

Jobbnorge ID: 262384 Deadline: 6/10/2024 Website: http://www.uio.no/

Scope: Fulltime Duration: Project

Postdoctoral Research Fellow in Epidemiological modelling (Plague) within Europe, 1300 to 1900 CE

About the position

Postdoctoral Research Fellow in Epidemiological modelling focusing on the epidemiological modelling how the plague bacterium (Yersinia pestis) might have been transported from outside Europe to Europe during the period 1300 and 1900 CE.

Position as Postdoctoral Research Fellow available at CEES, Department of Biosciences, University of Oslo

Starting date as soon as possible and preferably no later than 1 September, 2024.

The appointment is a fulltime position and is for a period of three years (10% of which is devoted to required duties).

No one can be appointed for more than one Postdoctoral Research Fellowship at the University of Oslo.

Knowledge development in a changing world - Science and technology towards 2030.

The Faculty of Mathematics and Natural Sciences

Video: https://www.youtube.com/watch?v=t4wvWQEhDEs

Job description / Project description / Development plan:

Are you passionate about advancing our understanding of the spatio-temporal dynamics of plague (Yersinia pestis), the bacterium which caused the Black Death followed by several waves of plague outbreak among people in Europe - a disease which during the Black death killed about half of the European population? We invite applications for a postdoctoral research position to join a pioneering project dedicated to the study of plague through history.

About the Project and the research team: The position is associated with the interdisciplinary research project "Reconstructing the environmental, biological, and societal drivers of plague outbreaks in Eurasia between 1300 and 1900 CE (Synergy-Plague)".

The project is funded through the European Research Council's Synergy Grant scheme and has four Pls. In addition to corresponding Pl Professor Nils Chr. Stenseth (who will be the main supervisor for the appointed postdoctoral candidate) at the University of Oslo, there are three co-Pls; Florent Sebbane at, INSERM, Lille, France, Philip Slavin, University of Stirling, Stirling, UK and Ulf Büntgen, University of Cambridge, Downing Place, Cambridge, UK. The overall aim of the project is to reconstruct the environmental, biological and societal drivers behind plague outbreaks in Eurasia between 1300 and 1900 AD. A short description of the project can be found here:

https://www.mn.uio.no/ibv/english/research/projects/synergy-plague/

The appointed postdoctoral researcher is expected to visit and work together with the other three PIs and their team members - as well as a large number of international partners. In addition to this position, there are three other linked postdoctoral positions at UiO: two working on epidemiological modelling at different spatial scales and one carrying out archival research on plague occurrences in the Ottoman Empire and adjacent polities through the Department of Culture Studies and Oriental Languages.

Your Contribution: The postdoctoral fellow's research will contribute to the overall aim within the broader framework of the Synergy-Plague project. Your role will be critical in advancing the project's goal of leveraging, together with other team members (not the least historians and climatologists), the spatio-temporal dynamics of the plague bacterium across an extensive geographic region (e.g., such as from Asia or North Africa to Europe).

The main purpose of a postdoctoral fellowship is to provide the candidates with enhanced skills to pursue a scientific top position within or beyond academia. To promote a strategic career path, all postdoctoral research fellows are required to submit a <u>professional development plan</u> no later than one month after commencement of the postdoctoral period.

It is expected that the successful candidate will be able to complete the project in the course of the period of employment.

Qualification requirements:

The Faculty of Mathematics and Natural Sciences has a strategic ambition to be among Europe's leading communities for research, education and innovation. Candidates for these fellowships will be selected in accordance with this, and expected to be in the upper segment of their class

with respect to academic credentials.

Essential qualifications:

- Applicants must hold a degree equivalent to a Norwegian doctoral degree in Epidemiology, Biostatistics, Computational Biology, or a
 related field, with a strong quantitative background. Doctoral dissertation must be submitted for evaluation by the closing date. Only
 applicants with an approved doctoral thesis and public defence are eligible for appointment.
- Demonstrated experience in epidemiological modelling and infectious disease dynamics
- Experience working in interdisciplinary teams
- Proven skills in statistical analysis and mathematical modelling tools
- · Excellent knowledge of programming languages such as R, Python, etc.
- Familiarity with Al algorithms and machine learning
- · Excellent written and oral communication skills in English

