



Riemer Lab
Redox Biochemistry

HFSP-funded postdoctoral position

on the biology of the intramitochondrial bacterium *Midichloria mitochondrii* in the Riemer lab at the University of Cologne

THE ENVIRONMENT: The Riemer Group (<http://riemerlab.uni-koeln.de/>) is part of the Institute for Biochemistry at the University of Cologne. Cologne is a vibrant city with a rich and dynamic cultural life. The University of Cologne is situated very close to the city centre. It is one of Germany's excellence universities with almost 50,000 students and a strong life sciences focus. Research in the Riemer laboratory focusses on different aspects of redox biology. For example, we characterize the mechanisms of disulphide formation and hydrogen peroxide signalling in different cellular compartments. We are also interested in the physiological impacts of these processes for example in calcium and in metabolic signalling (Bien *et al*, Mol Cell 2010; Kojer *et al*, EMBO J 2012; Suzuki *et al*, Nature Comm. 2013 and Petrunaro *et al*, Cell Metabolism, 2015). To this end, we work with yeast and mammalian cells as model systems and apply a wide variety of biochemical, cell biological and biophysical approaches.

THE PROJECT AND WHAT WE OFFER: In the framework of a *Human Frontiers Science Program*-funded project, we seek to characterize the life cycle of an intriguing and understudied intracellular bacterium found in ticks, *Midichloria mitochondrii*, whose genome has been recently compiled by the leader of our consortium (Sassera *et al* 2011). This bacterium is particularly interesting because to date, it is the only one known to invade host cell mitochondria. Our aim is to understand the molecular basis underlying its ability to colonize mitochondria and to survive there. We will thereby combine cell biological and biochemical approaches and work together with an international consortium (laboratories in France, Italy and Australia). This offers many opportunities for teamwork, laboratory exchanges and a broad spectrum of technical approaches.

We offer a competitive salary (100% E13 according to the German TvL scale) for a minimum of three years. The laboratory language in our international team is English (*i.e.* knowledge of German is not required). The position is available from December 2017 or upon mutual agreement.

WHAT YOU SHOULD BRING ALONG: First and foremost, you should bring along enthusiasm for science, curiosity, the drive to push a project to a successful ending and the willingness for teamwork. You should have studied biology, biochemistry or another subject with a molecular life science background. You should have completed your PhD successfully on a biochemical or cell biological topic preferably with mitochondria. Experience with *S. cerevisiae* cell culture and genetics work, with microorganisms in general and biochemical expertise (*e.g.* work with purified proteins) is appreciated; knowledge of redox biochemistry or intracellular bacteria is not required.

HOW TO APPLY: Please send the usual documents (cover letter describing your motivation and highlighting your expertise, contact details of referees, CV, certificates including university exams) to Jan (jan.riemer@uni-koeln.de). In case of further questions, please also contact Jan. The University of Cologne is an equal opportunities employer.