

Name and surname:	Anna Zielak-Steciwko
Academic Degree:	dr hab. inż. (DSc.)
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UPWr Base of Knowledge - link:	https://bazawiedzy.upwr.edu.pl/info.seam?id=UPWr40033549a3b946d6a0eed0d312283993&affil=&lang=pl
Researchgate:	https://www.researchgate.net/profile/Anna-Zielak-Steciwko
Personal website / Working group website:	-
Participation in projects in last 5 years (chronological; with distinction into PI (kierownik) and RF (wykonawca)):	Genomowe uwarunkowania chorób zakaźnych i inwazyjnych (BVDV, IBR/IPV, neosporoza, chlamydia) w stadach bydła rasy polskiej czerwono-białej oraz polskiej holsztyńsko-fryzyjskiej, finansowany z środków Krajowego Naukowego Ośrodka Wiodącego (KNOW) na lata 2014-2018 dla Wrocławskiego Centrum Biotechnologii; charakter udziału w projekcie: kierownik
PhD topic:	Environmental factors affecting the functioning of bovine mammary gland and their influence on selected milk parameters
Research discipline in Doctoral School:	Animal Science and Fisheries
Short description of the research problem to be solved in the PhD (minimum 1000 characters):	<p>Bovine milk contains over 400 fatty acids, about 100 proteins and peptides, lactose, vitamins, and minerals. These components are characterized by high bioavailability and biological activity with health-promoting properties for humans. They also determine the technological suitability of milk for processing. Milk production is a biological process directly related to the environment, which affects the nutritional and technological quality of milk. Furthermore, environmental factors are one of the main causes of mammary gland inflammations, which is the most common disease in cows, leading to significant economic losses for milk producers and negatively affecting the milk's chemical composition and technological quality.</p> <p>The objective of the doctoral thesis is to examine the environmental factors that influence the functioning of the bovine mammary gland and their effect on specific milk parameters. The project will encompass various activities, such as:</p> <ul style="list-style-type: none"> - the analysis of milk's basic composition and other relevant components, as well as the cytological evaluation of milk; - conducting experiments using cell lines to investigate the impact of environmental factors on the functioning of the mammary gland and the quality of milk; - conducting experiments to understand the molecular mechanisms that regulate the functioning of the mammary gland in relation to the occurrence of inflammatory conditions.
Professional skills for PhD candidate (e.g. master program, specializations, softwares, language, analytical techniques, minimum 500 characters):	<p>Obtained a master's degree in biology, zootechnic's, veterinary medicine, or a related field.</p> <p>Knowledge of the English language.</p> <p>Good laboratory skills.</p> <p>Familiarity with Office software, including Word, Excel, PowerPoint.</p> <p>Experience in conducting research during studies.</p> <p>Capable in interpreting obtained research results and writing scientific manuscripts.</p> <p>Capable of working independently and with good organizational skills.</p> <p>Able to seek assistance when required.</p> <p>Good collaboration skills when working with other team members on a joint objective.</p>
a) Project title:	none
b) Agreement number:	none
c) Number of months in the project to support PhD student (in months; starting from 1st of October 2024):	0
Project website:	