FACULTEIT DIERGENEESKUNDE
accredited by EAEVE

FACULTEIT GENEESKUNDE EN GEZONDHEIDSWETENSCHAPPEN

FACULTEIT FARMACEUTISCHE WETENSCHAPPEN

Four vacancies for PhD fellows on BOF-GOA project in Ghent-Belgium

"Restoring fertility by the 3R approach : rejuvenating, replacing or reconstructing the oocyte"

In this GOA project, the cause of reduced oocyte quality in women aged between 35 and 45 years will be investigated. Therefore animal models such as bovine, horse and mouse will be applied, as well as human material, to identify the problem, and offer possible solutions in a later stage. To this end, there is intensive cooperation between the Faculty of Veterinary Medicine, Medicine and Health Sciences and Pharmaceutical Sciences.

Are you looking for a challenging job for the next 4 years? Are you fascinated by research and interested in animal and human infertility issues? Would you like to work in an international team (all communication is in English) with other passionate researchers and postdocs, to learn how to master techniques such as *in vitro* fertilisation and intracytoplasmic sperm injection, micromanipulation and molecular analyses? Then you might be the right candidate to apply for this job!

Profile: You have a scientific attitude and hold a European Master's degree in medicine, veterinary medicine, biomedical sciences, pharmaceutical sciences, bioengineering, biology or related … by September 2024. High degrees serve as a recommendation but are not mandatory. We are especially searching for a motivated, flexible and engaged team player. A European driver's license B is needed for the job. Master students in their final year which will graduate by September 2024 are encouraged to apply.

We are specifically seeking candidates for the following parts of the project:

1. Bovine *in vitro* fertilisation: isolation of extracellular vesicles from stem cell cultures and follicular fluid, addition of specific (rejuvenating) miRNAs identified in these vesicles to maturation medium and bovine oocytes in individual culture, monitoring embryonic development – Prof. Ann Van Soom (Veterinary Medicine) ann.vansoom@ugent.be

2. *In vitro* fertilisation in the horse: comparing extracellular vesicles in follicular fluid in young and old mares and in young females and females between 35-45 years of age, testing identified miRNAs for rejuvenating properties, micromanipulation and nuclear transfer– Prof. Katrien Smits (Veterinary Medicine) katrien.smits@ugent.be

3. Genetic analyses of bovine, equine and mouse embryos, identification of miRNAs in extracellular vesicles of biological fluids and culture media (Veterinary Medicine) – Prof. Luc Peelman luc.peelman@ugent.be

4. Micromanipulation of mouse and human oocytes involving the nuclear transfer technology to distinguish the effect of cytoplasm versus nucleus during female oocyte ageing – Prof. Björn Heindryckx (Medicine and Health Sciences) bjorn.heindryckx@ugent.be

This research will be done in close collaboration with a PhD student already working under Prof. Dieter Deforce (Pharmaceutical Sciences) who is specialized in bioinformatics.

Are you interested? Then send an e-mail with your CV and application letter to ann.vansoom@ugent.be by the **1st of April 2024**. Don't forget to indicate your preference(s) as to the research parts mentioned above. Individual interviews with all selected candidates will follow in the morning of 15 and 17 April 2024. The contract will start from 1st of September 2024, but the starting date can be flexible depending on availability or preference of the selected candidate.

More info on PhD? https://www.ugent.be/en/research/doctoralresearch/overview.htm