



**FRAUKE ECKE**

*From Sweden to France*



Project: **Puumala hantavirus (PUUV)**

Research topic: **Medecine & Health**

Swedish Institution: **SLU, Umeå**

French Institution: **INRAE Montpellier**

Dates of mobility: **02/12/2019 to 04/12/2019**

Program: **SFVE-A (ex FRÖ)**



## PRESENTATION

[Frauke Ecke](#) is a Senior Lecturer at the [Department of Wildlife, Fish and Environmental Studies](#) at the [Swedish University of Agricultural Science](#) in Umeå. She graduated with a PhD degree in Landscape Ecology 2003 at the Department of Civil Engineering at [Luleå University of Technology](#), where she then worked as an Associate Professor. She defines herself as a landscape ecologist with interest in small mammals such as beavers, their predators and zoonoses, how they are affected by environmental change and how species affect their environment. Her objective is to better understand the pathogen transmission and disease outbreaks.

## ACTIVITIES IN FRANCE

Frauke Ecke had the opportunity to meet with [Nathalie Charbonnel](#) but also with [Guillaume Castel](#), virologist and [Renaud Vitalis](#) and [Maxime Galan](#), geneticists from [INRAE](#) Montpellier.

The discussions were targeted towards the common research project of Nathalie Charbonnel and Frauke Ecke on the immunogenetics of bank voles as a potential explanation of the spatial mismatch between bank vole distribution and human disease related to Nephropathia epidemia (vole fever).

Potential projects have been also discussed especially concerning small mammals and humans and how their movements, behaviour and interactions affect emergence and transmission of zoonotic diseases in changing environments. This project is ongoing in collaboration with Nathalie Charbonnel. Moreover, together with Guillaume Castel, they considered the potential to develop a project where we use the genetic methods developed by him and his colleagues to identify the spatial origin of the Puumala orthohantavirus in Sweden.

Frauke Ecke also held a seminar intitled "Ecology of hantavirus infections in Sweden - drivers of the contact zone between the virus, rodents and humans".