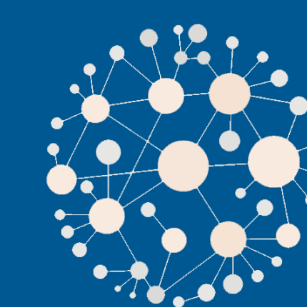




universität
wien

EXPOSOME AUSTRIA

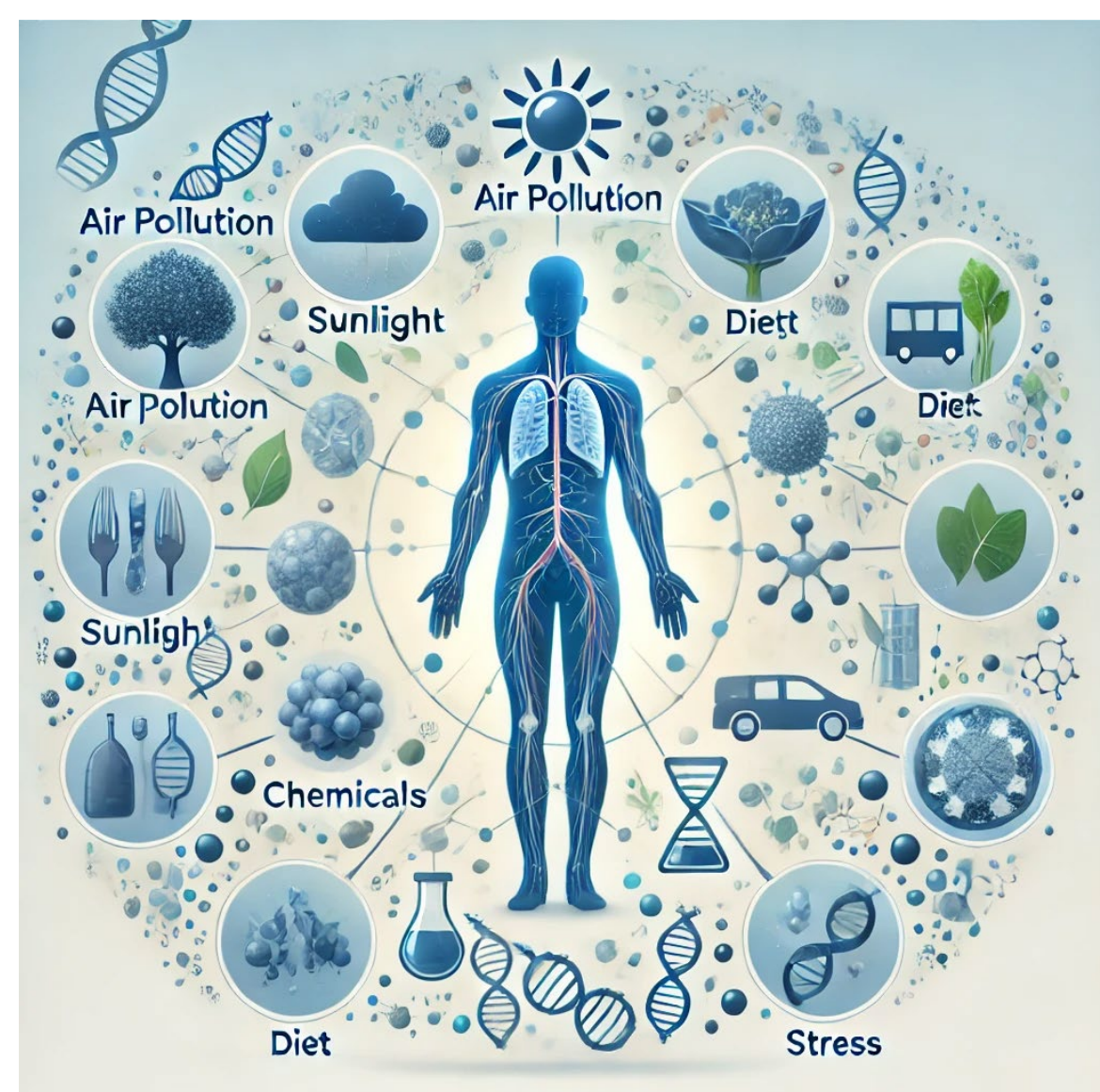
What Makes Us Sick?



