

## POST-DOCTORAL ANNOUNCEMENT – COMPUTATIONAL BIOPHYSICS

One post-doctoral position is available in the group of Dr. Giulia Palermo at the University of California Riverside (UCR) in computational biophysics.

Research in the Palermo lab focuses on applying and developing novel computational methods to unravel the function and improve applications of key macromolecular complexes responsible of gene regulation, DNA cleavage and replication, RNA transcription and in translation. The appointee will apply a variety of computational methods, spanning from conventional Molecular Dynamics (MD) simulations, enhanced sampling methods, ab-initio MD and emerging cryo-electron microscopy (cryo-EM) refinement. As well, she/he will have the opportunity to join ongoing collaborations with leading experimental scientists at UCR, UC Berkeley and at UC San Diego.

We are seeking a postdoctoral fellow with the following research background and interests:

- 1) MD simulations of protein and nucleic acid systems, including but not limited to DNA/RNA dynamics, protein-protein interactions, and ion-protein interactions. Experiences with enhanced sampling or free energy calculations or Markov state modeling is preferred.
- 2) Knowledge of ab-initio MD approaches, including the Car-Parrinello and Born-Oppenheimer methods. Applicants with experience in the application of ab-initio MD to biological systems and in the application of a hybrid QM/MM approach are preferred. Skills: experience with the CPMD and/or CP2K packages.
- 3) Applicants should hold a PhD in physics, chemistry, computational sciences or related fields. Motivation in learning and developing unconventional computational approaches during the appointment will be key for the successful applicant.

The University of California Riverside is a public research University belonging to the University of California system, located in the vibrant research area of southern California. The appointee will be employed in the Department of Bioengineering, receiving competitive salary and benefits, in agreement with the UC salary scale.

To apply, please email your CV to [gpalermo@ucsd.edu](mailto:gpalermo@ucsd.edu)  
More information on the PI: <https://giuliapalermo.wordpress.com>