

PhD position in retinal imaging at Bonn: Establishing an *in-vivo* cellular atlas of the human fovea

If cutting-edge imaging technologies and image analysis are right up your alley, consider joining the **AOVISIONLAB** at the University of Bonn. As part of the fundamental science groups at the University Eye Hospital Bonn, we specialize in retinal imaging and visual psychophysics, employing unique instrumentation based on high-resolution adaptive optics scanning laser ophthalmoscopy.

We are seeking an enthusiastic and skilled Ph.D. student to contribute to a research project with the goal to better understand the cellular architecture of the human fovea, the functional center of human vision, in health and cases of retinal disease. The position is fully funded by the German Research Foundation for 3 years, with the possibility of extension.

Your tasks:

- Development of an innovative analysis pipeline for cell-resolved foveal images.
- Development of a framework for automated image annotation and data dissemination.
- Analysis and multimodal metric correlation across a large retinal imaging dataset.
- Aid in operation and maintenance of imaging instruments.
- Scientific publishing.

Your background:

- Master's degree in a relevant field such as computer science, optometry, biomedical engineering, neuroscience, physics or related field.
- Strong programming skills, preferably in languages such as Python, MATLAB, or C++.
- Familiarity with image processing techniques and machine learning algorithms.
- Excellent communication in English and a team-oriented mindset.
- German language skills are not required but will be advantageous.
- A keen interest in ophthalmological research.

We offer:

- Work within an active, interdisciplinary, and multicultural, friendly team.
- Salary according to TV-L E13, 65%, with flexible working hours.
- Collaboration with international experts in adaptive optics imaging and close proximity to an excellent clinical environment and campus.
- Funding of national and international conference attendance.
- UKB employee benefits include: free fitness center, pension benefits, e-bike loan, etc.
- The University of Bonn is one of the leading Universities of Excellence in Germany.
- Bonn is a small yet lively international place with rich history and the surrounding offers plenty outdoor opportunities.

To apply, send an e-mail to wolf.harmening@ukbonn.de. Please attach in a single file: a cover letter, detailed curriculum vitae, and contact information of two references. Applications will be reviewed until a suitable candidate is found.

The University of Bonn is an equal opportunity employer. We embrace diversity and are committed to building a team that represents a variety of backgrounds, perspectives and skills.