

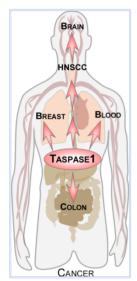


UNIVERSITĀTS**medizin.**

"FROM BENCH TO BEDSIDE" PHD POSITION IN TRANSLATIONAL PROTEASE RESEARCH

The Group of Molecular and Cellular Oncology at the **University Medical Center Mainz** (Prof. Dr. Roland Stauber)/ Junior Group Disease Relevant Proteases (Dr. Wünsch) is seeking for a **PhD student (TV-L 13, 50%)**. The position is initially for three year with a possibility to extension, starting latest in **September 2016**.

Key to the long-term improvement of cancer treatments is a molecular understanding of mechanisms contributing to tumorigenesis in order to develop targeted interference strategies. Proteases are key players for the initiation and progression of cancer and thus, clinically accepted targets for anti-cancer therapies. As shown by us and others, the unique protease Taspase1 contributes not only to the development of aggressive infant leukemias but also to solid tumors, including head and neck, colon, and breast cancer [1]. We further demonstrated that Taspase1 dynamically localizes to the nucleus/nucleolus [2], and defined Taspase1's



consensus target sequence in living cells, which allowed to bioinformatically predict its degradome in human and evolutionary model organisms, like *Drosophila melanogaster* [3-5]. Importantly, we showed that Taspase1 is active as a monomer and thus, cannot be inhibited by *trans*-dominant mutants [6, 7]. As no chemical inhibitors are available worldwide, the identification of cellular mechanisms regulating the protease's (patho)biological activity is not only key to dissect Taspase1's signaling pathways but also for the identification of inhibitory strategies [1, 8]. Hence, Taspase1 not only represents a challenging biochemical model enzyme but also a highly relevant disease target [9, 10].

What we offer: - work on a high scientific level in a young, enthusiastic and wellfunded research team

- excellent interdisciplinary infrastructure providing state-of-the art life science environment

- intensive professional supervision with opportunity to publish and present research to international scientific community

Interested? We invite applications from highly qualified and motivated students of any nationality. The applicants will hold a Master degree (Biology, Chemistry, Biotechnology, Pharmacy or Biochemistry) and have gained first biochemical research experience.

Please send your CV, your most recent certificates and a short letter of your research interests electronically to Dr. Désirée Wünsch (email: wuensch@uni-mainz.de, phone: +49-6131-17 6030). For further information about the project: www.stauber-lab.de

- [1] Wünsch D et al. Oncogene. 2015
- [2] Bier C et al. Traffic 2011
- [3] Bier C et al. JBC 2011
- [4] Wünsch D et al. FASEB J. 2015
- [5] Wünsch D et al. Biological chemistry. 2015
- [6] Bier C et al. PloS one 2012
- [7] Bier C et al. Faseb J. 2012
- [8] Wünsch D et al. Blood cancer journal. 2012
- [9] Hahlbrock A et al. Oral Oncol. 2016
- [10] Stauber RH et al. FASEB J. 2015

