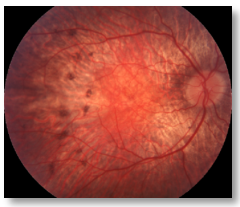

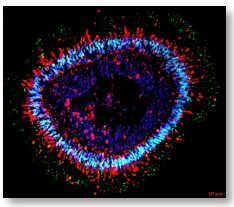

## Post-doctoral fellowship in the Vision team at the INM

### Project: Gene replacement for inherited retinal dystrophies due to large genes

Mutations in large genes are a frequent cause of inherited retinal diseases, and can result in severe visual impairment. However, as the causative genes exceed the cloning capacity of the most currently used viral vector to date, developing a gene replacement therapy is challenging. As part of a European network of 7 laboratories, we aim to meet this challenge and develop an alternative therapeutic strategy for large disease-causing genes in human retinal organoids derived from patient induced pluripotent stem cells (iPSCs).

### Requirements:

Ph.D. in molecular biology with <2 years post-doctoral experience. Human cell culture experience is essential. Experience in gene therapy would be preferred. Ability to work as part of a team, strong communication skills, and fluency in English, are required.

### Duration:

Three years post-doctoral fellowship in the framework of the European Joint Programme for Rare Diseases. Start date - 1st September 2021 (at the latest).

### Location:

The applicant will join the "Gene therapy of inherited retinal dystrophies" group within the Vision team of the INM (http://www.inmfrance.com/inmfrance-j3/index.php/en/vision-en). This dynamic group is interested in developing innovative strategies to treat genetic retinal diseases.

### Funding:

Funding is provided by the ANR. Brut salary from 2555 € / month (Inserm salary grid) depending on experience.

### Application:

Please provide i) a letter of motivation, ii) full CV including list of publications and iii) contact details for previous mentors. Applications should be sent to Vasiliki Kalatzis (vasiliki.kalatzis@inserm.fr) before the 30th June 2021.

### Recent publications:


Mamaeva D, Jazouli Z, DiFrancesco ML, Erkilic N, Dubois G, Hilaire C, Meunier I, Boukhaddaoui H & Kalatzis V. (**2021**) Novel roles for voltage-gated T-type Ca2+ and ClC-2 channels in phagocytosis and angiogenic factor balance identified in human iPSC-derived RPE. ***FASEB J.*** 35:e21406.

Diakatou M, Dubois, G, Erkilic N, Sanjurjo-Soriano C, Meunier I & Kalatzis V. (**2021**) Allele-specific knockout by CRISPR/Cas to treat autosomal dominant retinitis pigmentosa caused by the G56R mutation in NR2E3. ***Int. J. Mol. Sci.*** 20: 2542.

Sanjurjo-Soriano C, Erkilic N, Baux D, Mamaeva D, Hamel CP, Meunier I, Roux AF & Kalatzis V**.** (**2019**) Genome Editing in Patient iPSCs Corrects the Most Prevalent *USH2A* Mutations and Reveals Intriguing Mutant mRNA Expression Profiles. ***Mol. Ther. Methods Clin. Dev***. 17:156-173.

Torriano S, Erkilic N, Faugère V, Damodar K, Hamel CP, Roux A-F & Kalatzis V. (**2017**) Pathogenicity of a novel missense variant associated with choroideremia and its impact on gene replacement therapy. ***Hum. Mol. Genet.*** 26:3573-3584.



Inserm UMR1298, INM, Hôpital St Eloi, BP 74103,
80 Ave Augustin Fliche, 34091 Montpellier, France