

Open phd student position (m/f/d) in bioinformatics on corona virus modeling

Interested in pan-corona virus research by machine learning and bioinformatics?

Our team: We are a research team of four postdocs, phd-students, varying undergraduates and the group leader.

The position: We are offering a graduate position for performing a PhD in cooperation with the MERCK company (merckgroup.com).

Scope: We are analyzing the life cycle of a broad range of corona viruses comprising entry, replication and release. Together with partners in Frankfurt and Heidelberg, we are performing knockdown screens on virus infected human host cells. We use machine learning, gene regulatory network analyses of imaging, sequencing and other omics data. We aim to identify host dependency factors i.e. proteins in the human host cell which are essential for the virus, but are not for the cell. Inhibiting such proteins yield a protection effect leading to drug identification. Promising predictions will be validated experimentally by our collaboration partners.

Your profile: You (1) are interested in systematically detecting functional patterns in high dimensional data and gene networks, and (2) hold a degree in bioinformatics, biology or related subjects, or applied computer science. A machine learning or modeling background would be good, but is not necessary.

We are looking forward to your application (preferably within one pdf by email).

Jena University Hospital: Our around 5,500 employees working in 26 departments and clinics provide ambulatory care for around 280,000 patients and inpatient treatment for more than 53.600 patients each year. In addition, 2,300 students of medicine and dentistry are trained, and in 25 institutes, scientists from more than 25 nations research in advance medicine.

Webpage of our group:

www.uniklinikum-jena.de/cscc/en/koenig.html

See also a recent article about our work:

[www.lichtgedanken.uni-](http://www.lichtgedanken.uni-jena.de/en/issue_08_fighting_viruses_with_knowledge)

[jena.de/en/issue_08_fighting_viruses_with_knowledge](http://www.lichtgedanken.uni-jena.de/en/issue_08_fighting_viruses_with_knowledge)

In case of equal qualification, persons with disabilities will be given priority. The positions will be filled as soon as the appropriate candidate has been found.

Apply until **January 20 2021** to rainer.koenig@uni-jena.de or marcus.oswald@med.uni-jena.de (reference: 287/2020)

Prof. Dr. Rainer König, Center for Sepsis Control and Care, Jena University Hospital