REA, Laboratory of Life Science Electronics startup
www.readiagnostics.ch
Contact: careers@readiagnostics.com

EPFL   rea

Master thesis position:
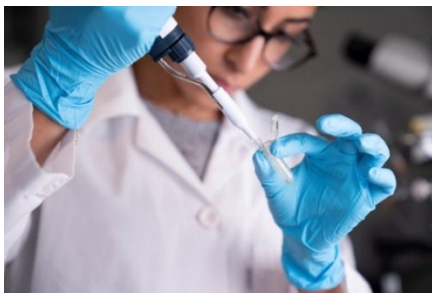# Wearable technology for preterm birth diagnostics

REA is an early stage EPFL startup developing technology for women healthcare. We are developing a wearable, in the shape of a sanitary pad, that tracks biochemical markers of preterm birth (PTB). Our solution allows doctors to continuously follow up pregnant women at risk of PTB to anticipate a potential early delivery.

Today, all of the medical examinations to monitor the risk of a PTB require invasive inspections of pregnant women. These tests have to be performed by a medical professional in a hospital, limiting significantly the number of pregnant women that can be tested.

Every year, an estimated 15 million babies are born preterm. Preterm birth, and its related complications, are the leading cause of death among children under 5 years of age.

The technology we are developing would create a big impact on the clinical decision making of preterm birth: Clinicians could effectively identify pregnant women at higher risk of preterm birth, admit these patients to the hospital and provide personalized prophylactic treatments to decrease neonatal mortalities and morbidities.

This project aims at optimizing a novel biosensor for preterm birth diagnostics. The project will give the students the opportunity to gain some expertise in :

- Biochemistry and diagnostics technology
- Experiments design and data analysis
- Working in a early stage startup with highly interdisciplinary field

Duration: starting from 5 months (preferably start in September 2022)

Prerequisites: Students with a background in biomedical engineering, biochemistry or biology. Micro-engineering, physics or chemistry students are also welcome. A strong motivation is required regardless your background.

In case of interest, send your CV & your motivational letter to: careers@readiagnostics.com