## **ISFG Pre-congress workshop**

## Workshop Body fluid Identification

## Monday, 9th september Description of the workshop

Sexual assault cases can be the victim's words against the suspect's words. DNA analysis may not discern whether an item or body part was inserted into the victim's intimate parts or whether there was only social contact. Can we show the presence of vaginal cell material? By what methods? How do we report results and can we give an evidential value? How are results handled in court?

We will discuss the ins and outs of mRNA typing as our favorite method to infer the body fluids or organs present in evidentiary stains. Since most casework samples comprise multiple body fluids, often from multiple persons, we will show how one can associate donor and cell type to prevent an association fallacy.

The workshop will be interactive, with many examples from real forensic cases, hands-on exercises and lively discussions. Bring your casework questions!

Participants will gain an overview of the full process of body fluid identification which starts with formulating the forensic question, followed by both DNA and RNA profiling (what are the similarities, differences and how does one accommodate the complexities associated with mRNA profiling), topped with interpretational aspects. It may tempt you to bring mRNA profiling to your forensic laboratory and finally provide answers on the presence of body fluids or organs. Or you may get inspired for your academic research on forensic applications of RNA analysis or methodologies to infer cell type in the forensic context.