PhD student: Optogenetics tools to investigate myoblast differentiation and muscle regeneration

A PhD student position is available in the lab of Dr Olivier Kassel in the Institute of Toxicology and Genetics at the Karlsruhe Institute of Technology (KIT). Information about the Kassel lab can be found at www.itg.kit.edu/kassel.

The lab has a general interest in the mechanisms of adult myogenesis and muscle regeneration. The project, funded for 3 years by the DFG Priority programme SPP1926, is a collaboration with the lab of Barbara Di Ventura at BioQuant, Heidelberg University.

The aim of the project is to develop optogenetic tools and use them to dissect particular signalling pathways involved in myoblast differentiation in a non-invasive, highly temporally and spatially controlled manner. The tools will be specifically developed for use in vitro in cell culture models of myogenesis as well as in vivo in models of muscle regeneration in the zebrafish.

Requirements:
- M.Sc. (or equivalent) in biology
- Experience in molecular biology techniques, in particular molecular cloning
- Experience in cell and tissue culture
- Ability to think independently
- Excellent technical and organisational skills
- Enthusiasm for team work
- Fluency in English

- Experience working with zebrafish would be advantageous

The position is presently available for 1-3 years with remuneration based on the Collective Agreement for the Public Service Sector. The application process will remain open until the position is filled. Applications from disabled persons are welcome. The successful candidate will be enrolled in the BioInterfaces International Graduate School (BIF-IGS).

Please send your applications to the manager of BIF-IGS, Dr Larissa Kaufmann (larissa.kaufmann@kit.edu), indicating that you are applying for this particular position, as well as to Dr Olivier Kassel (olivier.kassel@kit.edu). The application should comprise a motivation letter also including a brief summary of the Master's work, a curriculum vitae, copies of all relevant academic transcripts and certificates, a proof of English language ability and two letters of reference. See www.bif-igs.kit.edu/125.php for details about the required documents.