Call 1: Abstracts for an Innovative Project within the Framework of the new TRAIN Omics CRC Initiative presented within the session:

Conference Session on (Multi-)Omics Approaches to Healthy Ageing

Towards an Innovative Life-Span Clock: A Preparatory Step for a Future Transregio/CRC Initiative

We invite researchers to contribute to a dedicated session exploring the opportunity of a new collaborative research center (CRC) on:

"Healthy Life Lower Saxony –

Towards an Innovative Life-Span Clock as a Novel Measure for Healthy Ageing".

This session is part of our broader effort to form cross-location joint projects in preparation for a new Transregio/CRC grant proposal in future. Our vision is to establish a collaborative, interdisciplinary framework that leverages **systematic multi-omics approaches** —including e.g. genomics, transcriptomics, proteomics, metabolomics, epigenomics, and microbiomics — and other innovative technologies to develop novel and innovative biomarkers of healthy ageing. This session will bring together researchers interested in developing joint, cross-location projects to monitor, prevent, and treat ageing processes & ageing-associated disorders using cutting-edge multi-omics and AI-driven approaches.

The goal is to define a **systematic, interdisciplinary strategy** to measure healthy ageing and disease trajectories across the lifespan through:

- Development of a **multi-omics life-span clock** as a novel biomarker
- **Monitoring of ageing-associated disorders** for early detection, prevention, and personalized intervention
- Use of **AI and machine learning** on multi-omics approaches for molecular signature discovery and holistic data integration
- **Standardization** of workflows and protocols to enable reproducible, sustainable research and translational application

We encourage submission of abstracts that present **innovative methodologies, early-stage project ideas, or preliminary data** related to:

- Multi-omics data integration and analysis
- Biomarkers of ageing and age-related diseases
- Model organisms and cellular models in ageing research
- AI-driven analytics and signature identification
- Translational strategies in prevention and therapy
- Cross-site infrastructure and data harmonization strategies

Selected abstracts will be presented in **short pitches** during the session. This is a unique opportunity to position your research within a high-impact, future-oriented network initiative focused on **healthy ageing and precision health in Lower Saxony** and beyond.

Deadline for abstract submission (max. 300 words): 31 August 2025

Submit abstracts to: Calls for Abstracts - 2nd TRAIN Omics Days 2025 | innomatch niedersachsen