

Fraunhofer CMI
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Internship: Tissue Engineering/Bioprinter

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:

As an intern for tissue engineering you will perform tests with various synthetic and biological materials and optimize the 3D bioprinting process with Dr. Sauer-Budge as your supervisor.

Your main tasks will be:

- Optimizing and developing hybrid ink materials and the fabrication of hydrogels by testing crosslinking conditions etc.
- Characterizing material properties, e.g. rheological measurements
- Testing the material interaction with human cells *in vitro*, for example by performing viability and differentiation assays
- Adjusting and developing the 3D bioprinting process for new inks.

What we expect:

- A good academic record in biology, biotechnology or similar field
- Experience with mammalian cell culture and/or material science is ideal
- Ability to accept a high degree of responsibility in a team-based organization, combined with the ability to work independently
- 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