



Institut national
de la santé et de la recherche médicale



Postdoctoral Positions in Biomolecular Simulations Centre de Biochimie Structurale, Montpellier (France)

We are looking for strong and motivated candidates for postdoctoral positions funded by the ANR @RAction program within the project "Multiscale Modeling of Biomolecular Machines" to work at the Centre de Biochimie Structurale (CBS) in Montpellier (France).

Project: Our goal is to shed light onto the functioning of complex biomolecular systems involving extensive conformational dynamics and protein-protein interactions. To this aim, we plan to develop and apply multi-pronged computational protocols based on both atomistic and coarse-grained simulations and to profit from experimental data and/or statistical analysis of protein sequences. Biological systems of interest include (but are not limited to): molecular chaperones, nuclear receptors and the bacterial flagellar motors.

Candidate: The successful candidate should have i) a PhD in chemistry, physics or biology, ii) a solid background in theoretical/computational biophysics, chemistry or soft matter iii) strong interest in collaborating with experimentalists. Experience in molecular simulations is strongly recommended. Programming skills and/or basic knowledge of experimental techniques in structural biology or biophysics will be favorably considered.

Environment: The CBS research staff and infrastructure cover a wide variety of techniques for structural biology and biophysics including X-ray crystallography, cryo-electron microscopy, advanced fluorescence and super-resolution microscopes, single-molecule manipulation, molecular and cell biology, and high-performance computation. Montpellier is a major biology area with a focus on basic research, biomedicine, plant biology and environmental science. Its science drive, the beauty of the region, its high quality of life make it an ideal destination for scientists from all over the world.

Application: Applications and informal queries about the project and the lab should be addressed to Alessandro Barducci (alessandro.barducci@cbs.cnrs.fr). Interested candidates should send their CV, a cover letter describing their research interests and motivation, and the names of persons willing to write a recommendation letter.

References

- Malinverni, Jost Lopez, De Los Rios, Hummer & Barducci. BioRxiv, 067421. (2016)
- Malinverni, Marsili, Barducci & De Los Rios. PLOS Comp Biol, 11(6), e1004262. (2015)
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- Kellner *et al.* PNAS, 111(37),13355. (2014)
- Barducci, Bonomi, Prakash, & Parrinello. PNAS 110(49):E4708. (2013)
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