Join us as a PhD student!

You are thinking of doing your PhD in the Life Sciences and are interested in research topics like healthy ageing and age-associated diseases? The Cohorts for Healthy Ageing (CoAGE) is offering **talented scientists** the chance to work on **cutting edge research projects in the field of ageing research and epidemiological studies.**
You will be part of the CoAGE graduate programme. This programme focuses on investigating the causes of age-related diseases, such as cardiovascular diseases, diabetes and cancer, and why they often occur together. CoAGE brings together experts who are studying healthy ageing and age-related diseases to address current issues in an interdisciplinary manner. Each of these experts leads one of the major German ageing studies and will supervise a CoAGE PhD student where the study is located.

PhD position on 'The role of the urban exposome on cardiometabolic multimorbidity and mortality' in Munich, Germany

A growing number of studies have shown an association between air pollution and all-cause mortality and cardiovascular mortality, but there is a gap in research on other environmental exposures and their outcomes. It is also un-clear whether people with cardiometabolic disease are more vulnerable to the adverse effects of environmental factors. Therefore, we aim to investigate the association between several long-term environmental exposures and mortality and cardiometabolic multimorbidity.
The NAKO has recruited more than 200,000 individuals between 2014 and 2019 in both sexes aged between 19 to 74 years. NAKO has assembled morbidity and mortality follow-up data until 2023. We will use geocoded data of multiple long-term environmental exposures of the urban exposome, e.g. air pollution, traffic noise, ambient air temperature, greenness and built environment indicators, which were assessed in the EU-funded EXPANSE project (Exposome Powered tools for healthy living in urbAN Settings). These novel urban risk and protection factors will be linked to NAKO participants' residencies by the Environmental data unit. The outcomes of interest are all-cause and cause-specific mortality and prevalent and incident cardiometabolic disease.
As part of the PhD work, we will apply single-exposure models to quantify effects of each exposure on the outcomes of interest. The secondary aim of this project is to assess the effect modification of pre-existing cardiometabolic disease on the environmental exposure – mortality association and whether environmental exposures promote multi-morbidity. This NAKO-based study will contribute substantial evidence on the association of environmental exposures with mortality and cardiometabolic multimorbidity due to its high exposure contrasts and longitudinal health data. Moreover, it allows the assessment of the potential modifying role of prevalent cardiometabolic disease on these associations. We will extend the study with a similar set of analyses to other German Cohorts like the Gutenberg Health study.

Supervision: Annette Peters (Helmholtz Centre Munich); The NAKO Study

Requirements

Are you an ambitious scientist looking to push the boundaries of research while interacting with colleagues from multiple disciplines and cultures? Would you like to employ **bioinformatics and cutting-edge computational biology** to advance translational research? Then joining CoAGE is your opportunity to give your scientific career a flying start!

Further requirements:

- Master or equivalent
- Interactive personality & good command of English
- 2 letters of reference
- background in bioinformatics, biostatistics or data science is a plus

What else you need to know

- **Starting Date**: 01.10.2024
- **Duration**: 3 years
- **Deadline**: 31.08.2024

Have we sparked your interest?

To apply, please send a **single PDF file** containing your cover letter, CV, certificates and at least two professional references to coage-recruiting@imb.de. In your email, **please specify the project for which you are applying**. IMB is an equal opportunity employer.

Declaration of Consent and Data Protection

By sending us your application, you are consenting to us saving your personal data in order to carry out the selection process. You can find more information on data protection and retention periods at https://www.imb.de/jobs/data-protection.