

The University Children's Hospital Basel (UKBB) at the University of Basel performs research within a range of disciplines relevant to public health and patient care (www.ukbb.ch). Groups cut across divisions, facilitating an interdisciplinary approach to research in the fields of clinical research, lung physiology and epidemiology, as well as environmental health.

The Paediatric Lung Development Research Group (Professor of Pediatrics, Prof. U. Frey) and Environmental Research Group (Professor of Environmental Medicine, Prof. P. Sinues) conduct population-based and clinical studies in child health, focusing on lung development and respiratory disorders.

We are looking for a highly motivated

PhD student in lung development (100%)

What it's about

Environmental tobacco smoke exposure is a relevant public health problem which has deleterious effects on early and late lung development. Almost 20 years ago, the Basel-Bern infant lung development (BILD) cohort, a Swiss birth cohort (www.bild-cohort.ch) was founded. In nearly 1000 infants, BILD researchers have collected detailed information on lung development and environmental exposures (tobacco smoke, air pollution). Our research group collaborates with the Department of Environmental Paediatric Medicine at UKBB, which uses a novel mass spectrometry method (SESI-HRMS) to perform molecular profiling of exhaled breath to detect environmental exposures. The PhD position will be supervised by both the Professorships of Paediatrics and Paediatric Environmental Medicine.

Your tasks

As a PhD Student, you will be involved in both study groups; analysing data based on your specific interests and expertise. You will 1) address methodological questions relevant for exhaled breath analyses and 2) assess the impact of environmental tobacco smoke exposure on oxidative stress using the SESI-HRMS method. You will work within a well-established research platform and collaborate closely with paediatricians, epidemiologists, statisticians, basic scientists and other PhD students. You will gain a broad understanding of lung function measurements, epidemiological methods, and have the opportunity to present your results at international meetings and to publish them in peer-reviewed journals.

The position is an ideal stepping stone and preparation for a research career in scientific research settings (University), clinical settings (paediatric teaching hospitals), or public health institutions, and counts as medical training for paediatric specialisation. Teaching is organised via the University of Basel (www.unibas.ch).

Your profile

Applicants should have a university degree (MSc or equivalent) in medicine or applied science (environmental sciences, biology, statistics, public health, etc.) and a strong interest in child health and lung development. They should be keen to learn statistical methods and software. The position requires fluency in German and English.

Further information and contact details

The position is available from November 2018 (later dates can be negotiated, but latest start would be beginning of 2019). PhD salary rates of the Swiss National Science Foundation apply. If you are looking for an exciting PhD position in a highly motivated team, please send your CV with motivation letter and the names of two potential references to Karine Hugentobler (Karine.LandgrenHugentobler@ukbb.ch). Please send your application as soon as possible.