



European Association for Vision and Eye Research *Foundation*

The EVER-f Fellowships

Application for fellowship 2021

HOST INSTITUTION LIST

The following laboratories or departments have accepted to host EVER Fellows:

Professor Harminder S Dua, University of Nottingham, UK.

The university of Nottingham is one of the Highest ranked universities in the UK, with a long tradition of excellence and research and teaching. The Academic unit of Ophthalmology and Visual sciences is affiliated to the Queens Medical Centre of the Nottingham University Hospitals NHS Trust, which covers all ophthalmic subspecialties and has active clinical research programmes in Cornea & Ocular surface, Glaucoma and Medical retina. The Academic unit has dedicated research laboratories with ongoing projects on basic science of antimicrobial peptides and corneal infections; Limbal stem cells and ocular surface reconstruction including amniotic membrane; and the pre-Descemet's layer (Dua's layer) and lamellar corneal surgery, corneal pathology and glaucoma.

The candidate can become part of ongoing projects or initiate and complete a small project of their own, with opportunities to learn and train in laboratory skills and techniques. The candidate will have access to ongoing teaching sessions in the university on a regular basis. Co-authorship on one or more papers is guaranteed.

Bart LEROY – Ghent, Belgium

The team at the Department of Ophthalmology of Ghent University Hospital and Ghent University can offer training fellowships of between 2 weeks and 6 months duration in ophthalmic genetics.

The team is led by Professor Bart P LEROY, MD, PhD and has three consultants in ophthalmic genetics, two clinical PhD students, a postdoctoral research coordinator, two study nurses and multiple technical ophthalmic assistants and orthoptists. Fellows can come and learn how clinical research in ophthalmic genetics is performed, including deep phenotyping with extensive, state-of-the-art visual electrophysiological and psychophysical tests, genotype-phenotype correlation studies, and genetic therapy studies. Working closely with the molecular genetics team led by Professor Elfride DE BAERE, MD, PhD, we are able to also offer insight into how a top-class molecular genetics team works in ophthalmic genetics.

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Kai KAARNIRANTA, Kuopio, Finland

Kaarniranta AMD Lab

Expertise: Eye diseases, preclinical disease models, clinical trials

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<https://uefconnect.uef.fi/en/group/kaarniranta-amd-lab/>

<https://oddl.fi/contacts/>

The leader of the age-related macular degeneration (AMD) group is Professor Kai Kaarniranta (M.D.; Ph.D.; Chief Physician at the Department of Ophthalmology, Kuopio University Hospital (KUH); Head of Ophthalmology Department). Kai Kaarniranta is also one of the leaders in Ocular Drug Delivery Laboratory

Our AMD research group studies regulatory mechanisms of protein aggregation, as well as lysosomal and autophagy clearance in retinal pigment epithelial (RPE) cells. We also wish to understand the function of molecular chaperones in these clearance processes. We aim to find new autophagy linked therapies for AMD.

Our researchers and staff, as well as our collaborators around the globe, are all united by shared commitment to new scientific discovery on AMD. We seek to uncover and answer key questions in basic and preclinical research, allowing us to find novel therapies and cures for AMD for the benefit of tomorrow. Our vision is to connect talented young scientists with world-class leaders in AMD research and thereby promote discoveries that impact AMD care for the benefit of all.

Uwe PLEYER – Berlin, Charité

At the Charité, Berlin Department of Ophthalmology, we can offer fellowships between 2 weeks and 6 months in the field of ophthalmo-immunology. This includes both clinical and experimental investigations. Professor Uwe Pleyer's team focuses on immune-mediated diseases of the eye. This primarily affects intraocular inflammation, scleritis and keratitis. One focus here are infection-associated uveitis (toxoplasmosis, virus-associated uveitis). For this purpose, an aqueous humour laboratory with technician is available for the analysis of intraocular antibody synthesis as well as a close connection to the Department of Virology (PCR) of the Charité. For further examinations (e.g. cell sorting, cytokine and chemokine analysis), there is close cooperation with the Berlin Institute of Health (BIH) and the clinical immunology / rheumatology department. Working closely with S Mergler, PhD we can also offer insight into single cell patch-clamping and fluorescence calcium imaging examinations for intracellular signalling pathways.

