

Job Offer: **Postdoc or phd-student position in bioinformatics**

Scope: Developing methods and analyzing high throughput data in bioinformatics and particularly for fluorescence emission spectroscopy

Method: Microbial contaminations on surfaces in hospitals, pharmaceutical companies, or in food producing companies, kitchens of public facilities or restaurants are a substantial health risk for the public community. Hence, it is mandatory to control hygiene efficiency. The aim of the project is to develop a laboratory quick test detecting microbial contaminations on surfaces being above the allowed concentration rates. In our approach, UV-LEDs comprising several wavelengths (multi-lambda) will illuminate the sample and the auto-fluorescence emission of the biological fluorophores will be detected employing fluorescence spectrometry. The main task of the bioinformatician is to develop a method integrating the emission spectra of the different wavelengths to discriminate death from alive microbes and not contaminated from contaminated surfaces. Besides this, other developments and analyses will be linked to host-pathogen interactions basing on data from next generation sequencing/RNA-seq.

Your profile: : If you are interested in multivariate data analysis, machine learning, KI, biology, host-pathogen interaction, bioinformatics problems, or fluorescence emission spectroscopy, if you are trained in bioinformatics, statistics, computer science,

biology or a related subject, are fluent in English or German, are a good team player and have organizational talent, we are looking forward to your application.

Jena University Hospital:

Being the largest employer in the region, our around 5,000 employees working in 26 departments and clinics provide ambulatory care for around 280,000 patients and inpatient treatment for more than 55,000 patients each year. In addition, 2,300 students of medicine and dentistry are trained, and in 25 institutes, scientists from more than 25 nations do research to advance medicine. Employees at Jena University Hospital can benefit from a wide range of offers that encourage individual health promotion at work.

The group: The König lab comprises five phd-students, three postdocs, varying undergraduates and the group leader. We are located in the Hans Knöll Institute at Beutenberg Campus in Jena. We cooperate in this project with Dr. Karina Weber of the Leibniz Institute of Photonic Technology Jena. Our website: <https://www.leibniz-hki.de/en/netzwerkmodellierung.html>

We prefer online applications. Please apply for this job via our online application tool on www.uniklinikum-jena.de/Karriere or send your documents (letter of motivation, CV, certificates, preferably within one pdf) by mail, indicating reference number DM48/2018 to Marcus.Oswald@med.uni-jena.de. In case of equal qualification, persons with disabilities will be given priority.

Prof. Dr. Rainer König, Jena University Hospital, Germany

Deadline of application: Apply as soon as possible, not later than 20 February 2019