

The Centre for Microsystems Technology (CMST), which is part of the Faculty of Engineering and Architecture of Ghent University and affiliated with imec vzw is looking for a highly motivated PhD candidate.

The successful candidate will work on a 4 year project funded by the FWO on **the development of a novel microfluidic platform for the in-vitro culture of mammalian embryos**. The goal of the project is to improve the success rate of the embryo culture by providing a closer approximation of the environment that is found in nature, i.e. instead of a static culture in an oil covered drop of medium on a Petri dish. Microfluidics will be applied to provide a more gradual refreshment of the culture medium and exposure to stimuli similar to the ones found in the genital tract. In this project, the bovine (cow) model is used for the verification of the concept, with the ultimate goal of improving the in-vitro culture of human embryos. Therefore, the project is highly multidisciplinary in nature and will be performed in close collaboration with the department of Veterinary Medicine at Ghent University, and the Department of Reproductive Medicine of the Ghent University Hospital.

The desired background of the candidate is in the field of (Bio)Engineering or Physics with a specialization in biotechnological, biomedical, micro-and/or nano-fabrication, polymer processing, or other fields that provide the required insight in multidisciplinary research involving the manufacturing of small structures. The candidate must be willing to perform hands-on work with mammalian embryos. The necessary training is foreseen if this is not yet a skill of the candidate.

Proposed starting date is 1st of September 2017. The candidate should be eligible to enroll as a PhD candidate at the faculty of engineering and architecture at Ghent university. The requirements include :

- Hold the degree of Master (or equivalent) from a BeNeLux (Belgium, Netherlands, Luxemburg) institution.
- Holders of a foreign degree need to complete an admission procedure during which the academic aspects (equivalence of your degree, language skills) will be evaluated.

For more information: please send a letter and your CV to prof. Jan Vanfleteren (e-mail : Jan.Vanfleteren@ugent.be) before July 1st 2017