**Restoring visual processing in mutant models for congenital blindness**

Most of the current genetic therapies that are being developed for inherited retinal diseases are focused on determining whether the light-sensing photoreceptor cells within the retina can be re-activated. Less is known about the ability of the visual cortex to properly process this newly available information, in particular when the brain has been devoid of any visual input, either from early life onwards or for a very long-time. To study this, we made use of a tailor-made virtual reality setup that allows to study visual behavior of mice in a natural setting. The performance of wild-type vs. visually-impaired mice will be studied, as well as the ability to restore visual processing following therapeutic intervention.

**People involved:**

* P. (Paul) Tiesinga, principal investigator
* R.J.A. (Richard) van Wezel, principal investigator
* M.N. (Martha) Havenith, post-doctoral researcher
* W. (Wenjun) Zhang, PhD candidate

**Funding:**
* Gelderse Blindenstichting
* Netherlands Organization for Scientific Research (NWO) – Light, cognition and behavior
* ProQR Therapeutics
* Rotterdamse Stichting Blindenbelangen