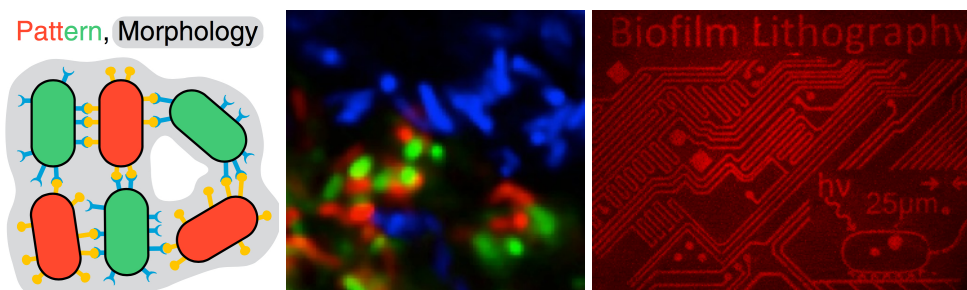


Postdoc positions available – Riedel-Kruse Lab, University of Arizona

Synthetic Biology, Systems Biology and Biophysics of Multi-cellular Bacterial Systems

We have two postdoc positions to fill in the Riedel-Kruse Lab, Department of Molecular and Cellular Biology, University of Arizona. <https://riedel-kruse.arizona.edu>

Our research focuses on engineering multi-cellular bacterial systems while controlling their morphology, patterning, dynamics, and environmental responses. Past projects include the engineering of the first synthetic, fully genetically encoded cell-cell adhesion toolbox [Glass Cell 2018] and the first high-resolution optogenetic cell-surface patterning method ('Biofilm Lithography') [Jin PNAS 2018] – providing critical tools for engineering synthetic multi-cell systems. Building on these tools, we will now address questions regarding bacterial self-assembly, multi-cellular bacterial pattern formation, emergence of antibiotic resistance in biofilms, synthetic developmental programs, metabolic pathway modularization between cells for bioremediation and chemical synthesis, physics of active matter, and the evolutionary origin of multi-cellularity. For more information see also our lab website.



Specific projects will be developed based on mutual interest of the candidate and the PI - and creativity and ideas are very much welcomed. Projects can be experimental, computational, or both. The ideal candidate has experience in one or more of the following: genetic engineering, synthetic biology, systems biology, microbiology, biophysics, imaging, microfluidics / instrumentation, theory / modeling.

Interested candidates should contact the PI, Prof. Ingmar Riedel-Kruse, via ingmar@arizona.email.edu. Please provide a brief description of your research interests and your CV incl. publication list and contact information of 2-3 references.

The University of Arizona, Tucson, Arizona, and the South West are exciting and affordable places to work, live, and explore!

