Inducible CRISPR Gene Editing System to Target Common USH2A Mutations in Patients with Usher Syndrome and Retinitis Pigmentosa

Project description

Mutations in USH2A are one of the most common causes of Usher syndrome and Retinitis pigmentosa for which no cure exists so far. The project seeks to develop and validate a novel CRISPR technology based therapeutic approach targeting common mutations in the USH2A gene and to explore strategies for an inducible (switch-on/switch-off) transgene expression system implemented into an adenoviral-associated viral (AAV) vector for delivery into preclinical model systems.

Keywords
CRISPR, gene editing, AAV, inherited retinal dystrophy, Usher syndrome.

Entry requirements
- MSc degree in Molecular Life Science studies
- Research Experience in Molecular Biology preferentially in gene therapy technologies (i.e. CRISPR/Cas, antisense-oligonucleotides, and/or AAV delivery systems)
- Proficient language skills in English (C1); proficiency in German language desirable

Location
Centre for Ophthalmology, University Hospitals Tübingen
Elfriede-Aulhorn-Strasse 7, D-72076 Tübingen, Germany

Starting date
August 01, 2024

Funding

Four years of funding (3+1, three years with the possibility to extend for one year)

How to apply

Please apply via the HFA application portal.

The Hector Fellows will arrange interviews (via skype or if feasible in-person) with the most promising applicants. The final candidates will be invited for an online presentation on June 20, 2024. The final decisions will be announced in July 2024.

Application Deadline
March 31, 2024

Enquiries
For further details about the project, please contact Hector Fellow at ezrenner@uni-tuebingen.de

For questions related to making your application, please contact Hector Fellow Academy Office: application@hector-fellow-academy.de or www.hector-fellow-academy.de

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