Exposome Austria

Research Infrastructure
National EIRENE Node

Why Exposome?



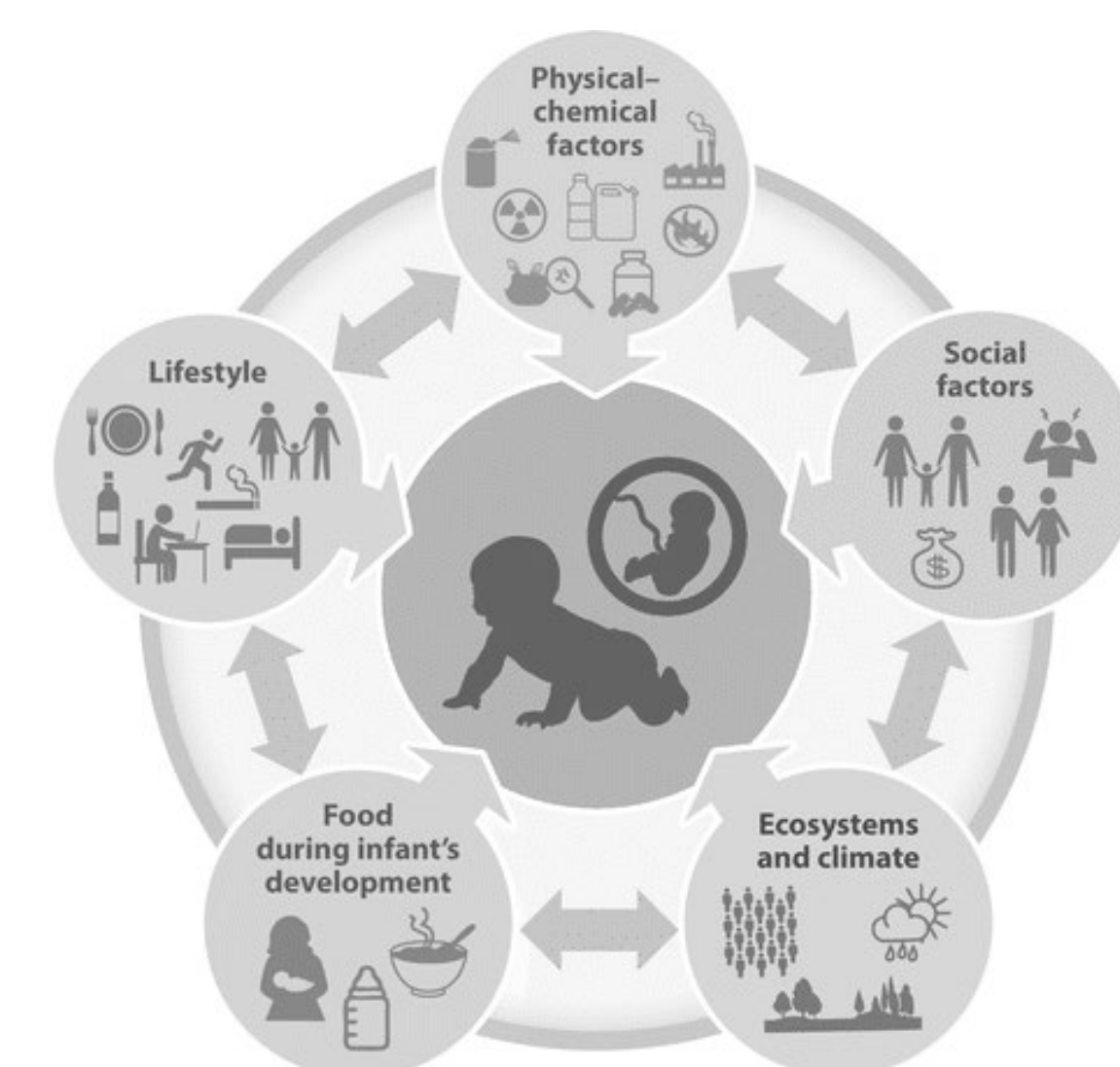
OpenAI. (2024). Scientific illustration representing exposome research. Generated by ChatGPT with DALL-E. Retrieved November 2024.

