

**Experimental
Ophthalmology**

**Scientific Executive
Manager**
Dr. Martina Kropp, PhD,
Maître Assistante
Project Management
Acquisition of funding
Human Ressources

Lab Manager
Dr. Nina Harmening,
PhD, Postdoctorante
Financial management

Prof. Thumann, MD
Group Leader

Animal Welfare
Alain Conti

Laboratory security
Gregg Sealy

**Ocular *in vivo*
electroporation to treat
retinal neurodegeneration**

**Investigation of neuroprotective
effect of PEDF and GM-CSF in
retinal organotypic culture model of
dry AMD**

**Xenofree ocular cell
culture using human
plasma lysate to develop
personalized therapy
approaches**

**Transposon based gene
cell therapy in the
treatment of retinal
neurodegeneration**

- Development of in-process quality controls for ATMPs
- Analysis of neuroprotective activity of scutellarine & toxicity of decaline
- Measurement of the role of lysyl oxydase in diabetic retinopathy
- Optic nerve prosthesis

**Transposon-based, targeted ex
vivo gene therapy to treat age-
related
macular degeneration (AMD)**
(FP7 EU Grant no. 305431)

**Enhancing reliability,
reproducibility and long-term
gene expression of PEDF in
SB100x transfected cells**
(SNF Grant no. 31003A_160195)

Transposon based gene therapy to treat Dry Macular Degeneration
Collaboration with Selexis SA