

The **AO Vision Laboratory** at the University of Bonn, Germany, offers **two PhD positions**, open immediately:

Doctoral researcher

Decoding human vision: cellular architecture, micro-psychophysics, and oculomotor dynamics

If you love vision research and cutting-edge imaging technologies, consider joining the AO Vision Laboratory at the University of Bonn as PhD student. We are seeking enthusiastic and skilled individuals to join one of two research projects with the common goal to better understand how the mosaic of light-sensitive photoreceptors of the human fovea, the functional center of human vision, is shaped and how its arrangement and oculomotor behavior is linked to visual perception.

As part of the fundamental science groups at the University Eye Hospital Bonn, we specialize in micro-psychophysics, employing unique retinal imaging and light stimulation techniques based on high-resolution adaptive optics scanning light ophthalmoscopy. Further information about the scope of our research can be found on our lab website: https://ao.ukbonn.de/. One of the projects is carried out in collaboration with Dr. Bilge Sayim (Ecole Normale Superieure, Paris), specializing in visual appearance.

The two PhD positions are funded by the German Research Foundation (DFG) for 3 years, with the possibility of extension.

Your profile:

- Master's degree in a relevant field such as computer science, optometry, psychology, biomedical engineering, neuroscience, physics, or related field
- Strong interest in vision science and technical aptitude
- Solid analytical abilities with experience in image analysis and/or human psychophysics
- Experience with a high-level programming language such as MATLAB or Python
- Excellent English communication skills and a collaborative mindset
- German language skills are not required but beneficial

We offer:

- Work within an active, interdisciplinary, and multicultural, friendly team
- Salary according to TV-L E13, 65%, with flexible working hours
- Funding of national and international conference attendance
- Collaboration with international experts, and close proximity to an excellent clinical environment and campus
- UKB employee benefits include: free fitness center, pension benefits, e-bike loan, and more
- Bonn is a small yet lively international place with rich history and the surroundings offer plenty of outdoor opportunities



About UKB campus:

The University Hospital Bonn (UKB) is a leading medical institution in Germany with about 500.000 treatments annually. With a dedicated workforce of 9,500 employees, UKB excels in research, education, patient care, and public health at the highest level. UKB ranks first among university hospitals in the state of North Rhine-Westphalia on the Focus Clinic List, received over 100 million euros in research third-party funding in 2023, and has the second-highest Case Mix Index (severity of cases) in Germany. The F.A.Z. Institute awarded UKB first place among university hospitals in the category 'Germany's Training Champions 2024'. The University of Bonn and UKB are embedded in an excellent and innovative research environment, exemplified by extensive partnerships with institutions in the Helmholtz Association, the Max Planck Society, as well as national and international research networks in the life sciences, including DFG-funded Collaborative Research Centers (SFB) and SFB/Transregios.

How to apply:

If you are interested in the position, **please send your application by email** including a brief statement of motivation and research interests, Curriculum Vitae, list of publications (if applicable), two letters of reference and/or contact information for two referees, compiled into a single pdf file, to:

Dr. Wolf Harmening
AO Vision Lab
Universitäts-Augenklinik
Venusberg-Campus-1
53127 Bonn

E-Mail: wolf.harmening@ukbonn.de https://ao.ukbonn.de/

The UKB and the University of Bonn are committed to fostering equal opportunities for all. We celebrate diversity and strive to build a team that reflects a broad range of backgrounds, perspectives, and expertise. The University of Bonn holds a family-friendly certification and is dedicated to increasing the representation of women in areas where they are underrepresented, with a focus on advancing their careers. As such, we particularly encourage women with the relevant qualifications to apply. All applications will be processed in accordance with the Landesgleichstellungsgesetz (State Equality Act). We also welcome applications from qualified individuals with certified disabilities, as well as those of equal status.