



## Postdoctoral Positions in cell biology and synthetic biology

The Heidelberg molecular life sciences (HMLS) is a cross-institutional platform that includes the Heidelberg University, the EMBL, the Max Planck Institute for Medical Research, and the German Cancer Research Center (DKFZ). Within the framework of the University's flagship initiative on molecular engineering, we are seeking postdoctoral fellows in synthetic biology and cell biology

**About the team:** The selected candidates will join a collaborative project led by Sergio P. Acebrón (Heidelberg University, [www.acebronlab.org](http://www.acebronlab.org)), Gislene Pereira (Heidelberg University/DKFZ), Jan Ellenberg (EMBL), Rainer Pepperkok (EMBL), and Anna Marciniak-Czochra (Bioquant/IWR). Our work employs different biological models, technology platforms and mathematical tools to better understand cell signal transduction, cell division, and fate determination.

**About the project:** The project *Synthetic DNA memories* aims to develop novel molecular tools to record transient cellular events into permanent and readable genetic memories. To drive this new collaborative project, we are looking for one postdoctoral fellow in the area of synthetic biology, and one in the area of cell biology. As a successful candidate, you will engage in one or several of the following areas:

- Design of synthetic biological circuits in yeast or mammalian cell culture
- Development of DNA-based memory devices controlled by recombinases and Cas endonucleases
- Characterisation of these tools in signal transduction and mitotic progression
- Development of scalable and robust analyses by single-cell sequencing, imaging or cytometry.
- Adaptation of the tools to different biological questions and scales, from cells to organisms.

**You have:** A PhD or equivalent qualification in synthetic biology or molecular/cell biology. Experience with genome manipulation techniques (e.g. Cas9, Cas1-2). You are excited about designing and developing novel techniques. You enjoy interdisciplinary research, and you are capable of building collaborations with team members working on different disciplines. Excellent communication skills in English.

**You might have:** Experience in mitosis, cell signalling, imaging or high-throughput analyses.

**How to Apply:** Interested applicants should send an email to [sergio.acebron@cos.uni-heidelberg.de](mailto:sergio.acebron@cos.uni-heidelberg.de) containing a pdf with 1) a cover letter that describes their motivation to pursue this position and summarizes past research accomplishments, 2) CV, and 3) contact information for two references.

**Deadline:** January 18, 2020.

**About the position:** The positions are initially funded for a period of 2 years (TV-L, 100% E13), with possibility of extension.

The Heidelberg University is committed to increase the percentage of female scientists and encourages female applicants to apply. Among candidates of equal aptitude and qualifications, a person with disabilities will be given preference.