

## CSC-Tübingen PhD Scholarship Program

2025/2026 application round: prospective PhD positions at the University of Tübingen

Faculty: Faculty of Medicine

Institute / Section / Subject: Institute for Preclinical Imaging and Radiopharmacy

Supervising Professor(s): PD Dr. Nicolas BEZIERE

About the Supervisor(s): My research is focused on enabling new diagnostic and therapy monitoring options through cutting-edge imaging modalities, with a particular emphasis on inflammation and infection. The discovery of novel biomarkers enabling the study of underlying biological processes and the development of image-guided drug delivery solutions are crucial aspects of this research. To me, the possibilities offered by molecular imaging represents a fascinating field full of promises in the short and long term for clinical translation and personalized medicine.

http://www.isct.uni-tuebingen.de/wsic/group/staff/staff-member/nicolas-beziere/http://www.isct.uni-tuebingen.de/wsic/research/research-groups/immunology-inflammation/inflammation

Specification/Project title: Imaging the role of senescence in age-related diseases.

Topic Description: Cellular senescence is a physiological phenomenon implicated in various processes such as wound repair and cell population regulation. However, unchecked accumulation of senescent cells, in particular during aging, can contribute to the progression of several inflammatory and oncological diseases. Through the development of novel senescence targeted radiotracers and the establishment of *in vitro* and *in vivo* senescence models, this highly multidisciplinary project ultimately aims at the *in vivo* imaging of the changes in the senescent cell population occurring during aging, age-related disease progression and senescence-targeted therapy.

Intended Degree: Dr. sc. hum., Dr. rer. Nat.

Type of the PhD Study: Full time (36-48 months)

Required Degrees and Qualifications: Master in biochemistry, pharmaceutical chemistry or medical

technologies is required with a strong interest in preclinical imaging. Willingness to work with small mammals is a must. Prior experience with senescence models and/or therapy

preferred.

Language Requirements: Very good command of English (a documented minimum of TOEFL iBT 95, IELTS 6.5., C1) Knowledge of German is a bonus.

Notes: The Institute for Preclinical Imaging and Radiopharmacy is a leading institution in the field of preclinical imaging and operates in a highly multidisciplinary environment and international team. As such, we are looking for enthusiastic and highly motivated candidates, eager to answer highly relevant biomedical questions and evolve in a multidisciplinary environment notably using state of the art imaging techniques.