The Institute of Social and Preventive Medicine (ISPM) at University of Bern performs research in a range of disciplines relevant to public health (www.ispm.ch). Groups cut across divisions, facilitating an interdisciplinary approach to research in the fields of clinical epidemiology, social and behavioral health, biostatistics, and international and environmental health.

Tuberculosis research within the HIV, Hepatitis and Tuberculosis Research groups is concerned with clinical and public health epidemiology of tuberculosis and co-infections with HIV in sub-Saharan Africa. In lower income countries where HIV prevalence is high, tuberculosis accounts for approximately 40% of adult deaths, and drug resistance to first-line drugs is growing and is an emerging public health problem.

We are looking for a highly motivated PhD student

**PhD student in Epidemiology**

**Period:** Fixed-term contract for 3 years, starting March 2022 (negotiable)

**Place:** University of Bern, Switzerland

**Apply no later than:** January 10, 2022

The [HIV, Hepatitis and TB Research Group](https://www.iedea-sa.org/) is looking for a highly motivated PhD student who will conduct epidemiological research on tuberculosis of HIV-positive and HIV-negative populations in Southern Africa within a large international consortium (https://www.iedea-sa.org/). A Tuberculosis Sentinel Research Network will be established with two participating cohorts in Southern African region. The PhD project will have a particular focus on drug resistant tuberculosis. The candidate will contribute to the establishment of a novel approach to diagnose drug resistances on site using targeted Whole Genome Sequencing. The PhD project is part of a large NIH-funded research project ([https://www.iedea-sa.org/](https://www.iedea-sa.org/)). The successful candidate will conduct the project in collaboration with other members of the HIV, Hepatitis and TB Research Group in Bern and members of the consortium in Southern Africa.

**Responsibilities of the successful candidate include:**

- Collaborate with an interdisciplinary team of epidemiologists, bioinformaticians, clinical microbiologists and infectious disease specialists.
- Support in establishing and monitoring new tuberculosis cohorts in Southern African countries (South Africa and Zambia).
- Implementation of novel targeted sequencing assays together with relevant experts (clinical microbiologists, molecular biologists, bioinformaticians) and monitor the study progress.
- Clean and analyse collected data from the field.
- Actively participate in an international research consortium and liaise with project partners in Southern African countries.
- Contribute to the design and conduct of other epidemiological research projects.
- Present own work at international conferences and publish articles in peer-reviewed journals.

**Requirements:**

- Strong interest in applied research in the areas of infectious disease epidemiology, genomics and biostatistics. Experience in research is an asset.
- Master’s degree in a relevant discipline (public health, epidemiology, medicine, biology), preferably with knowledge and experience in microbiology, molecular biology and/or bioinformatics.
- Strong organisational skills.
- Readiness for international travelling and field work in Southern African countries to support the local partners.
- Experience in statistical analysis, additional experience in bioinformatics is an asset (e.g., STATA or R).
- The ability to work efficiently, independently as well as in intercultural teams.
- Excellent English language proficiency

**We offer:**

- A multicultural, diversified and dynamic academic environment.
- Excellent networking opportunities.
- The possibility to attend courses – a wide range of topics offered.
- Enrolment in a graduate school of the University of Bern (www.gcb.unibe.ch or www.ghs.unibe.ch).
- Salary according to the pay scales of the Swiss National Science Foundation for PhD students.

For further information on the position, please contact Prof. Dr. med. Lukas Fenner (lukas.fenner@ispm.unibe.ch). Please send your application to hr@ispm.unibe.ch. Applications must be in English and include a curriculum vitae, publication list, reference letters and diploma, and a cover letter with a personal statement describing your suitability and motivation.