

PhD student positions (f/m/x) in Musculoskeletal Biology University of Cologne/University Hospital Cologne



Working at the University of Cologne/University Hospital Cologne and the Medical Faculty means helping to shape the future - the future of medicine, of patients and, of course, your own future. You benefit from 59 clinics and institutes as well as numerous other departments and facilities and more than 10,000 jobs. The Faculty of Medicine of the University of Cologne and the University Hospital Cologne assume important social tasks in research, teaching and patient care. A close network with many university and non-university partners guarantees an internationally successful science and the excellent education of our students.

Our research groups study the extracellular matrix (ECM), the complex and highly information-containing molecular network that surrounds cells. The ECM influences most aspects of cellular function by binding to cell surface receptors, by contributing to the mechanical properties of tissues and by modulating growth factor signalling. It is thereby intimately involved in many forms of inherited or acquired disease.

Activities and responsibilities

You will be part of the research unit FOR 2722 "Novel molecular determinants for musculoskeletal extracellular matrix homeostasis – a systemic approach" (www.for2722.uni-koeln.de) funded by the German Research Foundation (DFG). You will work in one of two subteams consisting of the research groups of Prof. Manuel Koch (Oral and Musculoskeletal Biology)/Prof. Marcus Krüger (CECAD) (2 students) and Prof Mats Paulsson (Biochemistry)/Dr. Alvise Schiavinato (Children's Hospital) (1 student). Together we will focus on understanding the roles of proteins in musculoskeletal homeostasis, disorders and regeneration and thereby form a basis for future therapies of inherited disease. You will work with genetically modified mice as well as cell culture models of disease and combine this with cell biology and biochemistry approaches as well as state-of-the-art proteomics and genomics techniques. You will work closely with an interdisciplinary and collaborative team consisting of several PhD students as well as more senior researchers and technicians.

Qualification profile

Ideal candidates will have a Master degree in Biochemistry, Biology, Molecular Biology, Cell Biology or a related field, and a strong interest in tissue biology, protein chemistry, inherited disease, and translational medicine. Prior experience in these research areas is a plus. Successful candidates will show a strong work ethic and

should be enthusiastic about working in a highly interdisciplinary environment. Excellent communication skills and the ability to work in a team are required.

We offer

- We offer a competitive salary according to German E13 TVL 65%
- A varied job in a highly interesting and challenging research topic
- A fair working environment with appreciative cooperation
- Internal and external training opportunities
- Flexible working time models to support family life
- Occupational health management offers
- Local transport ticket at a discount

Applications from female candidates are expressly welcome and will be given priority in the event of equal suitability, competence and professional performance.

People with disabilities are welcome to apply and will be treated preferentially in the event of equal suitability and qualification.

Prof. Manuel Koch
(manuel.koch@uni-koeln.de)

Prof. Marcus Krüger
(marcus.krueger@uni-koeln)

Prof. Mats Paulsson
(mats.paulsson@uni-koeln.de)

Dr. Alvis Schiavinato
(aschiav1@uni-koeln.de)

Please send the application directly to Prof. Manuel Koch no later than the 28th of February (manuel.koch@uni-koeln.de). He will organize the application process on behalf of the other members.