

# ENKORE

## Kick-off Meeting

Brussels

14th June 2024



# ENKORE





100+ new methods for EDC  
identification



Additional methods for EDC  
identification

Enhanced AOP-wiki to  
support EDC identification



Additional development of  
ED-relevant AOPs

Cross-species extrapolation  
for one-health assessments



Additional cross-species  
evaluations



Chemical-specific effects are common, and EDCs act through a multitude of molecular mechanisms and hormonal pathway cross-talks in a sex- and time-specific manner



Continued characterization of molecular mechanisms, hormonal pathway cross-talks, a sex- and time-specific effects, alongside shared and unique EDC modalities



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**8 projects**



**5 projects**



## The Five Projects



ENDOMIX

HYPIEND



## EDC-MASLD

INVESTIGATION OF ENDOCRINE-DISRUPTING CHEMICALS AS CONTRIBUTORS TO PROGRESSION OF METABOLIC DYSFUNCTION-ASSOCIATED STEATOTIC LIVER DISEASE

- Elucidate the impact of EDCs on the initiation and progression of MASLD
- Understand the mechanisms of hepatic injury and resolution due to exposures to EDCs
- Implement an integrative systems biology and screening platform for the studies of EDCs in MASLD

**Coordinator:**

*Prof. Tuulia Hyötyläinen*



**Vice-coordinator:**

*Prof. Matej Orešič*



## ENDOMIX

UNDERSTANDING HOW **ENDO**CRINE DISRUPTORS AND CHEMICAL **MIX**TURES OF CONCERN TARGET THE IMMUNE SYSTEM TO TRIGGER OR PERPETUATE DISEASE

- Uncovering the true impact of EDCs and mixtures on human health, focusing on immunotoxicity and critical periods of development
- Bridging gaps between science and policy to inform regulations and protect vulnerable populations

**Coordinator:**

*Prof. Ana C. Zenclussen*



**UFZ** HELMHOLTZ  
Zentrum für Umweltforschung

ENDOMIX



## HYPIEND

UNDERSTANDING AND PREVENTING THE IMPACT OF **END**OCRINE DISRUPTORS ON THE **HY**POTHALAMUS-**PI**TUITARY AXIS IN SENSITIVE POPULATIONS

- Understand effects of EDC co-exposure in the function and epigenetic programming of the HP axis
- Delineate interventional strategies in sensitive population for minimize exposure and consequences on neuroendocrine system (perinatal and pre-pubertal stages)

**Coordinator:**

*Dr Chiara Baudracco*



**eurecat**  
Technology Centre of Catalonia

**HYPIEND**

## MERLON

MERGING SCIENTIFIC EVIDENCE WITH REGULATORY PRACTICES AND LEVERAGING IDENTIFICATION OF ENDOCRINE DISRUPTORS USING NEW APPROACH METHODOLOGIES

- New biomarkers and NAMs for the identification of EDCs affecting sex development and reproductive function
- Develop a roadmap to advance EDC identification within the EU

**Coordinator:**

*Prof. Terje Svingen*



## NEMESIS

NOVEL EFFECT BIOMARKERS FOR METABOLIC DISRUPTORS: EVIDENCE ON HEALTH IMPLICATIONS TO ANSWER SCIENCE AND POLICY NEEDS

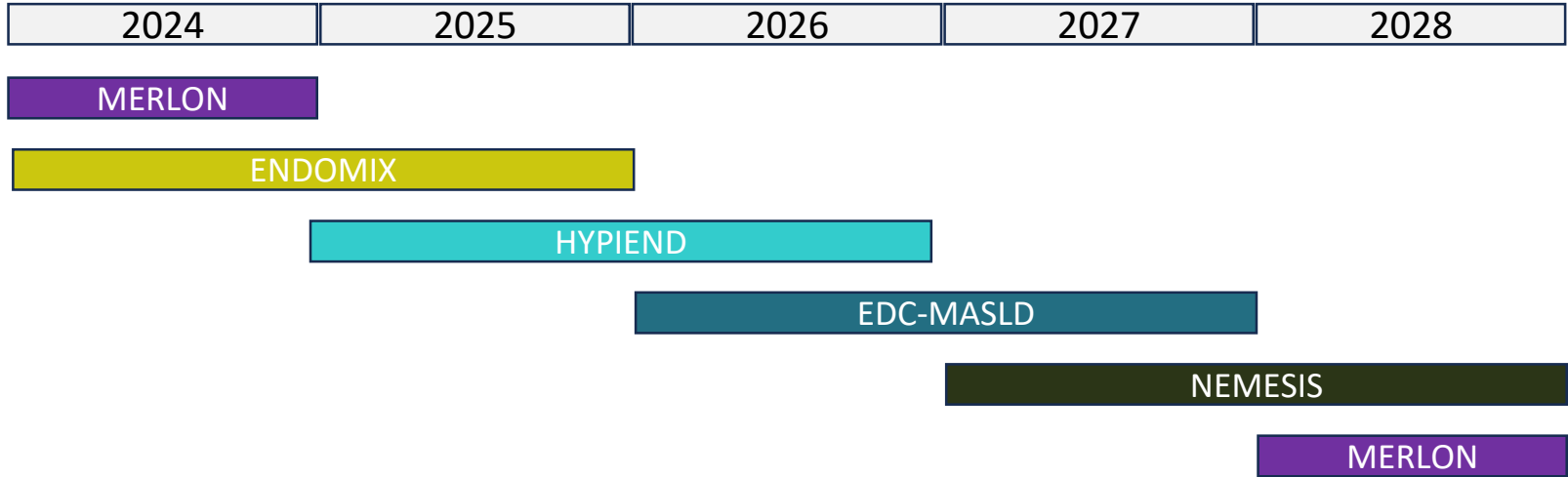
- Mechanisms of adverse effects of MDCs and mixtures in liver and pancreas
- Effects of MDCs and mixtures on intestinal microbiota
- Human exposure data and effect biomarkers for metabolic disruption
- Effective risk assessment and communication on MDCs

**Coordinator:**

*Prof. Jaana Rysä*



## Cluster Coordination



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Thank You for Your Attention