



European Network for integrated TRAINing on Innovative Therapies for VISION RestoratiON

Blindness is the most feared handicap leading to the greatest exclusion from society by reducing patient autonomy and mobility. Clinical trials have demonstrated the possibility to regain some useful vision with retinal prostheses in patients having lost photoreceptors. New approaches are entering into clinical trials such as photovoltaic implants, optogenetic therapy and even cortical prostheses for patients having lost eye to brain connection. In the ENTRAIN-VISION project, the Early Stage Researchers (ESRs) will work on these innovative technologies for restoring vision in blind patients.

Visual restoration with a whole diamond visual prosthesis - Sorbonne Université (Paris, France)

Optimization of Optogenetic therapy by targeting a new retinal cell target - Sorbonne Université (Paris, France)

Use of virtual reality for a rational design of retinal prostheses - EPFL (Geneva, Switzerland)

Use of optical tweezers for retinal cells separation toward transplantation and optogenetic therapy - UMFCD (Bucharest, Romania)

Towards object encoding using electrical and optogenetic artificial retinal stimulation at high spatio-temporal resolution - NMI (Tübingen, Germany)

Investigation of the electrical-stimulation induced beneficiary effects on diseased retina - EKUT (Tübingen, Germany)

Characterization of healthy and diseased mouse models from retinal circuits to visually guided behavior - Aalto University (Aalto, Finland)

From the retina to behavior: The absolute sensitivity limit of vision in healthy and diseased mouse models - Aalto University (Aalto, Finland)

Imaging enhancement techniques for bioelectronic visual aids - UMH (Elche, Spain)

Development of a cortical visual neuroprosthesis for the blind - UMH (Elche, Spain)

Simulation of prosthetic stimulation in neural substrate - CUNI (Prague, Czech Republic)

Optogenetic encoding schemes in retina, LGN and V1 - CUNI (Prague, Czech Republic)

Development of membrane-targeted azobenzene-based compounds for vision restoration - IIT (Genova, Italy)

Development and testing of organic nanoparticle-based light actuators for retinal applications - IIT (Genova, Italy)

Development of clinical endpoints of daily-life activity for low vision patients to assess the effect of visual restoration - Streetlab (Paris, France)

Submission deadline: 13th April 2020

More information and application procedure: www.entrain-vision.eu

Benefits

- Full position for 36 months with competitive salary and working conditions, monthly mobility allowance, and family allowance (if family obligations)
- Continuing education, secondments in the private sector, training modules and transferable skills courses

Eligibility criteria

Candidates must be in the first four years of their research career and not hold a PhD. They must not have resided in the country of their host organization more than 12 months in the 3 years prior to their recruitment.