

Master Thesis

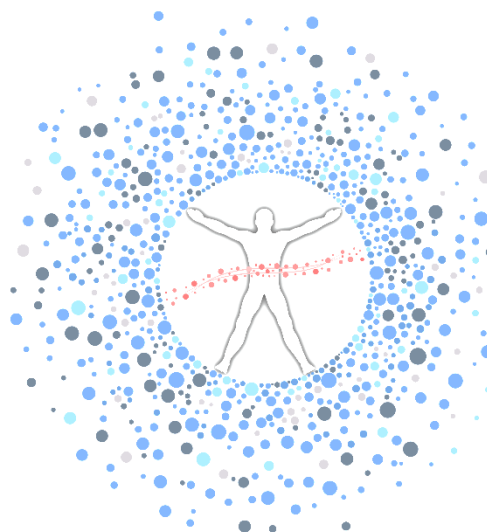
Measuring polyphenols in breast milk by LC-MS/MS

This thesis in the field of **bioanalytical chemistry** is dedicated to the **optimization and validation of a novel mass spectrometry-based method quantitating up to 100 polyphenols** in human samples. The final method will be applied to assess polyphenols in breast milk samples from cohort studies, potentially in cooperation with medical collaborators.

The working group '*Global Exposomics and Biomonitoring*' consists of a motivated and interdisciplinary team acting in a strong national and international network. We want to better understand the impact of food- and environment-related toxicants on human health and use innovative mass spectrometric methods to investigate exposure, metabolism, and toxicity.

Requirements

- ✓ Bachelor degree in chemistry or biotechnology
- ✓ Experience and interest in mass spectrometry and programming (e.g. R) would be an asset
- ✓ High level of self-motivation, commitment, and work ethics
- ✓ Application documents: Letter of motivation, CV, degree certificates and transcripts



Contact

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Relevant recent work

Oesterle I et al. (2021) [Polyphenol Exposure, Metabolism, and Analysis: A Global Exposomics Perspective](#). *Annual Review of Food Science and Technology*

Ezekiel et al. (2022) [Mycotoxin exposure biomonitoring in breastfed and non-exclusively breastfed Nigerian children](#). *Environmental International*