

# ISFG Peter M. Schneider short term fellowship 2024

## **Applicant**

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## **Research collaboration visit to the Netherlands Forensic Institute (NFI) in Hague from the 17th of March until 21st of March, 2025**

The purpose of this research collaboration was to benchmark a newly developed 17-plex hyperplex-PCR assay with the well-established CE-based CellTyper assay in use at the NFI for body fluid inference. Before my visit to the NFI, we carefully planned the laboratory experiments to be carried out in order to have a productive week when I was there. We decided to analyze single-source samples of various celltypes, as well as diluted samples and several mixtures of two different body fluids.

The Peter M. Schneider Fellowship gave me the opportunity to spend one week in the R&D team at the Netherlands Forensic Institute, NFI, in Hague, Netherlands. Together with Margreet van den Berge, we performed the laboratory analysis of just over 100 reactions for both the Celltyper method that is currently in use at the NFI and the hyperplex-PCR assay. For the hyperplex-PCR assay, a total of seven microscope slides were prepared. The results initially looks very promising, and we plan to present the results as a poster at the upcoming GRC Forensic Analysis of Human DNA conference.

In addition, I got the opportunity to give a presentation to the R&D team and RNA reporting officers where I described the work that we are doing at the Biology section at NFC, different research projects that we are working on and also talk about the hyperplex-PCR methodology and the project. Another important outcome of the research visit is the experience that I got from visiting another forensic DNA analysis lab, and I am so grateful for all the discussions I had in between the lab work where I got to ask questions and we were discussing everything big and small that goes on in a forensic lab. Everyone in the team was so nice and made me feel welcome at their lab. I was very impressed with the automated freezer that is used to manage samples and connected to the LIMS system.

I would like to thank the ISFG Fellowship Review Board for awarding me this scholarship which enabled me to perform this project and also a big thank you to Margreet van den Berge and Titia Sijen for hosting me and making me feel so welcome.

Sincerely,

Maja Sidstedt