Candidate supervisor's information summary form

Name and surname, degree, title: Tomasz Sadkowski, PhD, DSc	
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 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, 2. 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, 3. 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, 4. 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, 5. Nejad Fatemeh Mohammadi, Mohammadabadi Mohammadreza, Roudbari Zahra, Ebrahimpourgorji Abdolvahab, Sadkowski Tomasz: Network visualization of genes involved in skeletal muscle myogenesis in livestock animals, BMC Genomics, vol. 25, nr 1, 2024, 294, 1-13, DOI:10.1186/s12864-024-10196-3, 6. 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, 7. Roudbari Zahra, Mokhtari Morteza, Ebrahimpourgorji Abdolvahab, Sadkowski Tomasz, Sadr Ayeh Sadat, Shirali Masoud: Identification of Hub Genes and Target miRNAs Crucial for Milk Production in Holstein Friesian Dairy Cattle, Genes, MDPI, vol. 14, nr 11, 2023, 2105, 1-12, DOI:10.3390/genes14112105, 8. Burdzińska Anna, Galanty Marek, Więcek Sabina, Dabrowski Filip A., Lotfy Ahmed, Sadkowski Tomasz: The Intersection of Human and Veterinary Medicine—A Possible Direction towards the Improvement of Cell Therapy Protocols in the Treatment of Perianal Fistulas, International Journal of Molecular Sciences, MDPI, vol. 23, nr 22, 2022, 13917, 1-18, DOI:10.3390/ijms 232213917, 9. Mohammadinejad Fatemeh, Mohammadabadi Mohammadreza, Roudbari Zahra, Sadkowski Tomasz: Identification of Key Genes and Biological Pathways Associated with Skeletal Muscle Maturation and Hypertrophy in Bos taurus, Ovis aries, and Sus scrofa, Animals, Multidisciplinary Digital Publishing Institute (MDPI), vol. 12, nr 24, 2022, 3471, 1-17, DOI:10.3390/ani12243471
Experience in work with doctoral students (defended doctoral dissertations, initiated doctoral procedures) in chronological order	1. Marta Gozdek, supervisor (2021-) 2. Abdolvahab Ebrahimpour Gorji, supervisor (2021-) 3. Dr Dariusz Kamola, supervisor (2024) 4. Dr Karolina Chodkowska, auxiliary supervisor (2019) 5. Dr Katarzyna Antonina Szcześniak, auxiliary supervisor (2017) 6. 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, 2021-2026.
Subject area of the research project for which the candidate student is being recruited	The PhD student will investigate the molecular mechanisms underlying the effects of beta-hydroxy-beta-methylbutyrate (HMB) in supporting muscular dystrophy treatment using an *in vitro* model, in which muscle satellite cells derived from dystrophin-deficient DMD^{mdx} and wild-type (WT) rats, as well as human cell lines, will be studied. The research will employ techniques such as cell culture, next-generation sequencing

	(NGS), metabolomics, real-time PCR, Western blot, and other molecular biology methods.
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