PhD position at Dynamic Biosensors GmbH, Germany
Create biochips to study protein/RNA interactions

DYNAMIC BIOSENSORS (DBS) is a young biotech company based in Munich, Germany, and San Diego, California, focused on the development and marketing of novel technology for biophysics in the areas of molecular interaction analysis and drug discovery. The company's pioneering and award-winning **switch**SENSE® technology is used in life science research in academic and industry laboratories. Beyond the science, Dynamic Biosensors is buzzing with ideas, nice people, and fueled by an entrepreneurial spirit.

The open position is provided by RNAct, a European Innovative Training Network project. The interdisciplinary research aim of RNAct is the design of novel RNA recognition motif (RRM) proteins for exploitation in synthetic biology and bio-analytics. This includes computational approaches at the sequence and structure levels of proteins and RNA, large-scale phage display experiments with RNA screening, integrative structural biology approaches, implementation of RRMs in synthetic biology, and bio-analytics to detect RNA in-cell and design RNA biochips. RNAct is a collaborative project between 7 teams in 6 countries, from both academia and biotech industry, that will offer a comprehensive and cross-disciplinary structured curriculum for doctoral students.

A PhD candidate will be recruited at Dynamic Biosensors in Munich for the development and optimization of RNA bio-chips. Aim is the on-chip immobilization of RNA recognition motifs (RRM) for interaction analysis with RNA-binding proteins. These experiments will provide detailed insights into the allosteric modulation of RRM-protein interactions and will additionally provide information on the size and conformation of the protein-RNA complexes.

The experimental data will yield the constraints for structure-based modelling of RRM-protein interactions. For training in structure-based modelling approaches you will spend four months at CNRS (Paris, France). Furthermore, you will get the opportunity to connect to several research groups inside and outside EU, including pharma companies, through other projects developed in partnership with DBS. At the end of the project the PhD will be finalized by graduation at the Technical University of Munich (TUM), which ranks as one of the top universities in Germany.

You will be part of an interdisciplinary R & D Team. A broad basis for understanding DNA based biochemistry is required. Knowledge in molecular interaction analysis methods is a plus.

Skills / Qualification

- M.Sc. (or equivalent graduation) in relevant area (e.g. Biology, Chemistry, Biochemistry, Physical Chemistry, Molecular Biology, Biotechnology or similar).
- High interest in biophysical methods.
- Fluency in relevant models, techniques or methods and ability to contribute to developing new ones.
- Fluent in English (communication and teaching language throughout RNAct is English).
- Ability to communicate complex information clearly.
- Ability to assess resource requirements and use resources effectively.
- Understanding of and ability to contribute to broader management/administration processes.
- Great team spirit, having fun collaborating.
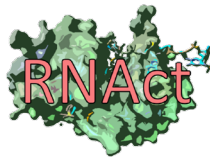
Requirements

Eligible applicants must hold a **Master degree of Science (MSc)** as requested in the respective job description.

They must not have stayed in the country of the host lab for more than 1 year during the last 3 years and be in the first four years (full-time equivalent) of their research careers.

Do not apply if you already hold a Ph.D.

Further information: http://rnact.eu
Contact and information: e-mail to info@rnact.eu
Applications must be submitted online at https://tinyurl.com/rnact-eu
When applying for this position, please choose position **ESR 9 RRM/RNA biochip (Exp, DBS, Germany)**

Deadline for applications: 15/03/2019