

## HFSP funded Post-Doctoral Position in Supramolecular Chemical Biology and Synthetic Biology



The group of [Dr. Javier Montenegro](#) is seeking for a **Post-Doctoral Candidate** with strong interest in **Supramolecular Chemistry, Chemical Biology and Synthetic Biology**. This is an excellent opportunity to join a **Human Frontiers Project**, a cutting-edge research aimed towards the fabrication of a minimal cell and a synthetic cytoskeleton ([group website](#)).

The general aim of the project is to prepare and study peptides and other molecules that self-assemble into tubular and fibril networks in the “*out of the equilibrium*” regime.

### DESCRIPTION

The applicant will be involved in the preparation of the cytoskeleton of a minimal cell mimic. The research will involve the synthesis of self-assembling peptide building blocks and the biophysical characterization of the resulting ensembles. This project is part of an international project towards a fully synthetic cytoskeleton with self-regulating capabilities. The research groups involved are top-level scientists of the United States ([Neal Devaraj](#)) and Japan ([Toshihide Takeuchi](#)).

### REQUIREMENTS

We seek outstanding individuals with initiative, creativity and team-working ability and with a PhD degree in Chemistry, Biophysics, Synthetic Biology, Chemical Biology or Biochemistry. Experience in peptide chemistry, self-assembly, microfluidics and biophysics will be highly considered. Good communication skills and proficiency in written and spoken English are essential.

### REFERENCES

“In situ” Functionalized Polymers for siRNA Delivery”, Priegue, J. M.; Crisan, D. N.; Martínez-Costas, J.; Granja, J. R.; Fernandez-Trillo, F.; Montenegro, J. *Angew. Chem. Int. Ed.* **2016**, *55*, 7492-7495.

“Cellular Uptake: Lessons from Supramolecular Organic Chemistry”, G. Gasparini, E.-K. Bang, J. Montenegro and S. Matile, *Chem. Commun.* **2015**, *51*, 10389-10402.

“Montenegro, J., Vázquez-Vázquez, C., Kalinin, A., Geckeler, K. E., & Granja, J. R. Coupling of carbon and Peptide nanotubes. *J. Am. Chem. Soc.*, **2014**, *136*, 2484–2491.

### STARTING DATE AND TERM

Starting date could be flexible during 2017. 2 years of contract (annual evaluation).

### APPLICATIONS

All the application procedure will be done online. Applicants must fill out, attach the required documents in a PDF file and submit the online application form available at the jobs section on the CiQUS’ website: [https://www.usc.es/ciqus/en/application\\_HFSP-01](https://www.usc.es/ciqus/en/application_HFSP-01).

### DEADLINE

**October 25<sup>th</sup>, 2017.**