

The SALUVET research group (<https://ucm.es/saluvet>) is looking for motivated candidates to carry out a PhD Thesis in Computational Biology and Bioinformatics.

The Predoctoral Contract for PhD Training (former FPI contracts) will be linked to the project: "Unravelling parasite and host's virulence determinants among archetypal *Toxoplasma gondii* strains" awarded in the call for Knowledge Generation Projects 2022 of the Spanish Research Agency.

The project focuses on the study of the zoonotic apicomplexan protozoan *Toxoplasma gondii* of great worldwide relevance as a cause of reproductive failure in both humans and small ruminants. The objective is to develop the analytical methodology and subsequent data analyses to identify new virulence factors and the mechanisms responsible for virulence in the strains circulating in Europe, as well as aspects related to the pathogen-host interaction of interest in human and animal health. The large genome of *T. gondii* (65 Mb) consists of 8920 genes, and today there are important aspects that remain to be investigated (Lorenzi et al. 2016, Xia et al., 2021, Berná et al., 2021, Fernández-Escobar et al., 2022; Galal et al., 2022).

Candidates with a background in bioinformatics will develop activities related to the analysis and integration of multi-omics data, analysis of whole genome data (WGS), transcriptomics and proteomics, as well as genomic variability and genotype-phenotype association studies (GWAS).

The candidate will have the possibility to collaborate with international research centers such as The Roslin Institute (Edinburgh) or National Institutes of Health (Bethesda, MD), will have access to high performance computational resources and will contribute to the advancement of scientific knowledge in the field of diseases caused by apicomplexan parasites with high impact on both Public Health and Animal Health.

Interested applicants should send their *Curriculum Vitae* and contact information to [saluvet@ucm.es](mailto:saluvet@ucm.es).

