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# **Internship: Rapid Antibiotic Susceptibility Diagnostics**

Internship start: 1 March 2017

Fraunhofer CMI – Center for Manufacturing Innovation – conducts advanced R&D and engineers solutions for a broad range of industries including biotechnology/biomedical, manufacturing and renewable energy. Our services include high precision automation systems, biomedical instruments and devices, and process management and consulting.

## Responsibilities and learning opportunities:

In our project: »Rapid antibiotic susceptibility« we have developed a system and methodology for rapidly detecting antibiotic resistance in bacteria by placing the bacteria in microfluidic channels and applying shear stress to the bacteria immobilized at the bottom of the channel.

As an intern in this project, with Dr. Sauer-Budge as your supervisor, your main tasks will be:

- Studying the effect of stresses to potentiate the action of antibiotics
- Running experiments on the bacteria to validate the model.
- Designing and building microfluidic devices

#### What we expect:

- A good academic record in biology, biotechnology, or similar field
- Ability to accept a high degree of responsibility in a team-based organization, combined with the ability to work independently
- Experience with microbiology, bacterial cell culture, and the like is ideal
- Intercultural competences and motivation to integrate into American culture
- Excellent verbal and written communication skills in English
- Proficiency in MS Word, Excel, PowerPoint

### What you can expect from us:

- Opportunity to acquire practical research experience through own responsibilities and the integration as a fully respected member in our team
- Housing in a shared apartment with other interns, and a monthly stipend.

### To apply:

Please send a cover letter, resume, transcripts, and any letters of recommendation to Dr. Alexis Sauer-Budge at asauerbudge@fraunhofer.org