



Master Thesis

Decoding Lipid Roles in Cardiovascular Health and Disease

Faculty of Chemistry
Department of Analytical Chemistry
Ahrends Lab

This thesis focuses on the lipid composition of blood cells and its role in cardiovascular health, particularly in thrombosis (clot formation) and hemostasis (bleeding control). Blood cells rely on specific lipids for proper function and interact with inflammatory cells by releasing lipids, which affects inflammation. Imbalances in lipid levels are linked to diseases like acute coronary syndrome. Recent advances in lipidomic analysis provide new ways to explore how lipids regulate these processes, potentially leading to the discovery of novel biomarkers and therapeutic targets. Throughout the thesis, you will learn cutting-edge mass spectrometry techniques and software tools to analyze lipid changes and their effects.



Start: Flexible, can begin at any time.

Duration: The project is designed to be completed in 6 months.

Additionally, there will be an opportunity to extend this research into a PhD thesis for those interested in deepening their expertise.

You are welcome to contact us for further information and to learn more about our lab. Together, we can discuss details and find a project tailored to your specific interests.

Contact: Mag. Aleksandra Tyjan
+43 1 4277 52307
aleksandra.tyjan@univie.ac.at

<https://lipidomics.at>
<https://ahrendslab.univie.ac.at>



We provide an interdisciplinary research environment, offering the chance to learn a variety of methods in the field of lipidomics. If you are generally interested in the areas we focus on and enjoy experimental work, you should definitely get in touch with us.