



The Leibniz Institute on Aging - Fritz Lipmann Institute (FLI) is a research institute of the Gottfried Wilhelm Leibniz Association, which is financed by the Federal State of Thuringia and the Federal Ministry of Education and Research with 50% each. The main focus of research is to delineate basic molecular mechanisms and its consequences for the development of dysfunctions and aging-related diseases. Around 350 employees work and conduct research at the FLI, with about 25% international employees from approximately 30 nations.

The **Ori Research Group** and the **Wang Research Group** of the Leibniz Institute on Aging—Fritz-Lipmann-Institute e.V. in Jena invite applications for a joint

## PhD student position (TV-L E13/2) (Job ID 1804)

We are looking for enthusiastic PhD candidates to work on a joined project between the labs of Alessandro Ori and Zhao-Qi Wang.

The candidate will use cutting edge proteomics technologies to study protein-protein interactions [1], and post-translational modifications in the context of neurogenesis, neurodegeneration and brain aging [2,3]. The candidate will work at the interface of the two labs and therefore benefit from multidisciplinary training in generation and analysis of omics data as well as *in vitro* and *in vivo* models of microcephaly, neurogenesis and neurodegeneration [4–6]

The central topic of the project will be to gain mechanistic insights by investigating the interactomes of key factors involved in brain development, degeneration and aging using Omics approaches, as well as cellular and mouse models for protein functional assessment. The ideal candidate will be a motivated and independent thinking person willing to undertake the challenge of working across disciplines' boundaries. She/he should hold a Master degree or equivalent in biology/biochemistry/bioinformatics/medicine or related field and have proven lab experience.

For scientific questions, please contact Alessandro Ori, [alessandro.ori@leibniz-fli.de](mailto:alessandro.ori@leibniz-fli.de) or Zhao-Qi Wang, [zhao-qi.wang@leibniz-fli.de](mailto:zhao-qi.wang@leibniz-fli.de). For the application, please go through our application procedure <http://lgsa.leibniz-fli.de/>

1. Mackmull M-T, Klaus B, Heinze I, Chokkalingam M, Beyer A, Russell RB, et al. Landscape of nuclear transport receptor cargo specificity. *Mol. Syst. Biol.* 2017;
2. Ori A, Toyama BH, Harris MS, Bock T, Iskar M, Bork P, et al. Integrated Transcriptome and Proteome Analyses Reveal Organ-Specific Proteome Deterioration in Old Rats. *Cell Syst.* 2015;224–37.
3. Cellerino A, Ori A. What have we learned on aging from omics studies? *Semin. Cell Dev. Biol.* 2017;
4. Tapias A, Zhou ZW, Shi Y, Chong Z, Wang P, Groth M, et al. Trrap-dependent histone acetylation specifically regulates cell-cycle gene transcription to control neural progenitor fate decisions. *Cell Stem Cell.* 2014;632–43.
5. Gruber R, Zhou Z, Sukchev M, Joerss T, Frappart P-O, Wang Z-Q. MCPH1 regulates the neuroprogenitor division mode by coupling the centrosomal cycle with mitotic entry through the Chk1-Cdc25 pathway. *Nat. Cell Biol.* 2011;1325–34.
6. Liu X, Zong W, Li T, Wang Y, Xu X, Zhou Z, et al. The E3 ubiquitin ligase APC/C<sup>dht1</sup> degrades MCPH1 after MCPH1-βTrCP2-Cdc25A-mediated mitotic entry to ensure neurogenesis. *EMBO J.* 2017;e201694443.

### We offer:

We offer a thriving international environment, access to cutting edge technologies, and complementary training for scientific as well as soft skills in the context of the Leibniz Graduate School on Aging (LGSA, <http://lgsa.leibnizfli.de/>).

The PhD position will be integrated in our Leibniz Graduate School on Aging and Age Related Diseases

The contract conditions and the salary will be according to the collective labor agreement for public service employees of the Federal State of Germany (TV-L E13/2).

### Application:

Please acquaint yourself with the LGSA procedures and with the application procedure on our website <http://lgsa.leibniz-fli.de/>, fill in the application form and send it electronically to the LGSA.