We are looking for a biotechnology master student interested in development of proteins for medical applications, incl. diagnostics and therapy

Affinity proteins are of fundamental importance in biotechnology, diagnostics and medicine where the ability to recognize and bind a given target molecule can be exploited for different purposes, incl. detection, capture or functional blocking. In recent years, technologies used to develop new affinity proteins have moved away from the use of laboratory animals for the generation of poly- or monoclonal antibodies to instead explore the power of in vitro protein library technologies involving selections/screenings of vast collections of candidate affinity proteins generated by modern gene technology principles. These routes also allow for the generation of new non-antibody classes of affinity proteins, differing in structure, size, stability and “engineerability”, opening up for new applications.

Project: We are engaged in a number of projects with different collaborators at Karolinska Institute, Uppsala University, SciLifeLab and internationally. We can therefore offer a portfolio of different topics for a Master Thesis Project (30 hp), including:

- Engineering of antibody fragments for cancer imaging and therapy
- Engineering of affibody proteins for cancer imaging
- Design and evaluation of novel binder protein formats
- Characterization of proteins for immuno-oncology applications

The project will involve hands-on experience with numerous methodologies of value for your future career.

Where to work: Division of Protein Technology, School of Biotechnology, KTH, AlbaNova University Center.


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POSSIBLE START IN JAN 2018