



**EDC-MixRisk**  
*safe chemicals for future generations*

## EDC-MixRisk

*“Integrating Epidemiology and Experimental Biology to Improve Risk Assessment of Exposure to Mixtures of Endocrine Disruptive Compounds”*



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 634880.

# EDC research in a global perspective

- A heated debate on the occurrence of EDCs effects
- Some 25.000 - 30.000 original scientific articles on EDC\* or endocrine disrupt\*
- Regulatory work in progress in EU and globally - UNEP, WHO, OECD
- Awareness raising efforts within UNEP, SAICM, WHO; Test development, OECD

# Key concern related to EDCs

- Many more potential EDCs as experimentally indicated
- Many more hormones than yet addressed in research
- Mixture effects yet poorly understood and researched
- Early life exposure of particular concern
- Low dose effects and non-monotonic dose response
- Urgent needs for regulatory actions on EDCs

... that's where EDC-MixRisk fits in!

# Long reach goal EDC-MixRisk

*“To promote safer use of chemicals for the next generation.”*

**Chris Gennings**  
Mount Sinai  
School of Medicine  
New York, USA

**EDC-MixRisk MEETING**  
Name and date

- Karolinska Institute
- Karlstad University
- Gothenburg University
- Lund University
- Stockholm University
- Uppsala University



**Hannu Kiviranta**  
National Institute for  
Health and Welfare  
Helsinki, FI

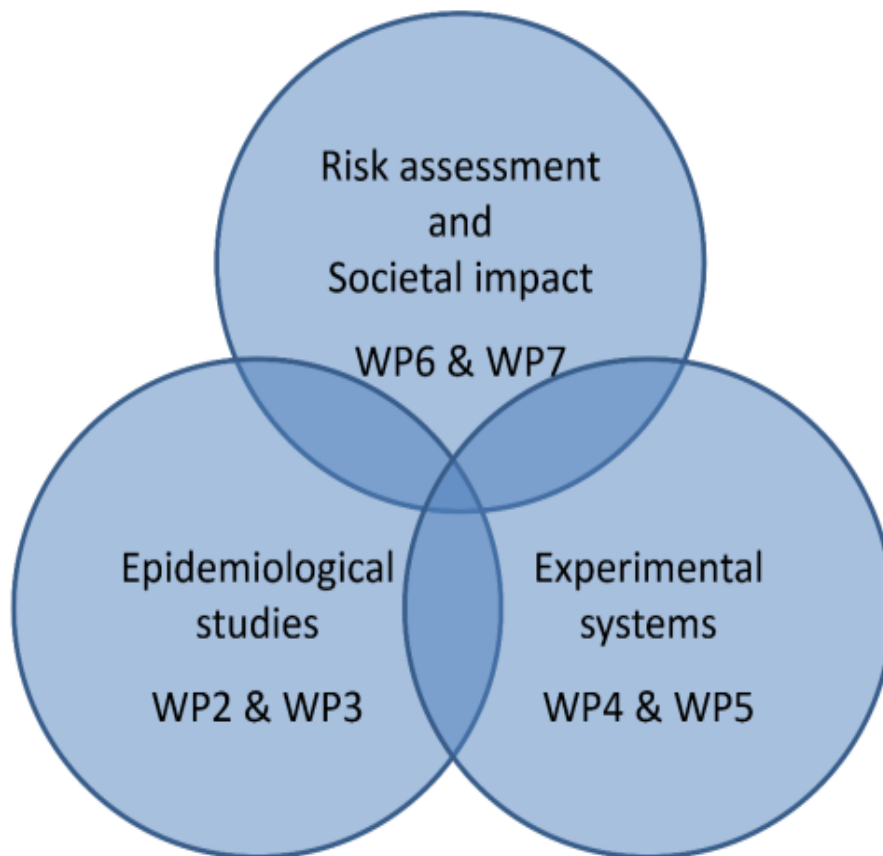
**Barbara Demeneix**  
Muséum National  
d'Histoire Naturelle  
Paris, FR

