Position Offered: UNIVERSITY GRADUATE

Project: Integration of artificial intelligence-assisted analytical techniques in the study of the pathogenesis of relevant infectious diseases in ovine livestock

Technological and scientific fields: Animal Health. Pathogenesis. Histological Image Analysis. Pathology

Location: León. Castilla y León. Instituto de Ganadería de Montaña. <u>https://www.igm.ule-csic.es/</u>

Research Group/PI: Sanidad y Patología de Rumiantes. University of León. Daniel Gutiérrez Expósito y Julio Benavides Silván

PROJECT SUMMARY

Research on the pathogenesis of significant diseases in domestic ruminants, focusing on the characterisation of the host's immune response to intracellular pathogens. This is based on advanced studies using massive nucleic acid sequencing techniques and AI-assisted digital analysis of histological images. The project includes training placements at international universities and access to continuous education, both in-person and online.

PROFESSIONAL PROFILE

Minimum requirements:

Veterinary degree C1 level, or equivalent, of English

Merits to be considered:

Experience in tissue processing and histology. Experience in immunohistochemical and immunofluorescence staining techniques. Experience in nucleic acid extraction and primary cell line establishment and handling.

Experience in conducting post-mortem studies in small ruminants.

WHAT IS OFFERED

This project offers a unique opportunity to investigate the pathogenesis of significant diseases in domestic ruminants. It focuses on characterizing the local immune response to intracellular pathogens using advanced digital image analysis of histological and immunofluorescent images, along with high-throughput nucleic acid sequencing. Artificial intelligence will maximize objectivity and information obtained.

The training program includes 290 ECTS in analysis activities, digital skills training, the possibility to undertake a PhD within the project, and training stays at international centers (e.g., Roslin Institute, University of Glasgow) and national ones (University of Santiago de Compostela).

Contract conditions:

Indefinite contract for a University Graduate associated with the Momentum Project of 4 years' duration according to Spanish science law. Gross annual salary $(37.000 \in -41.000 \in)$.

Start of contract: before 31 December 2024

PRINCIPAL INVESTIGATOR CONTACT

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