

We are currently seeking a highly motivated student (f/m/d) as

Student Assistant (9 h/week) for the

Mechanobiological characterization of an ageing model via immunoblotting

Context:

Age-related macular degeneration is the most impactful blinding disease of the elderly population. The most vulnerable outer retinal layer involved in AMD pathogenesis is the retinal pigment epithelium (RPE).

The RPE is a simple postmitotic monolayer that supports the light-detecting photoreceptor cells. During ageing, this monolayer undergoes structural and functional remodeling that has never been characterized from a mechanobiological perspective. To mimic the structural changes of the ageing RPE, we established an apoptosis-based in vitro model in hiPSCs-derived cells allowing us to study ageing-associated mechanobiological changes.

Your tasks:

To validate results obtained from immunofluorescence and RNAseq, we would like to perform immunoblotting (a.k.a. western blotting) of diverse targets, including contractility markers, cytoskeletal and motor proteins and cell-cell junction proteins. In addition, we would need regular support with hydrogel substrate preparation for cell seeding. The anticipated weekly tasks and time include:

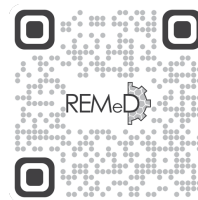
- polyacrylamide gel preparation, SDS-PAGE and Western-blotting (5 h)
- Glass surface activation (1,5 h)
- Preparation of hydrogels and seeding support rings (2,5 h)

Your profile:

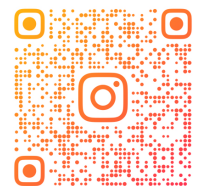
- Background in life sciences
- Ideally with experience with immunoblotting
- Good team player
- Independent and solution-oriented

We offer:

- Interdisciplinary and active research environment
- Close practical and theoretical supervision
- Possibility for ending up in publication.



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[@REMED_LAB](https://www.instagram.com/REMED_LAB)

If you are interested, please send a short motivational letter, CV and transcripts via email at [dirusso\[at\]dwi.rwth-aachen.de](mailto:dirusso[at]dwi.rwth-aachen.de) or [jdirusso\[at\]ukaachen.de](mailto:jdirusso[at]ukaachen.de)