



MEDIA INFORMATION

Institute for Farm Animal Biology
Dummerstorf, May 7th 2021

Research for better animal welfare - Dummerstorf Research Institute (FBN) launches innovation network for healthy and "happy" cows

Notice of funding under the federal initiative "Stables of the Future"

The Research Institute for Farm Animal Biology in Dummerstorf (FBN) has successfully applied to the Federal Agency for Agriculture and Food (BLE) for funding of an innovation network within the framework of the farm animal strategy of the Federal Ministry of Food and Agriculture. The funded innovation networks are to develop experimental stables that form the basis for "stables of the future" in practical animal husbandry. Parliamentary State Secretary Hans-Joachim Fuchtel (MdB) at the Federal Ministry of Food and Agriculture handed over the funding decision virtually yesterday evening. The basis is the guideline for funding the establishment of innovation networks and experimental barns for the development of "barns of the future" for cattle, pig and poultry farming of 2th January 2020.

"The programme is geared towards the development of stable construction concepts and innovative methods for cattle, pig and poultry farming that can be implemented in agricultural practice, which should improve animal welfare and thus contribute to social acceptance," emphasised FBN Executive Director Prof. Dr. Klaus Wimmers. "This gives us a tailwind, as we have been focusing on improving animal welfare and animal health as a research priority for many years. Extensive investments in new and modernised barns for dairy cows in recent years have been able to improve the housing conditions for the animals, but there is still a lot of potential for further future improvements in digitalisation, smart farming and the development and use of biomarkers."

The goal is the "dairy barn of the future"

The FBN has been awarded the contract to set up a network "Innovations for healthy and "happy" cows", which, under the leadership of the Research Institute for Farm Animal Biology, also involves the University of Applied Sciences Neubrandenburg, the University of Veterinary Medicine Hannover, the Chamber of Agriculture of Lower Saxony as well as the State Office for Environment, Agriculture and Geology in Saxony and the Friedrich-Loeffler-Institute on the island of Riems. The network under the project management of the veterinarian Dr. Lisa Bachmann is pursuing, among other things, the development of stalls that are geared to the sensory perception and physiological needs of the animals. In addition, economic and animal-friendly management concepts for the adapted duration of lactation and for the handling of male dairy cattle calves are to be worked on. Furthermore, the biosecurity of dairy cattle barns and the use of pasture and exercise areas is an important concern for the applicants. All measures are intended to improve

animal welfare, but also to help minimise the use of antibiotics and reduce livestock-related emissions.

"The funding is intended for the first step within the framework of the federal initiative to develop an innovative stable construction concept within the next six months in order to implement the described goals," explained Dr Lisa Bachmann. "All solutions developed by the innovation network focus on animal welfare and are to result in a further project application with a subsequent term of three years for the construction of a 'dairy barn of the future' as an experimental barn in Dummerstorf."

Measuring systems for cow health put to the test

In addition to the criteria on animal welfare, animal health and environmental impact available through research results, the sensory perception and species-typical behaviour of cows and calves are also to be included in the evaluation of measures. Among other things, the virtual reality goggles developed by the Agricultural Training Centre (LBZ) Echem of the Lower Saxony Chamber of Agriculture, which simulate the visual perception of cows, are to be used for this.

The systems available at the FBN for recording animal behaviour and animal health are also to be integrated into the project. This concerns, for example, electronic feed weighing troughs for measuring feed and water intake, the Moo monitor for recording activities, feeding and lying times, the footfall sound board for monitoring limb health as well as the calf feeder for individual and group feeding and various video recordings for behavioural-physiological examinations, for assessing body condition and birth monitoring.

Photos: SphinxET/FBN

Happy cow/ Dr. Nina Melzer, Dr. Jan Langbein, Volker Röttgen and Dr. Lisa Bachmann

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