

[View this email in your browser](#)



Newsletter - Issue 1 March 2020



**BREAKING DOWN THE WALL
BETWEEN HUMAN HEALTH
AND ENVIRONMENTAL
TESTING OF ENDOCRINE
DISRUPTERS: ENDOCRINE
GUIDELINE OPTIMISATION**

Image © Centre for Organismal Studies (UHE)

Would you like to receive future news from ERGO in your inbox? Sign up to our newsletter [here](#)



Welcome from the coordinator



Welcome to the first issue of the annual ERGO E-Newsletter!

ERGO was launched in January 2019 and will run for five years, exploring how to improve current testing for Endocrine Disrupting Chemicals (EDCs). It's a project that is very timely and urgently needed since endocrine disruption is an important public health concern and we need more research to obtain a fuller picture of the health and environmental impacts of these EDCs. Current testing tools do not always appropriately identify effects, for example for those

endocrine disruptors that are newly emerging.

ERGO is unique in that it aims to break down the wall between human health and environmental testing of endocrine disruptors. Currently, barriers exist between the different research fields (toxicology and ecotoxicology) that investigate adverse effects of EDCs in different vertebrate classes. This means that so far, useful data from non-mammalian vertebrate research tests have been disregarded in human health research and vice versa, while we believe that we can learn from each other and bridge information between the different fields.

ERGO brings together a strong and enthusiastic team of multidisciplinary experts from industry, regulatory bodies and research institutions involving partners from all over Europe as well as from Japan. Together, we aim for far-reaching impacts, not only contributing to improved testing, but also to better the regulation of EDCs, protecting

human and environmental health.

We are also proud to be part of EURION, a cluster of eight research projects which are all dedicating their research to "New Testing and Screening Methods to Identify Endocrine Disrupting Chemicals". All EURION projects are funded by the EU Horizon 2020 Research and Innovation Programme, which is the largest funding allocation for EDC research in Europe. Each project is concentrating on a different aspect and together we stand strong to improve human and environmental health. Please visit the [EURION website](#) and subscribe for [EURION news](#).

Assoc. Prof. Henrik Holbech, ERGO Coordinator and Associate Professor of Ecotoxicology, University of Southern Denmark (SDU)



About



ERGO aims to improve identification and hazard assessment of endocrine disrupting chemicals (EDCs) for the protection of human health and the environment. EDCs are chemicals which mimic natural hormones, harming the endocrine system which regulates important biological functions in humans and animals. Impacts of EDCs can include breast and testicular cancers, reproductive abnormalities and even neurodevelopmental delay in children.

EDCs are often man-made and can be found in plastics, clothes, cosmetics, toys, flame retardants and many other household products.

Total avoidance is not practical in modern life, but actions must be taken to reduce their availability and better protect people, animals and the environment. In 2019, the European Union-funded research project ERGO was launched to respond to these challenges. ERGO is also part of the EURION cluster, which is the largest funding allocation for EDC research in Europe. The eight research projects in the cluster together are doing innovative research to improve identification of EDCs and their harmful effects.

ERGO's research will break down the wall that currently exists between the different research fields (i.e. toxicology and ecotoxicology) that investigate EDC effects. So far, there has been a segregation between EDC research for human health and the environment. However, ERGO believes that research in one field will be applicable to the other and will demonstrate that harmful EDC effects observed in a fish or amphibian will also raise concern for harmful effects in humans. ERGO will do this by determining key events of thyroid disruption and identifying adverse outcomes in different species while also investigating the bioavailability and biotransformation of chemicals in different species. ERGO's research will enhance existing OECD guidelines for endocrine disruption testing by adding thyroid-related endpoints and biomarkers for different species.

Project Overview



The team

The ERGO consortium, coordinated
by the University of Southern

Denmark (SDU), brings together 15 partners from eight countries. The multidisciplinary team consists of representatives from industry, regulatory bodies and research institutions. The partners from Europe and Japan specialise in ecotoxicology, toxicology, endocrine disruption, genomics and molecular biology to name but a few!



