

Developing ultra-high throughput screening for microbial solutions: From lab to startup

We are an academic team from the University of Tübingen (Germany) leading a **project with the goal of transforming into a startup within the next two years: 'Microbial Solutions for a Sustainable Future'**. We are in the final stages of developing an ultra-high throughput screening system for microbes, aimed at addressing real-world sustainability challenges. Our immediate objectives are to finalize the development of our system and use it to find microbes capable of degrading bioplastic and producing biological dyes. Achieving these milestones will lay the foundation for a startup company, with potential customers already in view. Our future goals include screening for new drugs, enzymes, biological food additives, and biological agrochemicals to replace toxic and synthetic substances.

We have an open position for a scientist (m/f/d) to join us on this young project, offering the opportunity to be among the first members of a future startup. The position is fully funded for two years by the Innovation Grant of the University of Tübingen. The starting date is 1.1.2025. The salary is paid according to TV-L, E9 (100%). Ideally, the contract will be extended upon the foundation of a startup company.

Your responsibilities

- Play a key role in a small, dynamic team working on an innovative project.
- Executing experiments to finalize the development of our screening pipeline. This majorly includes working with microbes in microfluidics.
- Develop assays for bioplastic degradation and dye production by microbes.
- Analyze data from experiments to conclude the next steps.

Your professional qualification profile

- Bachelor of Master degree in microbiology, systems biology, biophysics, biological engineering, or related fields, or completed training as a Biological Technical Assistant (BTA) or Chemical Technical Assistant (CTA).
- Critical and independent thinking, creative problem-solving skills, and high intrinsic motivation.
- A startup mentality: Embrace challenges, demonstrate flexibility and persistence, and be motivated to build from the ground up.
- Experience in some but not necessarily all of the following techniques: microbial culture techniques, microfluidics, FACS, high-throughput measurements, big data analysis, genomics, DNA sequencing.

We offer

- A rare opportunity to be an integral part of a startup anticipated to launch within two years.
- An attractive, interdisciplinary, and international working environment in a mixed team of experienced and young scientists.

- Excellent infrastructure for conducting scientific research.
- An easily accessible workplace, conveniently located near the city center of Tübingen (bike-friendly and well-connected by public transport).

For further information about the project, team, or position, please informally contact **Dr. Or Shalev** (or.shalev@uni-tuebingen.de) or **Dr. Christoph Ratzke** (christoph.ratzke@uni-tuebingen.de). For the application, please submit a CV, a motivation letter, and reference contacts to **Dr. Or Shalev** (or.shalev@uni-tuebingen.de). **The review of applications will begin at the beginning of October. The position should start at 1.1.2025.**

The university advocates equal rights for all genders and therefore urges women and gender-diverse people to apply. Equally qualified applicants with disabilities will be given preference. For more information about our group, please visit www.cratzke.de.