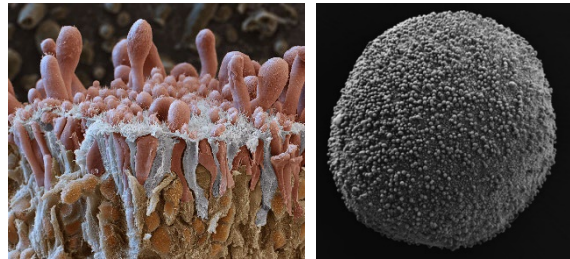




The **Institute of Neuroanatomy and Developmental Biology (INDB)** has an open



PhD Position (m/f/d, E13 TV-L, 65%) in using human Retinal Organoid for the Development of an RNA-base Editing Therapy for the Treatment of Retinitis Pigmentosa

The position is initially planned for 3 years and can be started as soon as possible. The candidate can receive a Dr. rer. nat. title by joining the Doctoral Program offered by the Graduate Training Center of Neuroscience (GTC, Tübingen) with the completion of the doctoral degree.

Our group in the Institute of Neuroanatomy and Developmental Biology is looking for a candidate for a PhD student position (m/f/d, E13 TV-L, 65%) as a part of a research project founded by a German-wide network (SPP 2127 program) that has the central aim of finding effective ways to treat rare eye diseases. Our young group is committed to develop and apply new in vitro models derived from human induced pluripotent stem cells (human iPSC) to study both developmental processes and disease pathomechanisms. Our work is mainly focusing on using retinal organoids and our novel model system, the retina-on-a-chip, as tools for disease modelling and drug screening

The candidate task in our group will be to contribute to the development of a new RNA-therapy utilizing tailor-made antisense oligonucleotides (ASOs) to treat the degenerative retinal disease Retinitis Pigmentosa caused by a mutation in CRB1 gene.

Detailed information on the project can be found here: <https://www.spp2127.de/gene-therapies/achberger-stafforst>.

The candidate will develop over the course of the project highly specialised skills as:

- Cell culture (i.e., human iPSC and organoids),
- Cell reprogramming,
- Bioengineering (i.e., multi-organoids model systems, co-culture model systems, organoid engineering)
- Organ-on-Chip technology,
- Immunocytochemistry techniques,
- RNA-based analysis methods (RNA sequencing and single-cell RNA sequencing)
- Flow Cytometry/FACS analysis.



Candidate profile:

The candidate should possess a Master's degree in life science/molecular biology or comparable. Experience in cell culture, specifically in stem cell culture (human iPSC), and molecular biology techniques (e.g., qPCR, immunocytochemistry) is advantageous. Excellent English language proficiency is mandatory. Finally, basic programming skills (e.g., R) and scientific software knowledge (e.g., ImageJ and Prism) are a plus but not required. We are looking for a highly motivated candidate with great communication and initiative skills, who is excited by the idea of experimenting new approaches on his way along the project and thrilled about the chance to learn new challenging techniques to achieve the final goal.

For further information about the position, please contact Dr. Kevin Achberger by e-mail at Kevin.Achberger@uni-tuebingen.de. Send the application documents only as a single merged PDF file including a letter of motivation, CV, copies of degree certificates and recommendation letters before the 31st of July 2022 to Dr. Kevin Achberger via e-mail.

The University of Tübingen is particularly interested in increasing the number of women in research and teaching and therefore strongly encourages women candidates to apply. In line with its internationalization agenda, the University welcomes applications from researchers outside Germany. Applications from equally qualified candidates with disabilities will be given preference.