



## Software engineer (f/m/d) (Bioinformatics)

The Max Planck Unit for the Science of Pathogens (MPUSP) headed by its director Prof. Emmanuelle Charpentier is seeking a software engineer with excellent skills and knowledge in the field of Software development and familiarity with the analysis of large data sets. The successful candidate will work in the bioinformatics research platform (focusing on Next-Generation Sequencing and proteomics datasets) headed by Dr. Knut Finstermeier.

MPUSP is an international research institute of the Max Planck Society located in Berlin. The institute was founded in 2018 with the mission to strengthen fundamental research on pathogens causing diseases in humans. MPUSP aims to achieve a better understanding of the complexities of pathogens and their interactions with their natural environment by developing innovative approaches (<https://www.emmanuelle-charpentier-lab.org>). MPUSP offers an interactive and dynamic environment where our team of international and creative scientists are provided ongoing support to take on original research projects and answer free-minded basic biological questions. MPUSP operates in a unique mode of cooperation between the administration, management and research. Our scientists benefit from a state-of-the-art infrastructure, integrative and custom-designed research platforms and a wide range of scientific activities. MPUSP emphasizes personal development: junior and senior scientists at MPUSP are engaged in research, but also take active part in scientific education, mentoring and teaching, and in the management and development of the institute.

The institute is seeking a highly motivated and talented scientist to join an international and collaborative team in an outstanding and competitive scientific environment, and to contribute with her/his expertise to the development of the institute's research topics. Further, we offer to train the successful candidate in bioinformatics, the analysis of DNA/RNA sequencing data and the interpretation of analysis results in the context of molecular biology and microbiology. The successful candidate is expected to pursue research at the highest standards and contribute actively to collaborative and complementary research across the institute.

### Minimum qualifications:

- B.Sc. or M.Sc. in Computer Science, Informatics, Bioinformatics, Mathematics, or Physics
- Proficient in Python, Go, C++ or similar programming languages
- First hand professional experience in large programming projects
- Proficient in English language (presentation and writing skills)
- Friendly disposition, confident and responsible work ethics
- Working independently and as part of an international team
- Self-motivated and enthusiastic to work in a competitive, dynamic, stimulating and interacting international scientific environment focusing on basic biological research

### Preferred qualifications:

- Experience working in Bioinformatics and genomics data
- Experience delivering clear, maintainable, and well-tested software
- Experience working with databases (front-end and back-end, Restful APIs, NoSQL)
- Experience working in a linux environment, including basic shell scripting
- Familiarity with data processing pipelines (eg. Snakemake, Nextflow)
- Experience working abroad
- Experience with Tensorflow
- Documented code in a Github portfolio (or similar)

### Main tasks:

- Design and development of analytical software in close cooperation with bioinformaticians
- Further development of databases (NoSQL, front end and back end)
- Review code from peers and provide constructive feedback
- Support in the analysis of large bioinformatics data sets generated by the biologists of the institute

# Max Planck Unit for the Science of Pathogens



- Teaching basics of bioinformatics to the biologists of the institute

The position is initially for two years with the possibility of an extension. The payment level is based on the German state public service salary scale (TVöD-Bund) according to the training, qualifications and professional experience. The benefits correspond to the regulations of the public service. The position is available at the earliest possible date. The Max Planck Society is committed to employing more handicapped individuals and especially encourages them to apply. Furthermore, the Max Planck Society seeks to increase the number of women in those areas where they are underrepresented and therefore explicitly encourages women to apply. The Max Planck Society strives for gender and diversity equality. We welcome applications from all backgrounds. For more information, please contact us at: [jobs-charpentier@mpiib-berlin.mpg.de](mailto:jobs-charpentier@mpiib-berlin.mpg.de).

Applications will be accepted exclusively via our online application portal. If you are interested, please follow the link <https://recruitingapp-5461.de.umantis.com/Vacancies/295/Application/CheckLogin/2?lang=eng> and upload your full application in English by **October 15<sup>th</sup>, 2019**:

**Max Planck Unit for the Science of Pathogens**  
Department of Human Resources