Genetics, environment, or both?

Genetics is responsible only for a minority of disease risks, while the environmental factors have proved being a major key trigger for many chronic diseases. This fact led to the exposome concept, introduced by Christopher Wild in 2005, stressing the role of lifetime exposures in disease development.

The term *exposome* refers to the total exposures humans face throughout their lives which may play a crucial role in disease development. Currently, about 70-90% of the global disease burden is estimated to be caused by the environment. And this figure is expected to grow.

To protect our health, we need a much better understanding of these exposures and their effects. Generating new data and making it accessible to scientists and policymakers is vital for driving evidence-based interventions and regulatory improvements.



Krausová M, et al. 2023. Annu. Rev. Pharmacol. Toxicol. 63:317-40

EIRENE Research Infrastructure

Mission

EIRENE is the first European infrastructure dedicated to the human exposome. This ESFRI project supports a large-scale research for the interdisciplinary assessment of **environmental determinants of health**. Not only food or water quality but also factors like indoor & outdoor environment, lifestyle, socioeconomics, or the individual's ability to cope with various stressors need to be considered and investigated.



Outputs

EIRENE will provide **harmonised workflows** and **integrated services** for data and sample collection, and knowledge and tools making these accessible to the research community, policy-makers, private enterprises and general public through an open-access system and expertise ecosystem.

