MICRO IMAGING

Room:	**Breezaal**
Time:	**Monday 11:00 to 12:30**
Chair(s):	**Daan Touw, Ingrid Dijkgraaf**
Organizing FIGON partner(s):	**NVT / NVF**

For the next step in the optimization of drug therapy, there is an urgent need to understand drug-target interactions and to assess whether a drug is retained with sufficient concentration at the target tissue level. In addition, off-target interactions can lead to unwanted toxicity. New physical technological developments in imaging using mass spectrometry-based techniques have now firmly established themselves in translational research. With these techniques drug targets and drugs can actually be visualized on a micrometer scale. However, the integration of the information retrieved through the different techniques requires a complex way of data analysis, visualization, and integration. In this session examples of methods for tissue target imaging and target drug imaging using mass spectrometric techniques will be presented as well as the challenge to integrate all information into a 3-dimensional picture of what actually happens at the target level in the tissue.

Invited lectures:

11:00 – 11:30	**Introduction of mass spectrometry imaging for drug imaging** *Prof. Dr. Benjamin Balluff – Maastricht University*
11:30 – 12:00	**Imaging the unimaginable with imaging mass cytometry** *Prof. Dr. Frits Koning – Leiden University Medical Center*
12:00 – 12:30	**Accurate quantification of intact drug distribution in tissue using mass spectrometry imaging** *Prof. Dr. Peter Horvatovich – University of Groningen*

Indicated speaker time includes 5 minutes for discussion

NVT TOXICOLOGIE

NVF Dutch Pharmacological Society