**Wieland Kiess**  
University Hospital  
Leipzig,  
Leipzig, GE

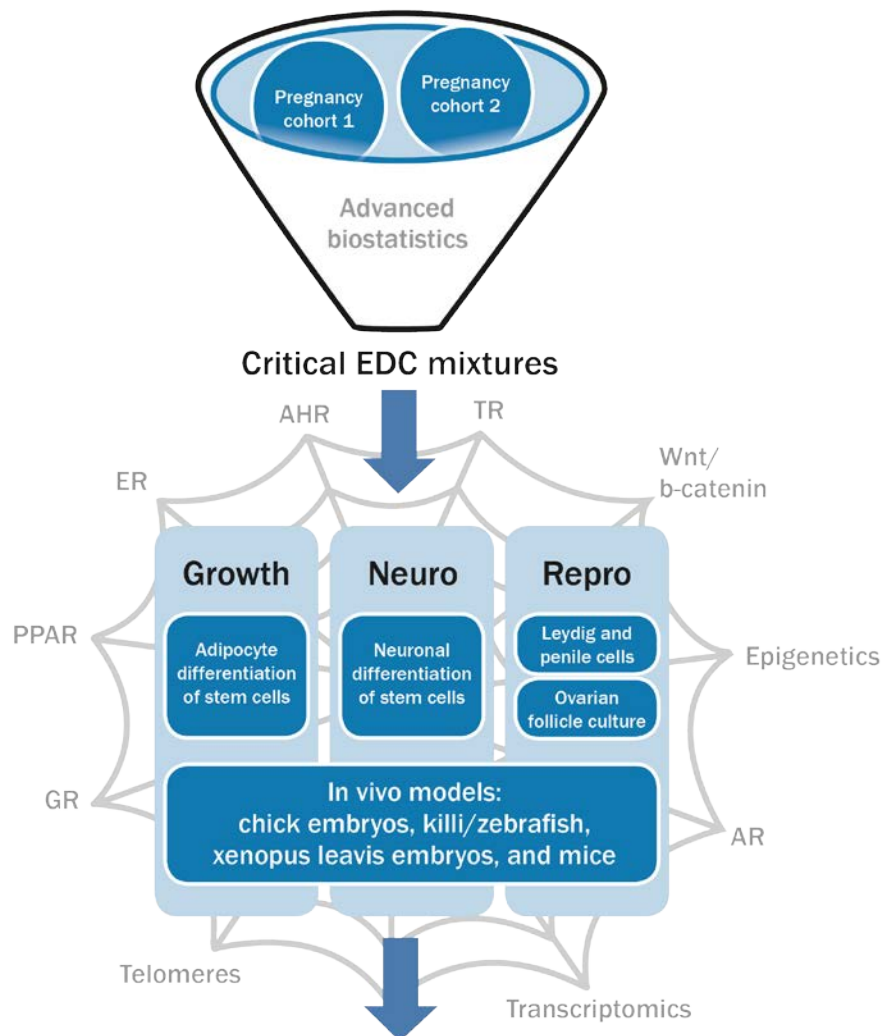
**Giuseppe Testa**  
The European Inst.  
Of Oncology  
Milan, IT