20+ national nodes, 50+ individual partners from across Europe and USA

MASARYK
UNIVERSITY

universität
wien

vito

Finnish institute for
health and welfare

Inserm

BARMHERZIGE BRÜDER
Klinik St. Hedwig
Rheinburg

wecare
Wundversorgung
und Wundmanagement

ARISTOTLE
UNIVERSITY
OF THESSALONIKI

UNIVERSITY OF ICELAND

Institute of Atmospheric Pollution Research
National Research Council of Italy

Utrecht University

NIPH
Norwegian Institute of Public Health

SLOVAK
MEDICAL
UNIVERSITY

Jožef Stefan
Institute

CSIC

ÖREBRO
UNIVERSITET

UCL

COLUMBIA UNIVERSITY
IN THE CITY OF NEW YORK

Exposome Austria

About

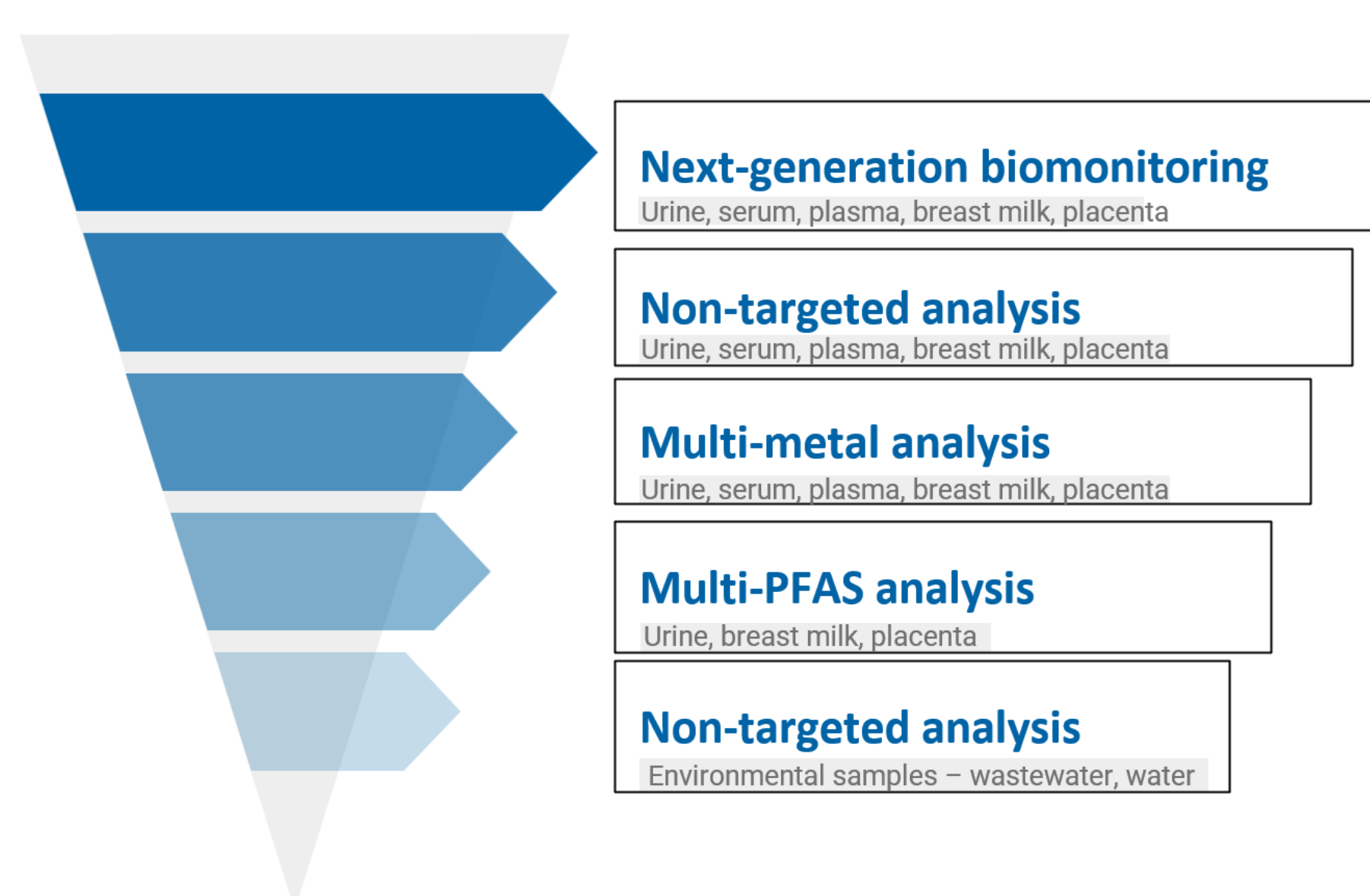
- National EIRENE Node
- Established in January 2022
- Political & financial support from two federal ministries (BMBWF & BMK)
- Coordinated by U. Vienna, unites four partners