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Marcela VOTRUBA, Cardiff, UK

Mitochondria and Vision Research Lab , School of Optometry and Vision Sciences
College of Biomedical and Life Sciences, Cardiff University

We can offer a research fellowship of 6 months to participate in research into the treatment of mitochondrial eye disease and learn a range cell and molecular laboratory techniques. Enthusiastic and committed applicants in vision sciences are invited to apply.

You will work as part of a multi-disciplinary group with an international reputation for studies in the role of the mitochondrial pro-fusion protein, Opa1, in retinal ganglion cell disease and novel therapeutic interventions. The Mitochondria & Vision Research Lab (M Votruba Lab) is interested in the role of mitochondrial dysfunction due to mutation in an expanding number of genes, in the pathophysiology of inherited optic neuropathy. Our approach has placed an emphasis on generating model systems to study retinal ganglion cell (RGC) loss and inner retinal degeneration. The current direction is to explore and evaluate novel therapeutic interventions. Our lab uses a range of molecular biology, cell biology, biochemistry, and neuroscience techniques.

The School houses extensive research facilities in a dedicated new building on the Cathays Park campus near Cardiff city centre. Additional information can be found at: <http://www.cardiff.ac.uk/optom>. Informal enquiries can be made to Prof. Marcela Votruba votrubam@cf.ac.uk

Jean-Frederic CHIBRET – Théa Pharma, Clermont-Ferrand, France

Prescription drugs and medical devices represent an essential tool in Ophthalmology, and even more, ophthalmologist are usually involved during the clinical stage of research. Before a drug becomes available for daily use, there is a long path to follow. The amount of work and the requirements requested to ensure patients safety, gathers many functions in pharmaceutical industry not usually known by the medical community.

Théa develops ophthalmic products through all this stages, from conception to marketing autorisation, with the higher standards of quality. We can offer the opportunity to join our company for 7-10 days, where our CMC, Quality, Regulatory, Clinical Research, Medical and Pharmacovigilance teams, will guide young ophthalmologist through all the steps of this process. The comprehension on how a drug it's designed, manufactured, what are the quality/efficacy/safety requirements it needs to meet to be safely offered to patients, or what are the regulatory requirements until getting an approval for commercialization, can help them to better understand the complexity of drug development.

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Aki KAWASAKI – Lausanne, Switzerland

The Jules Gonin Eye Hospital (Hôpital Ophtalmique Jules Gonin) offers fellowship opportunities in both clinical and fundamental research. The fellow may be integrated into an ongoing research protocol or clinical trial or alternatively, an individualized project can be considered. For clinical research, Professor Kawasaki is primarily investigating the melanopsin ganglion cell function in persons with various ophthalmologic disorders using pupillometry and sleep-wake cycle.

The fundamental research is directed by Professor Yvan Arsenijevic in the domain of retinal degeneration and regeneration. The different projects cover understanding of retinal degeneration mechanisms and pre-clinical studies for gene therapy. Fellowships involving visual function analysis and retinal imaging of mouse models are possible for a minimum of 6 months period provided that the fellow has a certification in animal handling and experimentation or can take the Swiss Animal Experimentation Module 1 training (one week course) before the start of the fellowship.

Tero KIVELÄ – Helsinki, Finland

The Department of Ophthalmology, Helsinki University and Helsinki University Hospital offers training fellowships from 2 weeks to 6 months in clinical and translational ophthalmology. The translational aspects include ophthalmic pathology and genetics. The faculty is led by Professor Tero Kivelä (ocular oncology and pathology), associate professor Sirpa Loukovaara (vitreoretinal diseases) and assistant professor Mika Harju (glaucoma) and includes several PhD students and postdocs as well as consultants and adjunct professors in various subspecialties of ophthalmology. The clinical genetics laboratory is run within the Folkhälsan Genetic Institute on the Meilahti Campus of the Academic Medical Center Helsinki. Special guidance is also available in medical statistics, especially basic and advanced survival analyses.

<https://www.helsinki.fi/en/beta/the-academic-medical-center-helsinki>