

Institut für Ökologie, Evolution und Diversität & RobustNature Exzellenzcluster-Initiative



EINLADUNG

Kolloquium Wintersemerster 2021 / 2022

Prof. Dr. Emma Schymanski

Luxembourg Centre for Systems Biomedicine, University of Luxembourg

hält am Montag, den 10.01.2022, um 13:15 Uhr, digital via Zoom, einen Vortrag über

"Environmental Detective Work: Environmental Cheminformatics and the Exposome"

The multitude of chemicals to which we are exposed is ever increasing, with over 110 million chemicals in the largest open chemical databases, over 350,000 in global use inventories, and over 70,000 estimated to be in household use alone. Detectable molecules in exposomics can be captured using non-target high resolution mass spectrometry (HRMS), but despite the size of the chemical space, scientists cannot yet identify most of the tens of thousands of features in each sample, leading to critical bottlenecks in identification and data interpretation. This talk will cover European and worldwide community initiatives and resources to help connect environmental expert knowledge and observations towards a better understanding of the



exposome, including various open cheminformatics and computational mass spectrometry approaches such as the NORMAN Suspect List Exchange, MassBank, MetFrag and PubChemLite for Exposomics.



Associate Professor Emma Schymanski is an FNR ATTRACT Fellow and head of the Environmental Cheminformatics (ECI) group at the Luxembourg Centre for Systems Biomedicine (LCSB), University of Luxembourg. Her research combines cheminformatics and computational (high resolution) mass spectrometry approaches to elucidate the unknowns in complex samples, primarily with non-target screening, and relating these to environmental causes of disease. An advocate for open science, she is involved in and organizes several European and worldwide activities to improve the exchange of data, information and ideas between scien-

tists to push progress in this field, including NORMAN Network activities (e.g. <u>NORMAN-SLE</u>), <u>MassBank</u>, <u>MetFrag</u>, <u>patRoon</u> and <u>PubChemLite for Exposomics</u>.

Einladender: Prof. Dr. Henner Hollert

Dieser Vortrag findet lediglich in <u>Digitaler Form</u> **statt.** Über diesen Link kommen Sie zu der entsprechenden Veranstaltung: https://uni-frankfurt.zoom.us/j/96336478283?pwd=QSttRFgxRy9Rd1c5ZkxzR1pudW9ZZz09

