

ENHANCING ANIMAL RESILIENCE

Are you passionate about exploring the intersection of nutrition, genetics, and bioinformatics? Are you eager to contribute to the future of sustainable farming in a world facing climate change and limited resources? We invite you to join a dynamic and multidisciplinary research project to unravel the complex mechanisms behind **animal resilience**.

In the context of growing environmental challenges and demands on farming systems, **resilient animals** -those that can sustain or revert quickly to its previous production level and/or health status after a perturbation- are critical for improving sustainability, welfare, and health. However, resilience is a complex trait, and its biological basis remain poorly understood.

Our research focuses on how some dietary lipids, known for their immunomodulatory properties, may affect the resilience of dairy sheep subjected to an inflammatory challenge. You will contribute to cutting-edge research in:

- Performance and inflammatory response analysis
- Trade-offs between resilience, immunocompetence and production traits
- Biomarker identification through omics data (transcriptomics & metabolomics)

As a PhD, you will be integrated in a research group from the **CSIC** (at the Instituto de Ganadería de Montaña) working in close collaboration with a group from the **University of León**. Together, they provide a highly multidisciplinary environment spanning areas of **nutrition, genetics, bioinformatics, statistics, and systems biology**.

This PhD opportunity offers an excellent platform to develop skills across multiple disciplines. You will gain hands-on experience with large-scale data, advanced bioinformatics, and the latest tools in genetic and nutrition research. With our group's rich history of collaboration and recognized expertise, this is an exciting chance to build a **solid basis for a versatile and impactful research career**.

We welcome applications from motivated candidates who are enthusiastic about learning and applying innovative approaches to improve animal health, welfare and productivity in farming systems. Join us and become part of a research initiative to shape the future of **resilient livestock**.

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