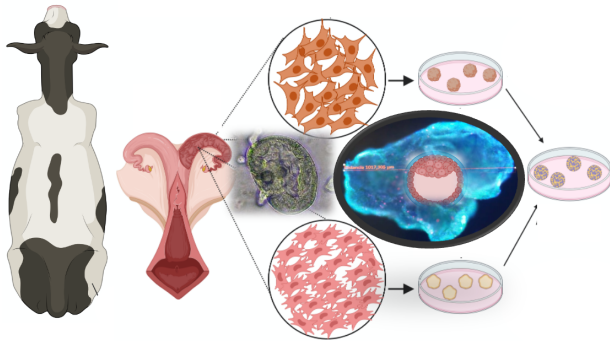


PhD Opportunity: Cutting-Edge Research on Bovine Embryo Development
Ref: PID2023-149027OB-I00

Join our innovative **IMITATE** project “*Modelling early embryo-maternal interactions in vitro as a means of improving embryo survival in vivo in cattle*” with the **Bovine ARTs and Preimplantation Embryology Group** (<https://www.inia.es/en/en/Research/Animalresearch/animalreproduction/Reproducción%20asistida%20y%20embriología%20preimplantacional%20bovina/Pages/Home.aspx>) at **INIA-CSIC** (<https://www.inia.es>) and be at the forefront of reproductive science. We’re seeking a motivated **PhD candidate** to develop a state-of-the-art in vitro model that closely mirrors the complex maternal microenvironment, aiming to transform our understanding of bovine embryo development and pregnancy success.



Research Goals:

1. **Maternal Influence:** Investigate how maternal microRNAs impact in vitro embryo development and quality.
2. **3D Model Development:** Design and refine a 3D in vitro model using bovine oviductal organoids and uterine asemploids to replicate physiological conditions.
3. **Embryo Quality:** Assess how this 3D model impacts embryo development and quality.
4. **Machine Learning Integration:** Apply machine learning to evaluate embryo competence and predict pregnancy outcomes.

Why Join Us?

- **Innovative Research:** Work on groundbreaking projects that aim to reduce reliance on traditional animal studies.
- **Expert Team:** Collaborate with national and international leading experts in bovine assisted reproductive technologies and preimplantation embryology.
- **Advanced Facilities:** Access cutting-edge laboratories and resources at INIA-CSIC.
- **Career Development:** Benefit from a supportive environment focused on your professional growth and research excellence.

This project promises a comprehensive approach to early maternal-embryonic interactions, with implications for reducing animal testing and advancing reproductive technologies. If you’re passionate about leading-edge research and eager to make a significant impact in reproductive science, we invite you to apply and be part of our pioneering research group.

For more information contact Dr. Dimitrios Rizos – drizos@inia.csic.es