We are looking for a highly motivated master student to join our laboratory at Center for Molecular Medicine (CMM) Solna campus, earliest Autumn 2021 for 6 months to a year. The project aims at dissecting the way cellular stress responses or stress factors integrate with pathways governing stem cell functions. The more specific aim focuses on the transcription factor ATF4 and its effects on neural stem cell functions.

**Background**

Cellular stress arises following different conditions such as, nutrient deprivation, viral infections or inflammatory processes. Accumulating evidence have shown that factors that have initially been described to be involved in stress responses, are also homeostatic regulators involved in different metabolic process or cellular differentiation. To date, stress responses/factors are scarcely studied in neural stem cells. Adult neural stem cells reside in the brain and spinal cords of mammals including humans. During neuroinflammatory conditions, these cells are directly affected by inflammatory factors causing their change in function.

**Description**

The student will be introduced to various methods such as cell culture, cell transfections with DNA or siRNA cell transductions with viral vectors, western blot, quantitative RT-PCR, immunocytochemistry and possibly work with different animal models for neurodegeneration. After an introductory period, the student is expected to work independently in the laboratory, collect and analyze data. Please, send your CV to ruxandra.covacu@ki.se.

**Contact information**

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