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Paul currently holds an associate professor position at the University of Lund (Sweden), where he leads the **Cell, Tissue & Organ engineering laboratory** (www.bourginelab.com). His research aims at studying Bone as an organ system, understanding from a fundamental perspective how its constitutive tissues (bone, cartilage, marrow) form, interact and regenerate. By exploiting innovative in vitro/in vivo models of bone formation, he ambitions to compile human specific knowledge helping the design of regenerative therapies. From bone, Paul's interest extended to the hematopoietic system where the lab intends to understand the function of human mesenchymal cells in healthy and malignant contexts. To this end, the lab is engineering human bone marrow niches capable of recapitulating the native human bone microenvironment.

Paul studied Biotechnology at the Ecole Superieure de Biotechnologie de Strasbourg, a European school joint venture of the universities of Freiburg, Strasbourg, Basel and Karlsruhe. He obtained his engineering diploma in 2010 after a stay at the **Ragon Institute of Harvard, MIT and MGH** (Boston, USA). Paul subsequently moved to Switzerland and received his Ph.D in Cell Biology from the University of Basel in 2013 (Prof. Ivan Martin's laboratory). After a three years post-doc at the Biosystem department of the **ETH-Zürich** (Prof. Timm Schroeder's laboratory), he opened his lab in 2018 at the faculty of medicine in Lund, embedded within the **Stem Cell Centre, Cancer Centre** and the **Wallenberg Centre of Molecular medicine** framework.

In the past years, Paul has secured over 6M euros in funding as principal investigator, through prestigious national (e.g. **Swedish Research foundation starting grant**) and international calls (e.g. **ERC Starting grant**, **ERC Proof-of-Concept**, **EIC Pathfinder**). Paul's group has published in highly ranked journals including Science Translational Medicine, Advanced Materials, PNAS, Cell Stem Cell, Advanced Functional Materials, Trends in Biotechnology, Blood and his strongly connected to the **TERMIS**, **ISSCR** and **ISEH** societies. His research is at the crossroad between tissue/organ engineering and stem cell technologies, exploiting state-of-the-art technologies such as personalized engineering of human bone organs in mice, 3D quantitative microscopy, single cell transcriptomics, and 3D-printing of custom bioreactor systems.