

Technische Universität Braunschweig
Braunschweig Integrated Centre for Systems Biology (BRICS)
Dept. Bioinformatics and Biochemistry

PhD student position in Infection Biology

- Fixed-term contract 3 years
- Employee status (start date: as soon as possible)

Area: Profiling mammalian immune-metabolism during bacterial infection

Tasks/Mission:

- Metabolic profiling of mammalian immune cells using stable-isotope labeling and mass-spectrometry.
- Cultivation and metabolomics analysis of *Clostridium difficile* and mammalian host cells (epithelial cell lines, primary human neutrophils and macrophages).
- Cell culture models, molecular biology, biochemistry.
- Computational analysis of the results and development or improvement of existing algorithms needed for the mission.
- Metabolic modeling of host-pathogen interaction.
- The thesis includes a combined experimental and computational approach.

Profile:

- A Master degree or equivalent in Biochemistry, Bioinformatics, Metabolomics, Biology or related disciplines.
- Background in either mammalian cell culture, metabolomics, mass-spectrometry, cell metabolism or bioinformatics would be an advantage.
- Working knowledge of English would be an advantage.

Offer:

- Fully funded position (50-65% TVL-13).
- Opportunity to participate in the development of the newly created BRICS.
- 3-years contract.

Applications in German or English should be addressed by e-mail to k.hanke@tu-braunschweig.de

For further information, please contact:
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