

## PhD student position in “deciphering the functional role of the epigenetic reader MRG-1 in the spatial organization of the *C. elegans* genome”

We are looking for a highly motivated **PhD student** to join the newly established group of Dr. Daphne Cabianca, **Institute of Functional Epigenetics (IFE), Helmholtz Center in Munich, Germany** to decipher the mechanism of heterochromatin spatial sequestration by MRG-1 in the intestine of *C. elegans*. At IFE, you will find a scientifically stimulating international environment. Supported by an excellent infrastructure, you will aim to solve fundamental questions of epigenetics, molecular and organismal biology.

The spatial organization of chromatin within the nucleus enables a functional compartmentalization of the genome that mirrors changes in cell identity. Recently, we identified MRG-1 as the first component of active chromatin regulating the spatial organization of silent regions in the nematode *C. elegans*.

In this project, you will contribute to identifying new players working with MRG-1 to regulate compartmentalization of chromatin. To do so, you will combine high-resolution live microscopy screens, IP-mass spec and cutting-edge molecular biology techniques like RNAseq, DamID and CRISPR-Cas9 genome editing.

See publication: **Cabianca DS**, et al. Active chromatin marks drive spatial sequestration of heterochromatin in differentiated cells. **Nature** **2019**, May;569(7758):734-739.

### Your Qualifications

- Master’s degree in molecular or cell biology or equivalent
- Wet lab experience and basic skills in molecular and cell biology
- Experience with protein work including western blotting and immunoprecipitation is an advantage
- Strong motivation and curiosity for science
- Excellent skills in spoken and written English

### What we offer you

- A challenging and innovative scientific topic to be conducted in the vibrant scientific environment of the Helmholtz Center Munich (HMGU), a world-class biomedical research institute dedicated to understanding the molecular mechanisms of health and disease.
- Joining an excited young group, that you can help thrive
- The possibility to join the cutting-edge community of epigenetics researchers based in Munich.
- On site career-building programs to help you with your professional and personal development.
- A competitive salary and social benefits in accordance with the collective agreement for the public service (EG 13 50 % TV EntgO Bund). In addition, there is also the possibility of granting an allowance amounting to 15 % if the necessary conditions are fulfilled.
- The position is (initially) limited to 3 years, but under certain circumstances an extension can be arranged.
- Munich, with its numerous lakes and its vicinity to the Alps, is one of the cities with the best quality of life worldwide. With its first-class universities, research institutes and a vibrant cultural life, Munich offers an intellectually stimulating environment.

Interested applicants should send a CV, one reference letter and a cover letter detailing research interests and reasons for applying to the position. Please submit all documents electronically to Daphne Cabianca: [daphne.cabianca@helmholtz-muenchen.de](mailto:daphne.cabianca@helmholtz-muenchen.de)