

## ENVIRONAGE | birth study population

### Intro

ENVIRONAGE (ENVIRONMENTal influence ON early AGEing) investigates the underlying mechanisms of age-related disorders. By studying newborns and children, we aim to find predictive markers of ageing, which are linked to environmental exposures.

### Why was the cohort included?

**Environmental factors, such as air pollution and nutrition, can affect fetal health during the prenatal period.**

The importance of prenatal health has been hypothesized by David Barker and is now known as the 'developmental origins of health and disease' (DOHaD). It is commonly known that age-related disorders, such as cardiovascular diseases, dementia and diabetes arise early in life.

**This longitudinal study aims to investigate the influence of environmental exposures during pregnancy and early life on the health of children.**

### Who is in the cohort?

**2500+**

**mother-child pairs**



**Birth**

**800+**

**mother-child pairs**



**Follow-up 1: Age 4 to 6 years**

**300+**

**mother-child pairs**



**Follow-up 2: Age 9 to 11 years**

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### What data do we collect?

#### At birth

- Biological samples such as placenta, blood, urine, ...
- Questionnaires
- Neonatal Behavioral Assessment Scale (NBAS)
- Neonatal blood pressure

#### Follow-up 1 & Follow-up 2

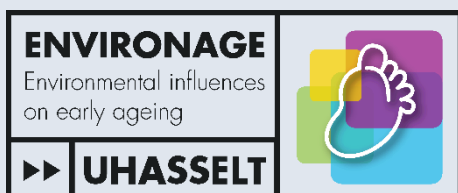
- Length, weight, and waist circumference
- Questionnaires
- Cardiovascular measurements
- Cognitive performance
- Bone density
- Biological samples

### Environmental exposures

- Particulate matter with a diameter of **2.5** µm or less
- Particulate matter with a diameter of **10** µm or less
- Nitrogen dioxide
- Black carbon
- Ozon
- Ambient temperature

### ENVIRONAGE in EXIMIOUS

- The EXIMIOUS project aims to improve people's lives by gaining insight in exposure-induced immune effects.
- ENVIRONAGE will provide data both on exposome and immunome in the prenatal period and at a young age to better understand the factors that lead to exposure-related immune effects at different stages of people's lives,



### LEARN MORE



[info@eximious-h2020.eu](mailto:info@eximious-h2020.eu)

[www.eximious-h2020.eu](http://www.eximious-h2020.eu)



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