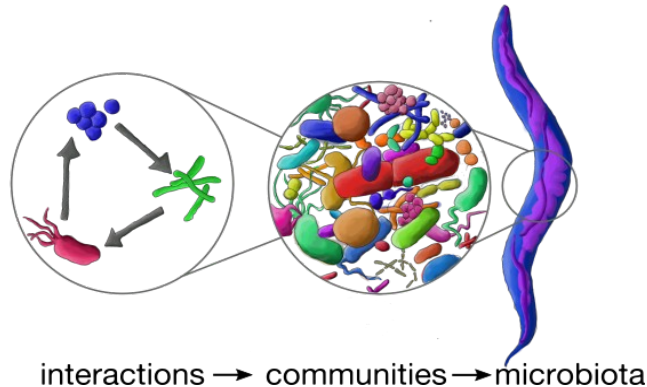




## ERC-funded PhD or Postdoc Position in Systems Biology of Microbial Communities



### Can we use microbial interactions to fight infections?

We are inhabited by a huge number of microbes that are crucial for our health and well-being — like the communities living on our skin or in our gut. When those communities are taken over by pathogens, we become sick. Traditionally microbial infections have been treated with antibiotics, but we currently face more and more antibiotic-resistant pathogens, which demands new therapies.

Pathogens that are infecting us first have to interact with our native microbial communities. Those native microbes can support the pathogen or hinder it and thus prevent infectious diseases. The goal of this ERC-project is to establish a novel microscopy technique to measure microbial interactions directly within host-associated microbial communities. This will allow us to identify microbes that can counteract pathogens and thus could be used as “living antibiotics” to treat and prevent infection diseases.

We have an **open PhD or postdoc position** starting early 2021. The scientific work will be very **interdisciplinary** including the areas of **systems biology/biophysics, microbiology, and ecology**. Accordingly, we welcome scientists with a background in any of these or related fields. Central task of the position is to establish a new microscopy method in the lab, which requires some skills in **optics and programming**. Moreover, experience with **microbial** and ***C. elegans*** culture is favorable, but not strictly required. Check out our homepage for more infos: [www.cratzke.de](http://www.cratzke.de).

If you have further questions please don't hesitate to contact me. For application submit a CV, motivation letter and reference contacts to **Christoph Ratzke** ([christoph.ratzke@cmfi.uni-tuebingen.de](mailto:christoph.ratzke@cmfi.uni-tuebingen.de)).