

EU-ToxRisk project sustainability

Martijn J. Moné, EU-ToxRisk project partners, Bob van de Water

Background

EU-ToxRisk launched itself off previous international toxicology efforts, like SEURAT-1, the US Tox21/ToxCast program, the OECD AOP framework, etc. Now that the project established a wide range of **technologies, data and know-how** on top of that, as well as active international **expert networks and collaborations**, these assets will reinforce new and ongoing initiatives into next-generation risk assessment (**NGRA**).

[:::] EUTOXRISK



RISK-HUNT3R: “*RISK assessment of chemicals integrating HUMAN-centric Next-generation Testing strategies promoting the 3Rs*”

- 2021-2026 under H2020
- €23M
- 37 EU partners, Coord. Leiden University (Bob van de Water)

Founded by core EU-ToxRisk partners

NGRA of chemicals based on non-animal approaches for **ab initio safety** evaluation; from **ADME, hazard** identification to full **IATA** based risk assessment.

Modular testing framework, drawing from EU-ToxRisk toolbox, integrating innovative human-relevant NAMs, e.g.:

- Omics
- iPSC technologies
- Advanced multi-organ systems

Focus areas include:

- STOT, DNT and NGC
- Case studies for toolbox qualification and NGRA consolidation
- Metabolic retrofitting
- Quantitative MoA for AOP/AON mapping
- Omics to link in vitro to human pathophysiology
- Exposome and MoS qualification
- PBK and qAOP for systems toxicology



ASPIS: “*Animal-Free Safety Assessment of Chemicals: Project Cluster for Implementation of Novel Strategies*”

- 2021-2026 under H2020
- €60M
- 70 institutions united in 3 projects across 16 EU countries + US

Europe’s effort on advancing chemical safety assessment without the use of animal testing.

Strategic collaborations among the PrecisionTox, ONTOX and RISK-HUNT3R projects on:

- Chemical Selection
- Kinetics and Exposure
- Omics
- Computational Approaches
- quantitative Adverse Outcome Pathways (qAOP)
- Risk Assessment
- Communication and Dissemination

Jointly pushing **scientific** state of the art **and regulatory impact**



PARC: “European Partnership for the Assessment of Risks from Chemicals”

- 2022-2028 under HE
- €400M total budget
- EU-wide Research and Innovation RA **hub of excellence**

- Support EU and national chemical RA and RM authorities to address current, emerging and novel chemical safety challenges and **enable transition to NGRA**
- Production of data and knowledge to better advice risk managers and decision-makers
- Reinvigorate human and environmental exposure, toxicology and ecotoxicology research communities in Europe **& developing European capacities**
- Learnings from EU-ToxRisk informed PARC partnership setup
- EU-ToxRisk and ASPIS partners providing and leading various key activities in PARC