Desired qualifications:

- · Experience with research on epidemiological modelling, with an emphasis on zoonotic diseases
- · Experience integrating socio-economic factors and spill-over dynamics in disease models
- · Ability to provide insights into pathogen epidemiology and model parameters
- · Familiarity with Artificial Intelligence and its application in disease modelling
- · Experience with teamwork and interdisciplinary research

Personal skills:

We are looking for a highly motivated and enthusiastic individual to join our team. The ideal candidate will have strong interpersonal skills and the ability to work effectively with colleagues from diverse cultural and disciplinary backgrounds. Additionally, we are seeking someone with the ambition to contribute to leading international journals and the drive to gain valuable insights in their field of study. If you are passionate about research and are eager to collaborate with a dynamic team, we encourage you to apply.

We offer:

- Salary NOK 575 400 657 300 per annum depending on qualifications in position as Postdoctoral Research Fellowship (position code 1352)
- · Attractive welfare benefits and a generous pension agreement
- · Professionally stimulating working environment
- · Vibrant international academic environment
- Postdoctoral development programmes
- · Oslo's family-friendly surroundings with their rich opportunities for culture and outdoor activities

The application must include:

- Cover letter (statement of motivation, summarizing scientific work, research interest, as well as what the applicant would like to do if
 offered the position)
- CV (summarizing education, positions, pedagogical experience, administrative experience and other qualifying activity)
- · Copies of educational certificates, academic transcript of records
- Letters of recommendation
- A complete list of publications and up to 5 academic works that the applicant wishes to be considered by the evaluation committee
- · Names and contact details of 2-3 references (name, relation to candidate, e-mail and telephone number)

The application with attachments must be delivered in our electronic recruiting system, please follow the link "apply for this job". Foreign applicants are advised to attach an explanation of their University's grading system. Please note that **all** documents should be in English (or a Scandinavian language).

In assessing the applications, special emphasis will be placed on the documented, academic qualifications, as well as the candidates motivation and personal suitability. Interviews with the best qualified candidates will be arranged.

Formal regulations:

Please see the guidelines and regulations for appointments to Postdoctoral fellowships at the University of Oslo.

If an applicant has applied for and been granted funding for a fulltime research stay abroad while being employed as a Postdoctoral Research Fellow, the employment will be prolonged with the equivalent time as the research stay, but for no longer than of twelve months (thus extending the employment to a maximum of four years)

According to the Norwegian Freedom and Information Act (Offentleglova) information about the applicant may be included in the public applicant list, also in cases where the applicant has requested non-disclosure.

The University of Oslo has an agreement for all employees, aiming to secure rights to research results a.o.

Inclusion and diversity are a strength. The University of Oslo has a personnel policy objective of achieving a balanced gender composition. Furthermore, we want employees with diverse professional expertise, life experience and perspectives.

If there are qualified applicants with disabilities, employment gaps or immigrant background, we will invite at least one applicant from each of these categories to an interview.

Contact persons:

For further information please contact: Prof. Nils Chr. Stenseth, phone: +47 228 54584, e-mail: n.c.stenseth@mn.uio.no

For questions regarding Jobbnorge, please contact HR Adviser Nina Holtan, e-mail: nina.holtan@mn.uio.no

About the University of Oslo

The University of Oslo is Norway's oldest and highest rated institution of research and education with 28 000 students and 7000 employees. Its broad range of academic disciplines and internationally esteemed research communities make UiO an important contributor to society.

Department of Biosciences (IBV) is one of nine departments at the Faculty of Mathematics and Natural Sciences. Research in the department is organised in five sections covering topics within biochemistry, molecular biology, physiology, cell biology, genetics, aquatic biology, toxicology, ecology, and evolutionary biology. The Department also operates Finse research station, the Biological research station in Drøbak and UiO's research vessel. Education across these topics is offered for around 300 bachelor, 170 master, and 75 PhD students. With 48 permanent professors/associate professors, post-docs, researchers, technical, and administrative personnel, the Department has a total staff of 260 from more than 30 different countries. The Department aims to maintain high international standards within both research and teaching. The new bachelor program in bioscience is the first of its kind to include programming and computational modelling as core elements.

Additional information

Place of service:

Problemveien 7 0313 Oslo (Oslo Municipality)