ERGO Consortium



Project news and highlights

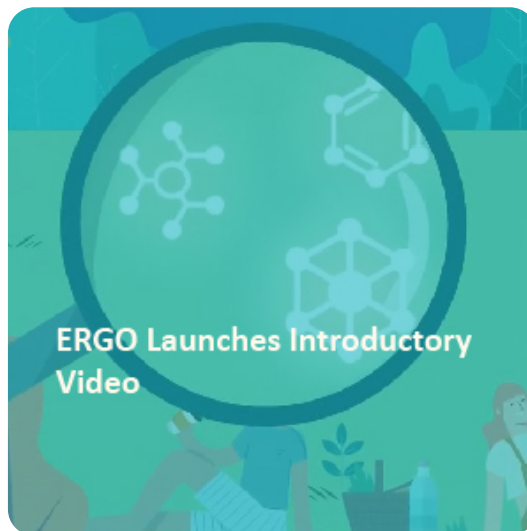
To read all the latest news from the ERGO project, [click here](#) and select 'news' from the filter options.

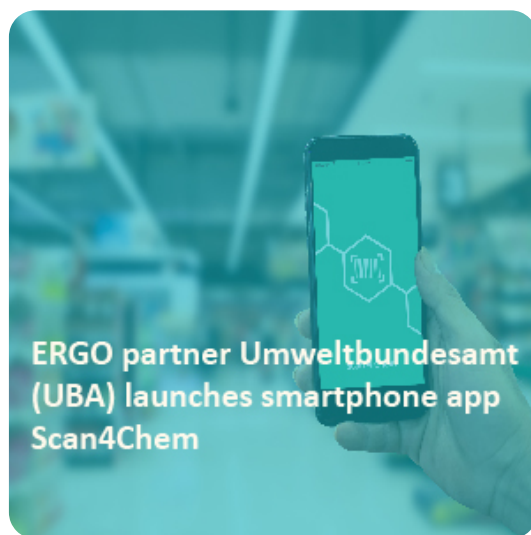
SDU

University of
Southern Denmark

The EU is launching its greatest effort ever to better protect consumers and the environment from endocrine disruptors

ERGO Launches Introductory Video





ERGO partner Umweltbundesamt (UBA) launches smartphone app Scan4Chem



ERGO researcher profile



Name: Lisa Baumann

Based in: Heidelberg, Germany

Research areas: Lisa has over 10 years' experience in endocrine disruption research in fish. She has specialised in aquatic toxicology with focus on endocrine effects and immunotoxicity in fish, mainly zebrafish (*Danio rerio*). She has special expertise in fish (histo)pathology and developmental toxicity.

Member of ERGO partner: University of Heidelberg (UHEI)

Academic background: In her PhD and Diploma in Biology at UHEI,

Lisa started working on endocrine disruption in zebrafish in the context of OECD guidelines. For her postdoctoral research, she developed projects on thyroid disruption in developing zebrafish with focus on consequences on morphology, physiology and behaviour at University of Bern, Switzerland.

Current research and role within ERGO: Lisa is an internationally recognised expert on endocrine disruption in fish. She is currently employed as a research group leader and zebrafish facility manager in the Aquatic Ecology and Toxicology Group of Prof. Dr Thomas Braunbeck at the Centre for Organismal Studies at UHEI.

Lisa is the leading UHEI scientist for the experimental work in ERGO's Work Package (WP)5. As co-principal investigator for UHEI, she is responsible for the performance and supervision of laboratory work, data analyses and reporting to other WPs. Her major tasks are the organisation of the experimental work, coordination with other ERGO collaborators involved in the *in vivo* experimental work and the supervision of UHEI BSc, MSc and PhD candidates involved in ERGO.



