



GERMAN
CANCER RESEARCH CENTER
IN THE HELMHOLTZ ASSOCIATION



50 Years – Research for
A Life Without Cancer

Heidelberg, May 12, 2016

Postdoctoral position in the field of RNA biology and metabolism

The German Cancer Research Center (DKFZ) invites application for a highly motivated and creative postdoctoral researcher to explore the molecular bases of metabolic and genetic regulations. The DKFZ is located in the picturesque city of Heidelberg in the South of Germany and benefits from an exceptionally strong research environment, with Germany's oldest university and several other leading life science research institutions in Europe. The successful candidate will join the lab of Dr. Bruno Galy in the „virus-associated carcinogenesis unit“.

Metabolic remodeling is emerging as a key process of physiology and disease. Although posttranscriptional regulations play a key role in shaping proteomes, genetic control of metabolism has so far been mostly investigated at the level of transcription. The interconnection between metabolism and the complex life of a mRNA, from its synthesis to its translation and decay, thus remains poorly understood. Iron metabolism is ideally suited to study the posttranscriptional regulation of metabolism. Indeed, iron homeostasis is maintained by two RNA binding factors called Iron Regulatory Proteins (IRPs), which modulate the translation or turnover of target mRNAs. In this postdoctoral project, we will use high-throughput technologies developed recently to define the regulatory scope of the IRP network on a system wide scale. This integrative approach will be carried out *in vivo*, using state-of-the-art IRP mouse models. With this work we wish to unveil new facets of a central homeostatic circuit in the cell, and constitute a basis for the study of other gene regulatory networks with similar properties.

The applicant holds a Ph.D. (or equivalent degree) in biology, biochemistry or related field and an excellent publication record. He/She is expected to have a strong background in RNA biology. A solid experience with cell and molecular biology techniques and in particular high throughput approaches will be essential; familiarity with standard bioinformatical analysis of large data sets is also required. The candidate is rigorous, able to conduct independent research, but also enjoys interacting with colleagues of different disciplines and nations. Good presentation skills and experience on project management (importance of scheduling, deliverables, reporting) will be highly valued.

Funding for a total of 3 years is available and the position is open immediately. Your application (in English language) must include a CV, a summary of academic records, your research interests, and at least two letters of recommendation (or contact details of potential referees). For further question, please contact Dr. Bruno Galy (b.galy@dkfz.de).