The Helmholtz Institute for Pharmaceutical Research Saarland (HIPS) is searching for new active substances against infectious diseases. It was founded in August 2009 in Saarbrücken as a site of the Helmholtz Centre for Infection Research (HZI) together with Saarland University (UdS). A new research building was established on the campus of Saarland University in 2015, which currently employs more than 190 researchers of international origin. For the coming years, a significant scientific and spatial expansion of HIPS is planned in close coordination with Saarland University.

Saarland University is a campus university with an international orientation and a distinguished research profile. As part of the strengthening of research excellence, the top interdisciplinary field at the interface of bioinformatics, computer science, drug development, pharmacy and medicine should be further strengthened. The Department of Computer Science at Saarland University combines outstanding education with excellence in research and application and regularly occupies top positions in relevant rankings. The Center for Bioinformatics Saar (ZBI), to which the new professorship will be attached, currently encompasses 6 groups whose research focus is the development of new bioinformatics methods for solving emerging issues in medicine and pharmacy.

In order to further strengthen the cooperation between UdS and HIPS, the Faculty of Mathematics and Computer Science at the campus Saarbrücken is looking for a

**Junior professor (W1 with Tenure Track on W2) (m/f/d) for „Human Microbe Systems Bioinformatics”**

(Reference number W1903)

initially for a fixed period of 3 years. The actual duration of the appointment may be extended up to a maximum of six years in total, if this is supported by the results of the teaching appraisal and the external assessment of the appointee’s research work. If performance continues to meet the required standards and the tenure evaluation procedure should be positive, the junior professorship (at the German academic salary scale W1) will be promoted to a permanent professorship (lifetime tenure) at the German academic salary scale W2. Due to the joint faculty appointment, there is a reduced teaching load of 2 semester hours.

The professorship will focus on the analysis of original molecular (patient) data of humans (hosts) and microorganisms from different microbiota as well as the interaction between microorganisms and hosts. Methodologically, algorithms based on artificial intelligence and machine learning should be developed or adapted and applied to suitable data. On a broader perspective, data from high-throughput sequencing (Next Generation Sequencing, NGS) as well as mass spectroscopy (MS) methods - also on the single cell level - should be considered. As putative omics entities, transcriptomics, epigenomics, metabolomics, proteomics and lipidomics data are available within collaborative projects. In the context of multi-scale and multi-omics studies, bioinformatics models should be designed to reflect both local and temporal structures and molecular interactions. A possible future focus of the professorship would be the analysis of communication between host cells and microorganisms using computational methods. The physiological flow of material and information is so far only incompletely understood, and methods of computer science will help to better understand the exchange.

Candidates must be university graduates with experience in and an aptitude for academic teaching who have shown a particular capacity for independent academic research, generally through the outstanding quality of their PhD or doctorate. For additional information on employment requirements, please refer to Sec. 1.2 of the Framework Regulations Governing the Approval, Recruitment and Evaluation Procedures for Junior Professorships at Saarland University (Rahmenordnung zur Freigabe, Besetzung und Evaluation von Juniorprofessuren an der Universität des Saarlandes) of 12 December 2018 (www.uni-saarland.de/Berufungen).

We are looking for a junior scientist with outstanding achievements who will contribute significantly to the progress of ongoing and the establishment of new interdisciplinary and cross-faculty collaborative projects.

In accordance with the objectives of its equal opportunities plan, Saarland University and HIPS seek to increase the proportion of women in professorial positions and applications from qualified women candidates are therefore strongly encouraged. Preferential consideration will be given to severely disabled candidates of equal eligibility.
Gender equality is an important concern for the institutions, in which future job holders will be involved.

We support you with offers for balancing family and career. We offer flexible working hours, different variants of part-time employment as well as support in the case of childcare or the need for care of relatives. Family time is taken into positive consideration as part of the selection decision.

Please submit your application until **25th July 2021** online via the Saarland University applications portal by: www.uni-saarland.de/Berufungen. Application documents must be uploaded as a PDF file (max.10MB) including the following documents: Cover letter (addressed to the Dean of the Faculty of Mathematics and Computer Science, Univ.-Prof. Dr. Thomas Schuster), curriculum vitae (with private address, incl. telephone and email address), official certificates, list of publications, an overview of teaching and research activities to date (incl. teaching evaluations, if available), amount and type of third-party funding acquired, teaching and research concepts in each case of two pages, and your three most important publications of the last five years. Please also submit the filled-out recruitment questionnaire for junior professorships ('Fragebogen zur Überprüfung der Einstellungsvoraussetzungen' www.uni-saarland.de/Berufungen).

When you submit a job application to Saarland University you will be transmitting personal data. Please refer to our privacy notice for information on how we collect and process personal data in accordance with Art. 13 of the Datenschutz-Grundverordnung (www.uni-saarland.de/datenschutz). By submitting your application, you confirm that you have taken note of the information in the Saarland University privacy notice.