EDCs in the news

To read the latest news on EDCs compiled by ERGO, [click here](#) and select 'EDCs in the News' from the filter options.



Understanding Endocrine Disruptors: Endocrine Society Produces Video Resources

Exposure fears: Banned toxic chemicals found in UK mothers' breast milk

Phthalates in Plastic Medical Devices Could Interfere with Patients' Hearts

European Commission Bans Harmful Class of Flame Retardants in TVs - New Measures Make Appliances More Sustainable



EURION news

To read the latest news from the EURION Cluster, [click here](#) and select 'EURION News' from the filter options.

EURION Cluster launches in Brussels

EURION Cluster establishes Working Groups



Dates for your diary



Emerging Contaminants in the Environment Conference

21 - 22 April 2020 | Champain, IL, USA

[Learn more](#)



SETAC Europe 30th Annual Meeting

3 - 7 May 2020 | Dublin, Ireland

[Learn more](#)

Full list of events



EDCs under the spotlight

Bisphenols (including BPA)



What is it?

A group of industrial chemicals used in the manufacturing of polycarbonate plastics, some epoxy resins and thermal paper.

Where is it found?

Polycarbonate plastics are used for plastic dinnerware, bottles, sports equipment, toys, food packaging and medical devices. Epoxy resins are used to coat the inside of water pipes and food/beverage cans to increase their shelf-life and preventing the metallic taste transferring to

the food or beverage. Bisphenols are also used to develop dye in thermal paper used for sales receipts, public transport and parking tickets. Other products that may contain bisphenols include floorings, paints and sealants.

How can we be exposed to it?

By ingestion, bisphenols can migrate in small amounts into food and beverages stored in materials containing them i.e. swallowing food, water or beverages that have been in containers made with bisphenols or by having dental sealants that contain bisphenols. Small children may be exposed by hand-to-mouth and direct mouth contact with toy materials containing bisphenols. Furthermore, workers who manufacture products that contain bisphenols are also exposed.

What can exposure cause?

- Changes in the development and behaviour of infants and children;
- Changes in a developing fetus;
- Interference with the body's natural hormones;
- Changes in reproductive function

How to reduce your risk

We can't avoid every chemical that we come into contact with, but we can make more informed choices about what we eat, drink and use in our home:

- Check for bisphenol/BPA-free labels on plastic products, avoid using plastic products marked with recycle codes #3 or #7, as they contain BPA e.g. toys, food containers, personal care bottles, shower curtains, raincoats, flooring and outdoor furniture;
- Avoid heating plastics in the microwave, which can cause BPA and other bisphenols to leach into your food;
- Avoid food from cans that might be lined with BPA and other bisphenols;
- Replace plastic storage containers, bottles and travel cups with reusable glass, porcelain or stainless-steel ones;
- Avoid processed foods, wash and eat fresh foods as much as possible.

For more information please visit:

[The Endocrine Society.](#)

[National Institute of Environmental Health Sciences](#)



How to make your own EDC free...

Scented all-purpose cleaner

Ingredients

- 1 part white vinegar
- 1 part water



- Lemon rind
- Rosemary sprigs

Method

1. Combine all ingredients together, pour into a glass bottle, shake and allow to infuse for a week before using.
2. This cleaner can be used throughout your home. The lemon's acid adds extra cleaning properties for those stubborn stains!



Follow ERGO



Contact Us:

Project Coordinator:
Henrik Holbech
Syddansk Universitet
hol@biology.sdu.dk

Project Administration:
Helle Lyngborg
Syddansk Universitet
hely@sdu.dk

Communication & Press:
Avril Hanbidge
AquaTT
avril@aquatt.ie

Designed and developed by



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 825753 (ERGO). This output reflects only the author's view and the European Union cannot be held responsible for any use that may be made of the information contained therein

Want to change how you receive these emails?
You can [update your preferences](#) or [unsubscribe from this list](#).

