

Heidelberg University Hospital as coordinator of the EU-funded action Establishment and Exploitation of a European-Latin American Research Consortium towards Eradication of Preventable Gallbladder Cancer (EULAT Eradicate GBC) invites applications for

Three PhD positions in Statistics for Molecular Medicine

Desired qualifications: We are looking for highly motivated, excellently qualified students holding a **university master's degree (MSc) including a written master's thesis** with a background in (bio)statistics, mathematics, computer science, epidemiology, public health or (molecular) biology, ideally with practical experience in the analysis of high-dimensional omics data using SAS and/or R. The candidates should have excellent analytical and communication skills, be fluent in English and be interested in working in an interdisciplinary team at the forefront of health research and biostatistics.

A language test for English is requested for all applicants except those coming from Germany, Austria and Switzerland, as well as native English speakers from Australia, Canada, Ireland, UK and USA. The following tests are accepted: IELTS certificate band 6.5+ or TOEFL certificate with score of 95+ (internet-based), 230+ (computer-based) or 570+ (paper-based).

Description of duties: Gallbladder cancer (GBC) is a very aggressive disease. Early symptoms are unspecific and most patients are diagnosed too late. Precise estimates of the personal risk of developing GBC and biomarkers for early GBC detection are urgently needed. The EU-funded project **EULAT Eradicate GBC** will generate the information needed to individualize GBC prevention, early detection and therapy. A unique European-Latin American GBC biorepository and a data platform will be established. Novel epidemiological and molecular risk factors will be identified and characterized. The findings of the project will be integrated into national health policies. The final goal is to establish and refine current GBC prevention programs.

As a PhD student, you are expected to significantly contribute to the identification of novel biomarkers for the personalized prevention of GBC by (1) contributing to the recruitment of patients within the project and (2) developing and applying novel statistical methods to analyze data from a unique European–Latin American biorepository integrated into a tailored IT platform. The project is led by Prof. Justo Lorenzo Bermejo at Heidelberg University Hospital in collaboration with research partners from Argentina, Bolivia, Chile, France, Germany, Norway, Peru, Sweden, United Kingdom and US. Brief descriptions of the EULAT Eradicate GBC project and the Statistical Genetics Research Group at the Institute of Medical Biometry and Informatics, University Hospital Heidelberg are available at cordis.europa.eu/project/rcn/224788/factsheet/en and biometrie.uni-heidelberg.de/StatisticalGenetics.

Successful candidates will work at the interface of molecular medicine and biostatistics in one of the best universities in Europe. She/he will gain substantial experience in both the practical analysis of omics data and the development of new biostatistical techniques. The training-through-research PhD program will include (1) a twelve-month stay in Latin America contributing to patient recruitment, (2) a short research stay at a top institution from a consortium partner, and (3) the finalization of the PhD project in Germany, obtaining a PhD degree from the Heidelberg Medical Faculty.



We offer

- The opportunity to obtain a PhD in a highly interesting area of research
- The possibility to conduct cutting-edge research at the interface of statistics and molecular medicine
- Extensive group experience in the analysis of multi-omics data and the development of new statistical techniques
- Comprehensive professional and personal training activities through a trainingthrough-research rotation program

Applications including a cover letter, CV and two reference letters should be sent as one single PDF to Prof. Dr. Justo Lorenzo Bermejo via <u>EULAT Eradicate GBC@imbi.uniheidelberg.de</u>. Selected candidates will be invited to a personal interview.