PhD student in Medical Cell Biology - Bioprinting of Tissues

Uppsala University is a comprehensive research-intensive university with a strong international standing. Our mission is to pursue top-quality research and education and to interact constructively with society. Our most important assets are all the individuals whose curiosity and dedication make Uppsala University one of Sweden’s most exciting workplaces. Uppsala University has 46,000 students, 7,300 employees and a turnover of SEK 7.3 billion.

The Department of Medical Cell Biology at Uppsala University has a strong and international research environment with over 100 scientists, including around 25 PhD students, 20 postdocs and 30 researchers and professors.

**Duties/Project description:** Bioprinting of cells in defined extracellular matrices represents a novel approach to create well-defined 3D tissue models. In the future, 3D bioprinted tissue models will likely replace many existing 2D cell culture models currently used in academia and industry, and 3D bioprinted tissues will also likely be used for transplantation.

The successful candidate will in this project be part of an international research team developing bioprinting of highly reproducible 3D tissue models, with a focus on tumor models from clinically relevant cancer cell lines or primary cancer cells, and tumor-associated cells, in physiological matrices. The bioprinted 3D tumor models will be evaluated for use in breast cancer research at Uppsala University and scaled to allow for high-throughput in vitro screening of new experimental cancer treatments. The project will also involve bioprinting of functional miniature islets of Langerhans, composed of human insulin-producing beta cells as well as glucagon-producing alpha cells, of great relevance to diabetes research. The bioprinted tissue models will be studied by advanced, high-resolution live imaging and characterized with regard to gene and protein expression.
Associate Prof. Johan Kreuger will be the main supervisor. The project will be carried out within AddLife, which is a VINNOVA Competence Centre that gathers more than 20 partners in academia, industry and the public sector to support competence development in additive manufacturing for the life sciences. The centre is funded by academia, industry and VINNOVA in equal parts, with a total budget of approx. 100 MSEK and will run for 5 years in a first instance, between 2020-2024, and engage experts within academia and industry with a passion for 3D-printing with the ultimate goal of developing new technologies to improve people’s lives.

The successful candidate will engage in research work and doctoral studies. Other duties at the department, i.e. administration and teaching, may be included in the employment up to a maximum level of 20 %.

Requirements: As a candidate for this position, you should have a Master’s degree (MSc) in Molecular Biotechnology Engineering, or an equivalent degree. You should be ambitious, productive, and have a passion for science and technology. Personal qualities, ability to work independently and at the same time be able to interact with other researchers both nationally and internationally is very important. Very good communication skills in written and spoken English according to Uppsala University’s guidelines is required.

To be employed as a PhD student, the applicant must be accepted in the postgraduate program. Information concerning doctoral education, requirements and rules of admission can be found at http://www2.medfarm.uu.se/utbildning/forskarniva. The length of the study period for full time employment is a maximum of four years.

Rules governing PhD students are set out in the Higher Education Ordinance chapter 5, §§ 1-7 and in Uppsala University’s rules and guidelines http://regler.uu.se/?languageId=1.

Salary: According to local agreement for PhD students.
Starting date: 01-08-2020 or as otherwise agreed.
Type of employment: Temporary position according to the Higher Education Ordinance chapter 5 § 7.
Scope of employment: 100 %
For further information about the position please contact: Johan Kreuger,
Please submit your application by the 25th of May 2020, UFV-PA 2020/1244.

Are you considering moving to Sweden to work at Uppsala University? If so, you will find a lot of information about working and living in Sweden at www.uu.se/joinus. You are also welcome to contact International Faculty and Staff Services at ifss@uadm.uu.se.

Please do not send offers of recruitment or advertising services.

Submit your application through Uppsala University’s recruitment system.

Placement: Department of Medical Cell Biology
Type of employment: Full time, Temporary position longer than 6 months
Pay: Fixed salary
Number of positions: 1
Working hours: 100 %
Town: Uppsala
County: Uppsala län
Country: Sweden
Union representative: Seko Universitetsklubben seko@uadm.uu.se
ST/TCO tco@fackorg.uu.se
Saco-rådet saco@uadm.uu.se
Number of reference: UFV-PA 2020/1244
Last application date: 2020-05-25

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