**Efthymia Kitraki**  
University of Athens  
Athens, GR

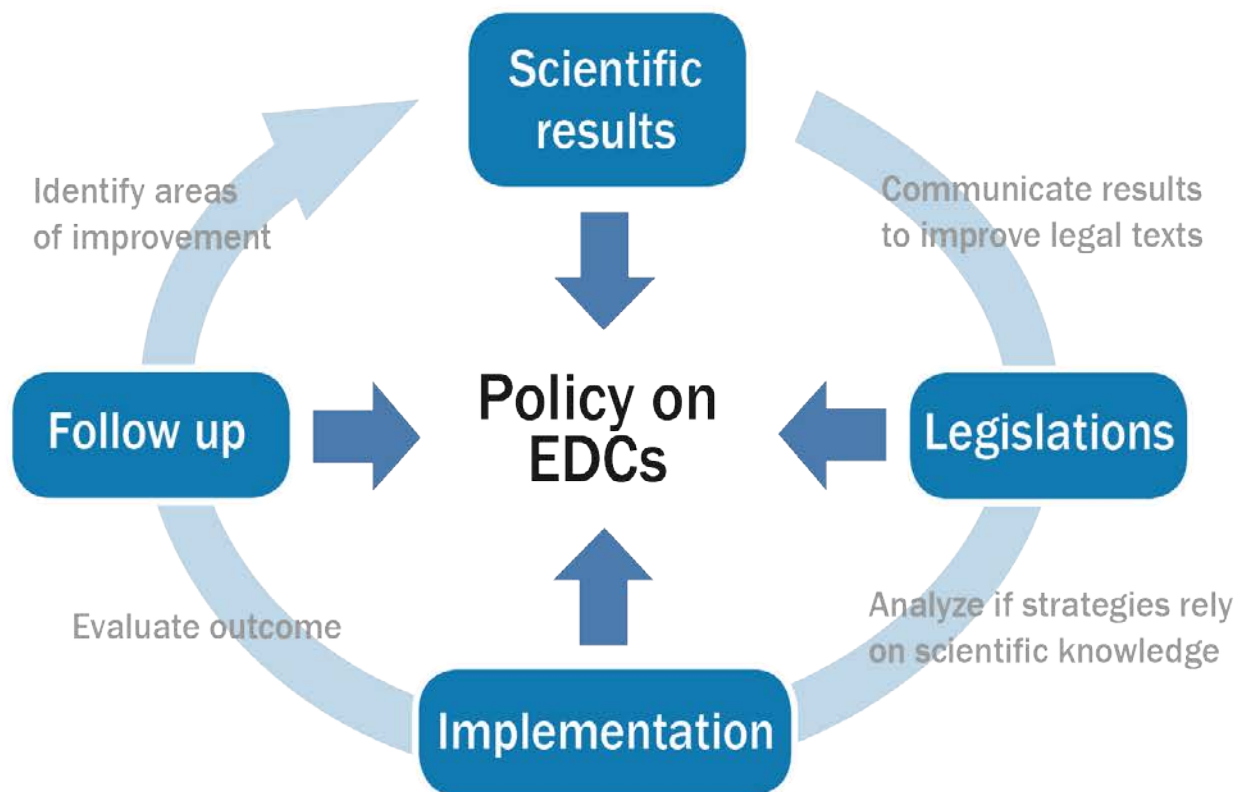
# The EDC-MixRisk mixture



# Experimental systems

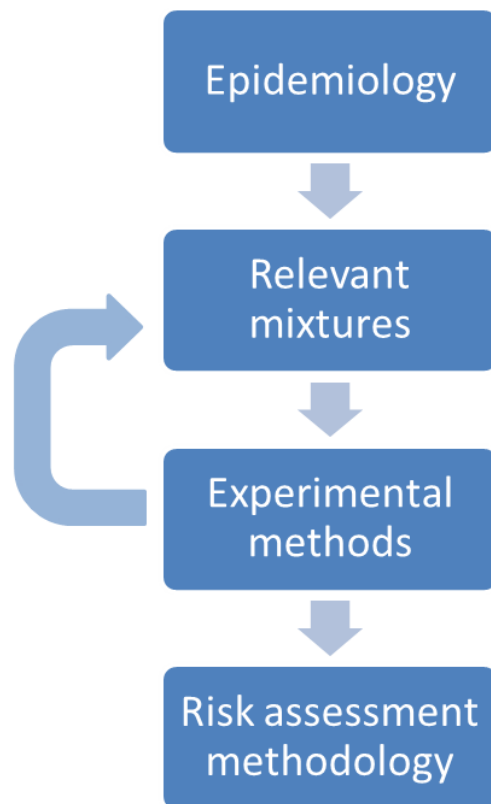


# Regulatory perspective





# Scientific project work flow:



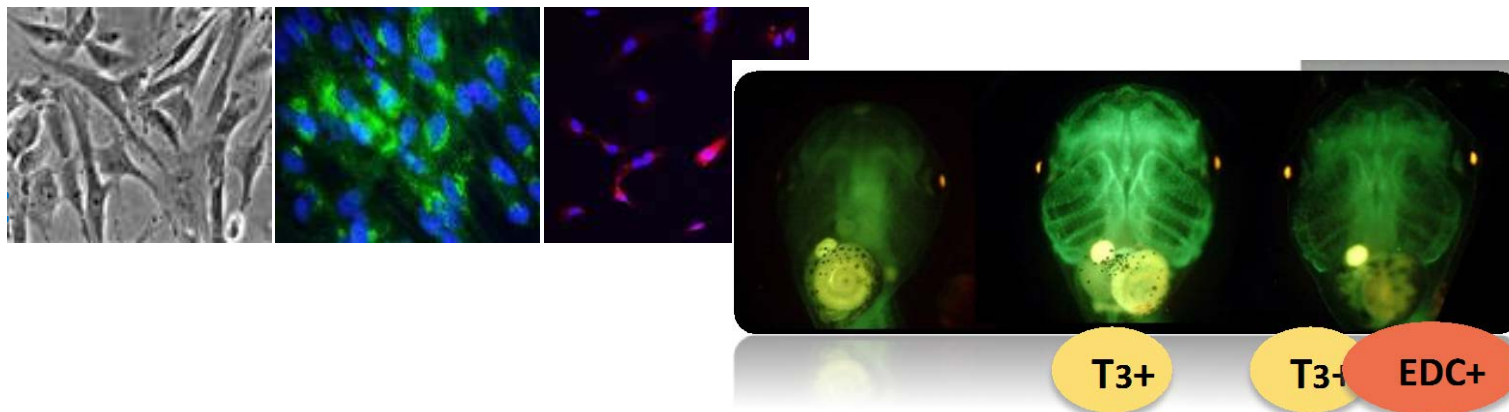
## EDC-MixRisk will:

1. Identify EDC mixtures with adverse health outcomes in two pregnancy cohort studies within: growth and metabolism, neurodevelopment and sexual development



# EDC-MixRisk will:

2. Identify molecular mechanisms underlying EDC exposure and adverse health outcomes using experimental animal and cell models.



## EDC-MixRisk will:

3: Develop an approach for evaluating, integrating and synthesizing complex datasets for EDCs and mixtures.

=

*Altogether EDC-MixRisk will lead to better risk management!*

# Thank you!

**More information:** [www.edcmixrisk.org](http://www.edcmixrisk.org)

Coordinator: Prof Åke Bergman

+46-70644 3861

[ake.bergman@swetox.se](mailto:ake.bergman@swetox.se)



Vice Coordinator: Dr Joëlle Rüegg

+46 73 7121592

[joelle.ruegg@swetox.se](mailto:joelle.ruegg@swetox.se)

