

Interdisciplinary Research Network 2022 within the Faculty Of Life Sciences

Ammar Tahir (Department of Department of Pharmaceutical Sciences) and Karl-Heinz Wagner (Department of Nutritional Sciences) have been granted a two-year interdisciplinary research project within the Faculty of Life Sciences entitled **Lipidomics and Metabolomics Profile Alteration of Elderly People after Vitamin D Supplementation and Strength Training**, starting in October 2022.

The focus of the project is to shed light on the lipidome and metabolome profile alteration in conjunction with vitamin D abundance in human.

The main aim of the project is to investigate how these profiles (lipidome and metabolome) would change across a 17-week clinical intervention study involving 85 elderly adults. These profile alterations would hopefully lead to characterize possible biomarkers and cellular mechanisms associated with vitamin D abundance in humans as well as with strength training. The omics analysis would be supported by profiling makers of oxidative stress (ROS, Oxidation products) and of DNA damage.