



LUND UNIVERSITY

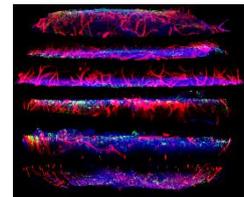
Laboratory for Cell, Tissue & Organ engineering

We are recruiting highly motivated scientists at Post-doctoral level! Applicants with an international research experience and strong background in molecular biology, 3D printing, bone formation/regeneration, tissue engineering are encouraged to apply. With a 30min direct connection to Copenhagen airport, Lund is an accessible university city of international reputation. You will be most welcome in a young, friendly and dynamic environment. Please provide your **CV, motivation statement and up to 3 referees** at: paul.bourgine@med.lu.se

GENERAL INFORMATION

The lab: The successful candidates will be part of the novel **laboratory for Cell, Tissue and Organ engineering**. The laboratory is part of the Wallenberg Centre for Molecular Medicine (WCMM LU), at the Lund Faculty of Medicine (<https://www.med.lu.se/english>). Focusing on regenerative medicine (regeneration, replacement and repair), WCMM LU is part of a national effort to strengthen Sweden as a world-leading life science nation (<https://www.med.lu.se/wcmm>).

Our lab aims at deciphering the cellular & molecular mechanisms occurring during phases of **bone formation/repair**. Using state-of-the-art **3D culture** systems, **death-inducible** human mesenchymal lines and tissue engineering protocols, we focus on studying processes of cartilage/bone/bone marrow establishment in human(ized) contexts. Compiled knowledge will be used for the design of **cell-based but cell-free** extracellular matrices, to be used as **smart-materials** for skeletal repair. As such, the lab covers both fundamental and translation research aspects. **More information available on our website:** www.bourginelab.com



The University: The lab is located within the BioMedical Center of the Faculty of Medicine and is part of Lund University (Sweden). The university was founded in 1666 and is repeatedly ranked among the world's top 100 universities. With 42 000 students and 7 400 staff based in Lund, Helsingborg and Malmö, Lund is the second largest university of Sweden.

The Faculty of Medicine as part of Lund University is responsible for education and research within medicine and healthcare. Our academic programs are closely linked with the healthcare system and are firmly anchored in the faculty's strong research tradition. Our research spans a broad field within experimental preclinical research, near-patient clinical research and health sciences research. The Faculty of Medicine, is a knowledge-intensive meeting place for students, teachers and researchers from all over the world.



Keywords: Bone organ, regenerative medicine, tissue engineering, hematopoiesis, 3D culture, stem cells, biological matrices

Position: Postdoc position in tissue engineering/regenerative medicine

Project: The candidate will exploit novel human death-inducible cell lines and 3D systems for the engineering of extracellular matrices customized in composition and shape. Those cell-based but cell-free grafts will be characterized and validated in various animal models of bone repair. The candidate will target the GMP and scaled-up production of such materials, toward its pre-clinical validation. The candidate is also expected to decode the cellular/molecular events driving bone formation in this model. The project combined both key translational and fundamental features.

Ideal profile: You are a freshly graduated PhD looking for a post-doctoral experience to complement your existing skills/background. You have strong experience in tissue engineering, and knowledge on bone development, biology and regeneration. You are familiar with cell culture and engineering techniques, flow cytometry. The laboratory will offer you robust training in human cellular biology, engineering of human cells/tissues/organs, as well as in manipulation of 3D culture systems. Required skills include an excellent speaking/writing English levels and capacity to work with animals. Experience in molecular biology, 3D culture, confocal microscopy or 3D printing is a strong asset.

Working Pattern / Starting Date: Full time / ~September 2019

Type of employment Temporary position longer than 6 months

Contract type Full time

Number of positions 1

Working hours 100%

City Lund

County Skåne län

Country Sweden

Contact Paul Bourguine/paul.bourguine@med.lu.se

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Link to ad <http://www.bourginelab.com/2019/06/10/wanna-collaborate-with-us/>