









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 'Sarcopenia, Sarcopenic Obesity and Healthy Ageing' in Munich, Germany

Sarcopenia, a progressive muscle disorder, often occurs in ageing or obese individuals due to shared risk factors, e.g. sedentary lifestyle, unhealthy diet, ageing and acute and chronic diseases. Sarcopenic obesity, a combination of sarcopenia and excess adipose tissue, appears to be more severe than obesity alone, with the underlying mechanisms remaining unknown.

The mechanisms likely to be involved include low-grade inflammation, lipotoxicity, mitochondrial dysfunction, oxidative stress, myosteatosis and insulin resistance. Recent advances in high-throughput proteomics have allowed us to further elucidate these molecular mechanisms. Novel proteomics measurements have recently been completed in the Cooperative Health Research in the Region of Augsburg (KORA) Age study at baseline.

The aim of the proposed CoAGE PhD project is to assess the association of these novel protein biomarkers with sarcopenia and sarcopenic obesity in order to further elucidate the underlying metabolic pathways of these disease outcomes. Validation of the obtained results in other population-based cohorts with available proteomics data is anticipated. Furthermore, Mendelian randomization analyses are planned to further elucidate the potential causal role of the identified protein candidates in disease development. We will extend the study with a similar set of analyses to other German Cohorts like the Gutenberg Health study.

Supervision: Barbara Thorand (Helmholtz Centre Munich); The KORA 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 yearsDeadline: 31.08.2024

Have we sparked your interest?

To apply, please send a <u>single</u> PDF file containing your cover letter, CV, certificates and at least two professional references to <u>coage-recruiting@imb.de</u>. 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.