

The framework of the recently funded CRC 1310 (Predictability in Evolution) of the German Research Foundation (DFG), Bollenbach lab, at the University of Cologne, Germany, invites applications for a

Postdoc (f/m) in biological physics & systems biology

The Bollenbach lab uses a combined experimental and theoretical approach to tackle a wide range of questions in biological physics and systems biology. Our main interest is in revealing general, quantitative principles that enable predicting the dynamics of biological systems. Specifically, we are investigating the evolution of antibiotic resistance and cellular responses to combinations of multiple stressors such as antibiotics. We primarily use the model systems *E. coli* and *S. cerevisiae* to tackle these problems. We combine concepts and techniques from physics with advanced high-throughput techniques from systems biology. Physicists and biologists work closely together in our interdisciplinary group. For more details about our research program and projects visit <http://bpsb.uni-koeln.de/>.

The successful applicant will work on an interdisciplinary project aimed at predicting and perturbing the dynamics of antibiotic resistance evolution using a combination of theory and robotic techniques for high-throughput experimental evolution.

Applicants need to hold a PhD university degree in physics, biology or a related discipline. Candidates should have a serious interest in evolutionary dynamics and antibiotic resistance, and the willingness to develop new techniques for automated evolution experiments. Prior experience with programming, statistical physics, molecular biology, or microbiology would be advantageous, but is not required. Good communication skills are essential. Applicants should be highly motivated and independent.

The position can be started in March 2018 or later. The initial contract is limited until February 2020 and can be extended until December 2021. The salary is based on the German TV-L E13 scale (100%, i.e. 39.83 h per week), if terms and conditions under collective bargaining law are fulfilled.

If you are interested in joining our interdisciplinary lab, please send your application (incl. CV, publication list, 3 reference letters) to t.bollenbach@uni-koeln.de.

The deadline for applications is **15 January 2018**. Applications received after this deadline can be considered until the position is filled.

Disabled individuals with equal personal and technical eligibility will be favored. The University of Cologne is committed to increasing the ratio of women in research. Women are therefore particularly encouraged to apply for this position.