Research Focus

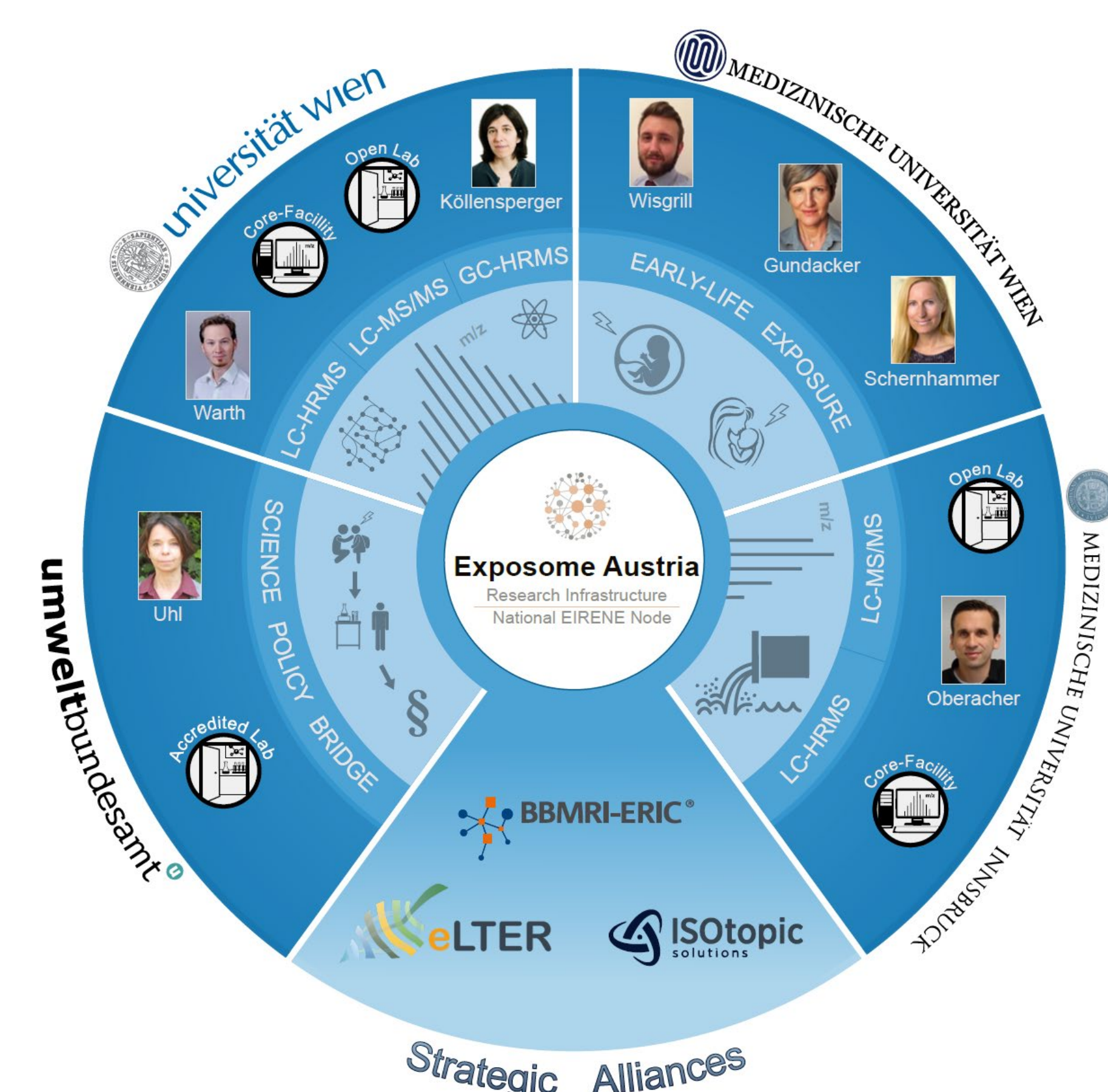
- Development of mass spectrometry-based analytical services supporting two research areas of high national priority
- 1. Analytical technology development
- 2. Early-life chemical exposome, impact on health

Services



For a service request or more information please contact us

Consortium



National Coordinator



Univ.-Prof. Dr. Benedikt Warth

Coordinator, Exposome Austria

Head, Global Exposomics & Biomonitoring Laboratory

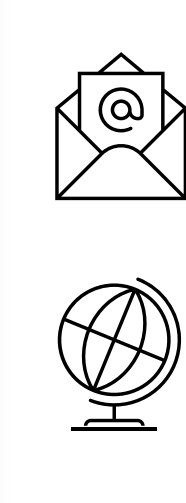
Deputy-Head, Department of Food Chemistry & Toxicology

University of Vienna

Supported by



Contact & Project Management



exposome.austria@univie.ac.at

www.exposome.at
www.eirene.eu

Jan Stiglitz, MA

Managing Officer
Exposome Austria
University of Vienna

