



## SAHLGRENKA AKADEMIN INSTITUTIONEN FÖR BIOMEDICIN

### Utlysning

**Project Title:** Therapeutic oligonucleotides in tumor biology: Methods and applications

**Project duration and dates:** 1 Jan 2026 to 31 March 2026

**Application deadline:** 15 Dec, 2025

**Amount:** Stipend of 16 000 SEK /month

#### **Project summary:**

Therapeutic oligonucleotides offer a promising modality for treatments of patients with various diseases and conditions. The use development and use of therapeutic oligonucleotides is a rapidly growing research field, where the first approved treatments are clinically used. However, there are several challenges when developing therapeutic oligonucleotides, including evaluating different oligonucleotide sequences and their specificity. One issue is to detect and quantify therapeutic oligonucleotides reliable. Therapeutic oligonucleotides are short molecules with a range of different modifications, which make them challenging to analyze with traditional analytical methods, such as PCR and sequencing. The goal of this project is therefore to apply sensitive and specific method that enable the quantification of different types of therapeutic oligonucleotides. We will test therapeutic oligonucleotides in experimentally model system to study their biology and ability to downregulate the expression of specific genes. If feasible, we will also test different approaches to design and assess therapeutic oligonucleotides.

The aim is to apply therapeutic oligonucleotides to tumor cell lines and knock-down the expression of genes relevant in tumor development.

#### **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 molecular techniques related to therapeutic oligonucleotides.

#### **Application:**

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