The subinstitute Computational Biomedicine (INM-9) at Forschungszentrum Jülich develops and uses computational methods going from multi-scale molecular simulations to bioinformatics and drug design to face the challenge of understanding the molecular basis of cellular (especially neuronal) signaling processes, in healthy and disease conditions. Because of the complexity of the systems under study, simulation approaches require massive parallel computing resources such as those available at the Jülich Supercomputing Center (JSC) at Forschungszentrum Jülich.

The projects will be carried out within an European Network, in collaborations with experimental labs

We are looking to recruit a

2020-094 - Postdoc - Computational Drug Design Against Coronavirus Targets

Your Job:
• Design in silico compounds which may interfere with the Covid-19 infection by using methodologies ranging from molecular simulation to computer aided drug-design, cheminformatics and machine learning
• Implementation of structural Bioinformatics approaches
• Molecular simulation of selected targets
• Virtual screening and identification of potential binding entity
• Development and application of Chemoinformatic/Machine learning-based analyses
• Free-energy calculations

Your Profile:
• University degree in either biophysics, chemistry, pharmaceutical chemistry, or computer science
• Experience with UNIX-like operating systems
• Experience in computer-aided drug design and/or biomolecular simulation is required
• Mathematical and programming skills (R, Python, Keras, Tensorflow)
• Ideal prior knowledge on pathway/Systems biology or MD simulations
• Excellent knowledge of written and oral English
• Interactive person with good communication skills
• Used to work in international teams

Our Offer:
• Exciting working environment on an attractive research campus with excellent infrastructure, located between the cities of Cologne, Düsseldorf, and Aachen
• Outstanding research and computing infrastructures in one of Europe’s largest supercomputing facilities
• Participation in national and international conferences and workshops
• International and interdisciplinary working atmosphere
• Opportunities of being part of an international scientific community
• Further development of own scientific profile through a strong international network
• A comprehensive further training programme
• Flexible working hours and various opportunities to reconcile work and private life
• Limited for 2 years with possible longer-term prospects
• Full-time position with the option of slightly reduced working hours
• Salary and social benefits in conformity with the provisions of the Collective Agreement for the Civil Service (TVöD). Depending on the applicant’s qualifications and the precise nature of the tasks, salary grade 13 TVöD-Bund

Forschungszentrum Jülich promotes equal opportunities and diversity in its employment relations.

We also welcome applications from disabled persons.