



THIERRY LÉVEILLARD

From France to Sweden



Project: **Truncated thioredoxin-like protein Rod-derived Cone Viability Factor**

Research topic: **Biology**

Swedish Institution: **Karolinska Institutet**

French Institution: **Institution de la Vision, Sorbonne University**

Dates of mobility: **03/03/2019 to 05/03/2019**

Program: **SFVE-A (ex TOR)**



PRESENTATION

[Thierry Lévillard](#) is Research Director at [INSERM](#), [Institut de la Vision](#) (UMR-S 968). He identified the truncated thioredoxin-like protein Rod-derived Cone Viability Factor (RdCVF), a rod-secreted protein encoded by the nucleoredoxin-like 1 (*NXNL1*) gene whose depletion in retinitis pigmentosa leads to cone cell death. His group elucidates the mechanism of action of RdCVF and demonstrated that RdCVF participates in a novel metabolic and redox signalling involving RdCVF and the thioredoxin RdCVFL, the second product of the *NXNL1* gene. *NXNL1* is a possible treatment for retinitis pigmentosa independent of causative mutations.

ACTIVITIES IN SWEDEN

The purpose of Thierry Lévillard's stay in Sweden was to visit [Prof. Arne Holmgren](#) at the [Department of Biochemistry](#), [Karolinska Institutet](#), with whom he previously collaborated. Thierry Lévillard had identified a thioredoxin-related protein, rod-derived cone viability factor (RdCVF) encodes as a splicing variant of the nucleoredoxin-like 1 (*NXNL1*) gene, that is a potential therapeutic agent for treating inherited retinal degeneration. Together, they worked on a collaboration to elucidate the biochemical function of that protein.