particular emphasis on the metabolic profiles of skeletal muscle (in vivo) and satellite cells

	(in vitro) characteristic of individuals with Duchenne muscular dystrophy (DMD) and wild-type (WT) individuals (rat model and human cell lines), as well as on the assessment of the effects of HMB and steroids on shaping these profiles. The study will employ, among others, cell culture techniques, metabolomics using the UHPLC system (ultra-high-performance liquid chromatography), Western blotting, and other molecular biology methods.
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