

The Institute of Social and Preventive Medicine (ISPM) employs some 150 staff, provides under-graduate and post-graduate education, and carries out research in a range of disciplines relevant to public health (<a href="https://www.ispm.unibe.ch">www.ispm.unibe.ch</a>). The ISPM offers a lively, interdisciplinary environment with excellent computing and library facilities.

We are looking for a

## Post-doctoral scientist in mathematical modelling of infectious disease dynamics (80-100%)

to join the Sexual and Reproductive Health Research Group.

We are looking for a specialist in mathematical modelling of infectious disease dynamics to investigate the emergence and spread of antimicrobial resistance in sexually transmitted infections, and the potential impact of new diagnostic and treatment strategies for gonorrhoea in a South African population. The project will inform the work of the Foundation for Innovative New Diagnostics (www.finddx.org/), a global non-profit organization driving innovation in the development and delivery of diagnostics to combat major diseases affecting the world's poorest populations. The Sexual and Reproductive Health Group at ISPM Bern investigates sexually transmitted infections and other aspects of reproductive health. The group is involved in studies about the aetiology, epidemiology, prevention and control, diagnosis, and social and cultural aspects of these topics in Switzerland, Europe and internationally.

## **Duties and responsibilities:**

- Develop, parameterise, and analyse transmission dynamic mathematical models of sexually transmitted infections and antimicrobial resistance;
- Collaborate with modellers of infectious disease dynamics, epidemiologists and statisticians;
- Contribute to publications in peer-reviewed journals, scientific reports and conference presentations.

## Qualifications and skills:

- PhD in biology, physics, mathematics, statistics, epidemiology or another relevant discipline
- A high level of skill and independence in working with transmission dynamic models or other population dynamic models
- Strong programming skills, preferably using R
- Ability to work efficiently on projects to agreed timelines
- Ability to work independently and to interact with interdisciplinary teams
- Good knowledge of English (written and spoken)

The post starts immediately and is for 12 months, with a possibility for extension.

The ISPM at the University of Bern offers an international and interdisciplinary environment. It encourages independence and flexible working models.

For further information on the position advertised, please contact Prof. Nicola Low, Tel. +41 31 631 30 92, nicola.low@ispm.unibe.ch.

Please send your application including a Curriculum Vitae and letter of motivation to Natalie Studer, <a href="https://hreaispm.unibe.ch">hr@ispm.unibe.ch</a>.

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