

PhD position - SLC26A9 as a therapeutic target in Cystic Fibrosis

In the laboratory of Prof. Marcus Mall
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The group's main focus is the investigation of the disease mechanisms and development of new therapeutic strategies for cystic fibrosis (CF) and for other chronic lung diseases (<https://www.bihealth.org/en/research/research-groups/marcus-mall>).

We offer an open, supportive, dynamic and motivating academic environment with excellent training opportunities, interdisciplinary collaboration in translational lung research, as well as support in professional qualification with the aim of obtaining a doctorate.

The project

We are seeking a highly motivated and committed doctoral candidate for a research project that addresses the role of the Cl⁻ transporter SLC26A9 as a therapeutic target in CF. The project focuses on the regulation of SLC26A9 in airway epithelial cells and its elucidation as a therapeutic target to improve airway hydration and mucociliary clearance in CF and other muco-obstructive lung diseases. The project is funded by the German Center for Lung Research (<http://www.dzg-lungenforschung.de>), an association of the leading lung research institutions in Germany.

- Methods include cell-based assays to characterize druggable pathways, electrophysiological assays to study epithelial ion transport, establishment and maintenance of primary human cell cultures, functional microscopy imaging, as well as testing therapeutic strategies in genetically modified mouse models with lung disease phenotype.
- The candidate will be communicating results on national and international conferences and contribute to manuscript and grant writing
- We offer a structured graduation program and enrollment into PhD curriculum, provided by Charité and integrated in the Berlin University Alliance.

Requirements

- Master's degree or equivalent in the fields of medicine, biology, biochemistry, biotechnology or similar is required
- High proficiency in written and spoken English is a prerequisite
- Experience in cell culture, especially previous work with human primary cell culture models is an advantage
- Knowledge in molecular biology, cell biology, and in transcriptional and epigenetic regulation
- Experience in fluorescence microscopy including confocal microscopy and image analysis is an advantage
- Experience with transgenic mouse models, willingness to work with them is an advantage

Application

We are looking forward to your application including: a one-page motivation letter indicating prior research experience and future goals, your curriculum vitae (including a list of publications if applicable), certificates and transcript of records, as well as names of two references. Review of applications will begin immediately. Please send all documents in one pdf to: Prof. Marcus Mall marcus.mall@charite.de