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SHORT TERM MISSIONS

Short Term Missions (STMs) are small travel grants with the aim of:

- Sharing scientific expertise, methodologies, equipment and facilities to harmonise the existing approaches and methodologies within the large
- OHEJP European network
  Driving the research forward in a collaborative and non-duplicative fashion to strengthen both the scientific capacity within the OHEJP
- Contributing to the future prevention, preparedness, detection and response of the EU to foodborne and other emerging threats across human-animal-environmental sectors.

Zoonotic pathogen detection in rats

"Not only did this STM result in new data for my PhD project, it also strengthened the collaboration between FLI and RIVM, both in the form of sample/data sharing and publishing papers together. I can recommend all my fellow PhDs to work at another research institute for a while, not only to broaden your horizon, but also to have an unforgettable experience and to meet other researchers!"

Marieke de Cock,
RIVM, The Netherlands

Theme:	One Health, Emerging Threats
Home Institute:	RIVM, The Netherlands
Mission Hosting Institute:	FLI, Germany
Duration of Mission:	1 month

The Short Term Mission opened up the opportunity to compare and harmonise pathogen detection methods between RIVM and FLI, share reference material, and test new detection methods.

The mission focused on detection methods for specific zoonotic pathogens carried and transmitted by rats, to gain more insight in the prevalence and transmission of such infective agents that are able to cross species barriers.

The laboratory at FLI has experience in detecting specific rat-borne pathogens such as Seoul orthohantavirus, cowpox virus and rat hepatitis E virus, and it has the facilities to perform those analyses, currently not available at the RIVM. Marieke was able to learn these detection techniques, with the aim to set up these methods at RIVM.

The detection of specific rodent-borne pathogens will be included in a paper, expected towards the end of 2022, about the effect of urban greening on rodent abundance, pathogen prevalence, and diversity in wild rats from urban areas. During the STM, the team detected lymphocytic choriomeningitis virus (LCMV) in one house mouse, which is an exciting result that will be included in a separate paper about LCMV in collaboration with FLI.

As well as producing valuable test results, the mission strengthen the current collaboration between FLI and RIVM, opened up interesting discussions about rodent-borne (zoonotic) pathogen research, and led to new, unforeseen opportunities for sharing of data and the writing of papers.

The outcomes of this STM are a step forward in the harmonisation of pathogen detection methods and responses to potential emerging threats, in line with the One Health approach and vision.

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