

The Helmholtz Centre for Infection Research (HZI) and the Braunschweig Integrated Centre of Systems Biology (BRICS) offers a position as

PhD student in Mathematical Biology

at the Department of Systems Immunology.

You will be embedded in a strong team of modelers headed by Michael Meyer-Hermann with expertise in a wide range of quantitative modelling methods, including spatio-temporal techniques and application to a large range of biological problems (visit www.systems-immunology.de).

You are expected to actively contribute with new ideas to research projects in the field of infection and immunity. Beyond support by the Department, you will be supported by a strong group of clinicians at the Medical School of Hannover and international experimental collaborators in the field of T cell immunology. Our collaborators provide us with experimental and clinical data including human data, which will be used for validation of *in silico* predictions and distinction of competing mechanistic hypotheses. The insights provided by *in silico* simulations are essential for our collaborators and clinicians to better understand the dynamics of the complex immune system, to evaluate the efficacy of existing therapies, to optimize them, and to suggest new ones. Therefore, an applied contribution from your PhD work to the field of infection and immunology is expected.

The successful candidate will be educated in one of the following disciplines:

Theoretical Biology, Mathematical Biology, Computational Biology, Computer Sciences, Physics, Mathematics or other quantitative sciences.

A background in dynamic system analysis (differential equations), or strong programming skills (obtaining numerical solutions of differential equations, implementing agent-based simulations, data visualizations, etc.) are expected. Good written and spoken English is required.

Severely disabled applicants will be favored if equally qualified.

Starting date: January 2017 or as soon as possible (initial appointment for 3 years)

Probation period: 6 months

The HZI is a research centre under the roof of the Helmholtz Society, which is a world leading and powerful institution funding basic and applied research in natural sciences. HZI is narrowly connected to the Universities of Braunschweig and Hannover as well as to the Medical School in Hannover and is, thus, embedded in a dense environment of fundamental research and clinical application in Biology, Infection, and Immunology. The HZI has proven in the past to provide excellent support for the appointed scientists in order to promote their career.

Please send questions or your application including C.V., certificates with grades, publication list, one page research interest, and contact details of two referees to jobs@theoretical-biology.de.

The advertisement will be kept open from October 2016 until the position is filled.