

GYROS PROTEIN Technologies

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

4. Use of microsampling techniques for sample analysis on the Gyrolab platform

Microsampling techniques refers to the collection of small volumes blood or other biological fluids for bioanalysis. One of the main benefits with microsampling is that the multiple samples can be taken from the same study individual, even when mice and smaller animals are used, and thereby contribute significantly to the three R:s in laboratory animal science (Replacement, Refinement, Reduction).

The Gyrolab is an immunoassay platform that is working with very small sample volumes, thereby making it ideal for microsampling techniques. It is also very matrix tolerant, which means that the samples do not need to be diluted that much to be measured, which is important to avoid sensitivity problems.

In this M.Sc. thesis project, several microsampling techniques will be tested for analysis on the Gyrolab system.

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