Curriculum Vitae

Fernando Martín García
Madrid, Spain.
E-mail: fmgarcia85@gmail.com | fmgarcia@cbm.uam.es
Phone: (+34) 620 18 37 54

Education

- Ph.D. In Biophysics. Universidad Autónoma de Madrid. 2013.
- Postgraduate Master in Biophysics. Universidad Autónoma de Madrid. 2010
- Specialist in Biotechnology Management Companies. Universidad Francisco de Vitoria. 2008
- M.sc. In Biotechnology. Universidad Francisco de Vitoria. 2008
- B.sc. In Biotechnology. Universidad Francisco de Vitoria. 2006

Career

- Guest student in Copenhagen University. Copenhagen. Department of Biology. 2013
- Ph.D. Student in the Molecular Modeling Group. Molecular Biology Center "Severo Ochoa". 2008-2013
- Guest student in Computational Biology Group. Spanish National Cancer Research Center (CNIO). 2007
- Student of microbiology department. Universidad Francisco de Vitoria. 2005/2006

Teaching experience

- Guest speaker in Universidad Francisco de Vitoria. Subject: Protein structure and function. 2010 and 2013.

Grants and contracts

- Biomol-Informatics S.L – Molecular Modeling Group. 2012-Today
- Contract for Research and Development on Bioinformatics between Biomol-Informatics S.L and "Severo Ochoa" Foundation. 2010-2012
- Contract for Research and Development on Bioinformatics between Biomol-Informatics S.L and "Severo Ochoa" Foundation. 2008-2010

Publications

- **Martín-García, Fernando**, Papaleo Elena, Gómez Puertas Paulino, Boosma Wouter , Lindorff-Larsen Kresten. Comparing molecular dynamics force-fields in the essential subspace. In preparation.
- Pablo Gonzalez de Prado Salas, Ines Hörger, **Fernando Martín-García**, Jesus Mendieta, Paulino Gómez-Puertas, Mario Encinar, Alvaro Alonso, Pedro Tarazona, Marisela Velez. Torsion and curvature of FtsZ filaments. ***Soft Matter. In press (2014)***
- **Martín-García, F**., Mendieta-Moreno, J. I., Marcos-Alcalde, I., Gómez-Puertas, P. & Mendieta, J. Simulation of Catalytic Water Activation in Mitochondrial F(1)-ATPase Using a Hybrid Quantum Mechanics/Molecular Mechanics Approach: An Alternative Role for β-Glu 188. ***Biochemistry 52, 959–66 (2013).***
- **Martín-García, F**., Mendieta-Moreno, J. I., López-Viñas, E., Gómez-Puertas, P. & Mendieta, J. The Role of Gln61 in HRas GTP hydrolysis: a quantum mechanics/molecular mechanics study. ***Biophysical journal 102, 152–7 (2012).***
- **Martín-García F**., Mendieta-Moreno JI, Mendieta J, Gómez-Puertas P. Molecular dynamics analysis of conformational change of paramyxovirus F proteinvduring the initial steps of membrane fusion. ***Biochem Biophys Res Commun. 30; 420(1):42-7 (2012)***
- **Martín-García F**., Salvarelli E, Mendieta-Moreno JI, Vicente M, Mingorance J, Mendieta J, Gómez-Puertas P. Molecular dynamics simulation of GTPase activity in polymers of the cell division protein FtsZ. ***FEBS Lett. 586(8), 1236-9. (2012).***

Seminars, conferences and formation

- Bioinformatics Congress. Pompeu Fabra University. Barcelona. 2012. (Poster)
- VIII EBSA Congress. Budapest. 2011. (Poster)
- COMBAT. Biotechnology National Center (CNB). Madrid. 2010. (Speaker)
- IV Spanish-Portuguese Biophysical Congress. Zaragoza. 2010. (Poster)
- EMBO Workshop: Frontiers of Prokariotic Cell Biology. Oxford. 2010. (Poster)
- Advanced Linux Course. Universidad Autónoma de Madrid. 2010. (Student)
- CESGA Computational Summer School. Santiago de Compostela. 2010. (Student)
- Mathematician Simulation in Science and Technology. Sevilla. 2010. (Assistant)
- Discovery Studio Seminar. Madrid. 2008. (Assistant)
- Introduction to Bioinformatics. Universidad Complutense de Madrid. 2007. (Student)

Skills and qualifications

- Native Spanish and fluent English.
- Expertise with Unix based operative systems (Ubuntu, Fedora and CentOS) and system administration.
- Skills in several programming languages(C, Perl, Python, Csh, Bash).
- Experience in the compilation of scientific programs like AMBER or Gromacs, in their serial, parallel and CUDA versions.
- Principal Component Analysis of structural ensembles
- Skills in OpenMPI programming.
- Skills in graphic edition (Gimp) and scientific illustration.
- Lab techniques: PCR , Western Blots , Cell culture (bacteria and yeast) , Chromatography, Spectroscopy , AFM , IR analysis .