BMC Porcine Health Management

Call for Papers

Precision Livestock Farming in Pigs

image credit: © dusanpetkovic / Getty Images / iStock

The intensification in pig production demands management strategies as the number of pigs per farm employee continues to rise. Simultaneously, the importance of pig welfare is increasingly being recognized, emphasizing the necessity for pigs to exhibit favorable social behaviors. As a result, there is a growing need for pigs that are easy to manage, healthy, and resilient. Precision Livestock Farming (PLF) offers innovative solutions to these challenges, and the development of PLF technologies for pigs is advancing with unprecedented speed.

Recent advancements in PLF have introduced a range of sensor technologies—from computer vision systems and audio analysis to accelerometers and digital thermometers. These tools allow us to phenotype classic traits such as daily gain or feed intake almost continuously, or to phenotype a whole new range of traits including pig behavior, resilience, and health. The integration of this extensive data into routine practice supports more informed decision-making, optimizing both preventative and reactive healthcare or management strategies. Additionally, the ability to continuously track and analyze health metrics can streamline veterinary workflows, allowing for more efficient and targeted interventions, reducing the reliance on labor-intensive manual observations, and enhancing the overall efficiency of health management on farms. Further, this wealth of new data is revolutionizing pig breeding by making new traits accessible for routine genetic evaluation.

Therefore, the scope of this collection will focus on (1) PLF techniques to phenotype new traits related to pigs' social behavior, resilience and/or health, (2) the implementation of such techniques to leverage optimized healthcare and management in pigs, and (3) genetic strategies to implement these PLF data in breeding programs. Join us in exploring the potential of PLF to enhance pig production and welfare by submitting original articles and reviews on these topics. Make pig production great again!

Edited by

- **Carmen Winters:** ETH Zürich, Switzerland
- **Wim Gorssen:** KU Leuven, Belgium

www.biomedcentral.com/collections/PLFP

Submission Deadline: 1 February 2025

BMC Part of Springer Nature