

MSc/BSc-project

Title: Biofilms treated with hyperbaric oxygen

Description:

Biofilms provide a protective matrix for bacteria proliferating inside living tissue. In this project we model how hyperbaric oxygen diffuses into the biofilm and modifies the effect of different antibiotics. In this way we hope to understand how the protective effect to antibiotics of the biofilm matrix can be surpassed.

Relevant qualifications: Knowledge of signal processing, matlab, biochemistry, cell physiology, ...

Responsible institution: DTU Elektro in collaboration with Rigshospitalet and Panum, KU.

Contact information:

Thomas Sams <tsams@dtu.dk>, BME, DTU Elektro

Kaj-Åge Henneberg <kah@elektro.dtu.dk>, BME, DTU Elektro

Mette Kolpen <mettekolpen@gmail.com>, Dept of Clinical Microbiology, Rigshospitalet,

Peter Østrup Jensen <peter.ostrup.jensen@regionh.dk>, Dept of Clinical Microbiology, Rigshospitalet.

Allowed no of students per report (1-2): Preferably 2.

Suggested DTU supervisor:

Thomas Sams <tsams@dtu.dk>

The project description may be published on the website (yes/no): yes