



## SAHLGRENKA AKADEMIN INSTITUTIONEN FÖR BIOMEDICIN

### Utlysning

**Project Title:** Exploring the functional role of novel antisense RNA encoded protein MSEP in mitosis progression in normal and cancer cells.

**Project duration and dates:** 01-06-2025 to 30-06-2025

**Application deadline:** 12-12-2024

**Amount:** 20,000 SEK/ month

**Project Summary:** We have recently identified an antisense RNA locus which encodes a novel protein called mitotic spindle essential protein (MSEP). Its loss of function leads to accumulation of cells with mitotic abnormalities. MSEP shows stage-specific localization: It is localized specifically to nuclear compartment in interphase cells and in mitosis, it is exclusively localized mitotic spindle fibers and spindle poles. We have characterized MSEP interacting protein partners, which are shown to have critical role in mitosis progression. The selected candidate will investigate if MSEP undergoes post-translational modification in a stage-specific manner.

**Applicant:** The applicant should have master's degree in cell biology and molecular biology. The applicant should have very good theoretical and technical expertise in cell biology and molecular biology. The applicant will perform plasmid transfection, immunoprecipitation, Western blotting and mammalian cell culture. The applicant will investigate if the MSEP protein undergoes post-translational modifications and the significance of the post-translational modification MSEP function.

**Application:** Applications should be emailed to [kanduri.chandrasekhar@gu.se](mailto:kanduri.chandrasekhar@gu.se) The application should include; Motivation letter, CV, degree certificates and other relevant documents including contact info.