NORDIC BIOSCIENCE
BIOMARKERS & RESEARCH

UNIVERSITY OF COPENHAGEN

MASTER THESIS

Are you interested in working with biomarkers for lung fibrosis in an academic and industrial collaboration project?

The project

Lung fibrosis is a manifestation of various chronic lung diseases. It is characterized by excessive remodeling and accumulation of extracellular matrix (ECM) proteins which leads to loss of lung function. In this project the focus will be on biomarkers for chronic obstructive pulmonary disease (COPD or smoker's lungs) and idiopathic pulmonary fibrosis (IPF), which are diseases that are affecting millions of people worldwide.

The aim of the project is to identify and develop novel biochemical markers, measuring fragments of ECM proteins generated by mechanisms of lung fibrosis. You will characterize the markers using various techniques and validate their diagnostic and prognostic value in clinical studies.

Mostly, your day-to-day will be at the biotechnological company Nordic Bioscience, but you will also work at Professor Michael Davies' Group at the department of Biomedical Sciences, University of Copenhagen, with the mass spectrometry related methods.

Methods

During the project you will learn several techniques including

- ELISA development
- Characterize ELISA targets with mass spectrometry through
    - Developing a method in immunoprecipitation
    - *In vitro* protein cleavages
- Handling and analysis of human samples

Other techniques such as SDS-PAGE and histology may be included, depending on your wishes.

What do we expect?

You are expected to show a high level of engagement, have a desire to learn and further improve your skills. You will be working on the project for at least app. one year full-time, in order to obtain a satisfactory result. A good level of English is required. Laboratory and mass spectrometry experience is an advantage.

Company profile

Nordic Bioscience is an expanding biotech company with a strong focus on developing novel biochemical markers for diagnosis and prognosis of major human diseases. You will be part of a young and ambitious team with a high publication rate. We offer an attractive research environment with several master and PhD students and close contact with your daily supervisor.

Contact

If you are interested in a master thesis project and would like to hear more, please contact Annika H. Hansen, Nordic Bioscience A/S, Herlev Hovedgade 207, DK-2730 Herlev, Phone 4454 7737, E-mail ahh@nordicbio.com