

Master's thesis project

at Subramaniam group in Lund Stem Cell Center, Sweden

Lund Stem Cell Center is a world-leading center for stem cell research with the mission of transferring basic science findings to the clinic in order to improve human health. Working at the Stem Cell Center also gives you the opportunity to interact with excellent scientists working in diverse stem cell fields.

We are looking for a master's student interested in conducting their thesis project on the epigenetic regulation of stem cells.

Project duration

From 6 to 12 months (1 or 2 semesters), Starting time: Spring of 2027.

Topic

Uncovering the epigenetic regulators of hematopoietic stem cells.

Project description

The aim of this project is to elucidate the molecular mechanisms that governs stem cell fate decisions in hematopoietic stem cells. The thesis work would focus on the mechanistic characterization of co-repressor epigenetic complexes in regulating the stemness. This will be performed by employing a combination of CRISPR and targeted protein degradation approaches. This project aims to employ a set of molecular and functional assays in primary human hematopoietic stem cells to dissect the underlying self-renewal mechanisms.

Requirements for candidate

- Experience in vector cloning or cell culture
- Experience in standard molecular assays (western blot, RT-qPCR and others)

The project includes,

- Gene knockout using CRISPR
- Targeted protein degradation
- FACS assays
- Gene expression and epigenome profiling assays
- Working with primary human hematopoietic stem cells

Supervisor: Agatheeswaran Subramaniam, PhD, Lab website: <https://subramaniamlab.in/>

More information about the PI and our work:

- <https://portal.research.lu.se/en/persons/agatheeswaran-subramaniam>
- <https://www.lunduniversity.lu.se/article/unexpected-discovery-reveals-mechanism-behind-brain-tumour-development>
- <https://www.stemcellcenter.lu.se/article/decoding-inner-workings-blood-stem-cell-boosting-molecule>
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Please send your CV, a short motivational letter and preferred internship time before **December 10, 2026**.

to agatheeswaran.subramaniam@med.lu.se, with subject "Master thesis project". You can also contact Agathees for any questions or more information on the position.