



Tentative project offers for master thesis projects spring 2023 at Gyros Protein Technologies

About Gyros Protein Technologies

Gyros Protein Technologies provides enabling peptide synthesis and bioanalytical solutions, helping scientists in research through bioprocess applications. Our peptide synthesizers and chemistries deliver uncompromising purity, flexibility and quality in less time. Sensitive, accurate and robust nanoliter-scale immunoassays for pharmacokinetics/pharmacodynamics, immunogenicity and quantitating bioprocess impurities and viral titer are performed on our proprietary platforms [Gyrolab™ xPand and Gyrolab xPlore™]. Peptide synthesis and bioanalytical solutions: accelerate your discovery, development and manufacturing of safer biotherapeutics. Gyros Protein Technologies is a division of Mesa Laboratories. <https://www.gyrosproteintechnologies.com/>

Background

Gyrolab technology offers fully automated miniaturized immunoassays simplifying the workflow with increased performance. Immunoassay techniques are widely used for determination of the concentration of biomolecules in wide range of applications in life science. It has been used in established areas like drug and vaccine development and in vitro diagnostics for decades, but also it is also used in new emerging fields including cell and gene therapy. The ELISA technique has been the gold-standard but new more efficient techniques with improved performance are replacing this methodology.

Master thesis projects

2. Development of immunoassays useful in the development of a bispecific therapeutic antibody

In the development of antibody therapeutics, a range of quantitative assays is being used to predict the action of the drug. Measurement of the drug in pharmacokinetic (PK) assays or the target molecule in pharmacodynamic assays (PD) are developed for this purpose. Bispecific antibodies bind two different targets and the number of free molecules and complexes formed are more intricate. Gyrolab immunoassays are based on a flow through detection technology suitable to measure concentrations in the interaction mixture.

In this project Gyrolab open immunoassay platform will be used to develop a wide range of relevant PK and PD immunoassays concerning bispecific antibodies. A range of assay formats will be evaluated for the different analytical requirements.

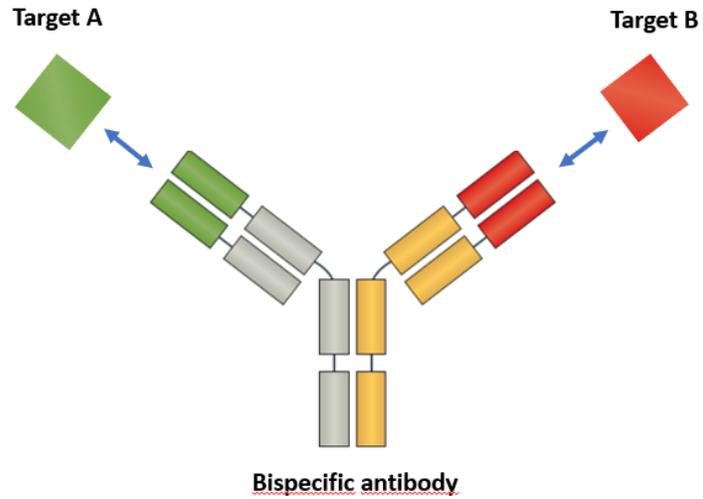


Figure 2: Bispecific antibody with the ability to bind two different targets. There are a wide range of molecules and complexes formed.

Apply by sending your application letter and CV to sara.sandstedt@gyrosproteintech.com