



SAHLGRENKA AKADEMIN INSTITUTIONEN FÖR BIOMEDICIN

Utlysning

Project Title: Proteomics profiling in FET sarcomas

Project duration and dates: 17 June 2022 to 31 Dec 2024

Application deadline: May 2024

Amount: Stipend of 16 000 SEK /month

Project summary:

FET (FUS, EWSR1 and TAF15) fusion oncogenes are characteristic for several sarcomas (FET sarcomas) and leukemias, including myxoid liposarcoma and Ewing sarcoma. FET sarcomas have few other recurrent mutations, suggesting that FET fusion oncogenes have causative roles in tumor development. The FET oncoproteins interact with the SWI/SNF complex subtypes, where cBAF, PBAF and GBAF are the most common types. SWI/SNF complexes consist of about 15 protein subunits, some subunits exist in SWI/SNF as different paralogs and their combinatorial assembly results in a large variety of complexes. However, the specific interactions between FET fusion oncoproteins and specific SWI/SNF subunits are not known, including their specific effects on other protein interactions, and downstream epigenetic regulation.

In this project we will study the SWI/SNF complexes in FET sarcomas, especially in relation to FET fusion oncoproteins. We will use cell culture techniques and stimuli to study protein interactions. We will have a specific focus on molecular analysis, especially protein analysis. Parts of the project will include method development in relation to protein interaction studies. The work will be experimentally oriented and include experimental design, cell culturing followed by molecular analysis and data interpretation.

Applicant:

We are looking for a highly motivated person, who wants to develop their expertise in tumor biology and molecular techniques. The candidate should have a MSc or be close to finish their MSc in a relevant area. Preference will be given to candidates who already have prior experience in tumor biology, especially sarcoma biology as well as protein analysis.

Application:

Applications should be emailed to Anders Ståhlberg: anders.stahlberg@gu.se The application should include; Motivation letter, CV including contact info.