The University of Bonn is an international research university offering a broad range of subjects. With a 200-year history, some 35,000 students, more than 6,000 employees and an outstanding reputation in Germany and abroad, the University of Bonn is one of the leading universities in Germany and has been awarded the status of a University of Excellence.

The Chair of Computational Life Sciences of the International Research Unit Mathematics and Life Sciences is looking to fill the following position as soon as possible, on a fixed-term contract for three years:

**Ph.D. candidate in computational biomathematics (75%)**

The Computational Life Sciences group develops and applies novel mathematical and computational approaches as well as software tools for data analysis and modeling. The spectrum of applications includes oncology, immunology, and epidemiology. We are intensively collaborating with world-leading experts in the respective fields as well as in mathematics, and we are part of the excellence clusters ImmunoSensation2 and Hausdorff Center for Mathematics at the University of Bonn.

Your tasks:
- Development of methods for machine learning-based mathematical modelling and simulation of cell- and tissue-level processes
- Development of interpretable machine learning models with focus on cellular models in oncology
- Data analysis and interpretation
- Collaboration with medical researchers
- Publication of scientific results at conferences and in journals

Your profile:
- University degree (master's degree or equivalent) in (bio-)informatics, computational biology, computer science, mathematics, physics, or related fields
- Profound knowledge in computational biomathematics
- Experience in some of the following fields: mathematical modelling (e.g., ODE and PDEs for biological processes), numerical optimization, machine learning, bioinformatics
- Interest in medical topics
- Programming skills (preferably Python, C++ and/or R)
- Proficiency in written and spoken English

We offer:
- A varied, challenging job with one of the largest employers in the region
- An international, stimulating, well-equipped working environment with an open and constructive atmosphere and the necessary infrastructure for high-quality research
- Participation in exciting scientific projects and cooperation with internationally renowned scientists
- The opportunity to complete a doctorate
- Occupational pension (VBL)
- Many options available for university sports
- Easy access to the public transport system due to the central location in Bonn as well as the possibility to use inexpensive parking facilities
- Flexible working hours and the ability to work from home
- Remuneration in accordance with TV-L pay grade 13

The University of Bonn is committed to diversity and equal opportunity. It is certified as a family-friendly university. The University of Bonn seeks to increase female representation in staffing areas where women are underrepresented and provide special career support. Accordingly, the University of Bonn expressly encourages qualified women to apply. Applications will be handled in accordance with the NRW State Gender Equality Act.
Applications from qualified candidates with a certified severe disability or from those of equal status are especially welcome.

If you are interested in this position, please send your complete application by email to iru-mls@uni-bonn.de by August, 30, 2023, quoting reference 29.23.331. For technical reasons, applications may only be submitted as a single PDF file. Please do not hesitate to contact Prof. Jan Hasenauer (phone +49 228 73-69446) if you need any more information. We reserve the right to review application documents that are received after the deadline.