



UNIVERSITAT DE BARCELONA



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JOB OFFER

Barcelona, 28th October 2016

Single molecule techniques have revolutionized our way to approach biological and physical systems by **manipulating one molecule at a time**. "Take a single DNA molecule and pull from its extremities, while recording the force-extension curve until it gets fully straightened.". This thought experiment, which was just a dream a few decades ago, has now become standard in many research institutes worldwide. By using laser beams it is possible to generate optical traps to capture microspheres tethered to individual molecules and pull them to measure piconewton forces. This technique, known as **optical tweezers**, is the main equipment of the **Small Biosystems Lab** (<http://ffn.ub.es/ritort/>)

The Small Biosystems Lab is seeking for a **young student, graduated or researcher** to work and contribute to some of our most pioneering lines of research. This job offer is a **great opportunity to someone talented for research** who wants either to start or continue his/her research experience. Foremost it must be someone very **enthusiastic, hard-working, responsible and independent person**. The expertise of the candidate can pertain to a broad range of disciplines. He/she can be a student, either doing high-level studies or professional training, in **any field related to engineering** (industrial, electronics, mechanical or informatics) **and physics**. He/she must be someone with **knowledge and passion** for physics, robotics and electronics. We are looking for someone who likes to **ask questions and create tools to explore nature, build them and see them work!!** Last but not least, we want someone who has team working skills and capacity.

The researcher should help us to **build optical tweezers instruments** for single molecule manipulation and work in the implementation of **single molecule devices for sequencing** nucleic acids and proteins.

Offer details: We offer a **partial or full time contract**. Schedule and salary is to be arranged (**minimum of 1000 € per month** for a full time contract). Immediate contract.

If you are interested in applying, please send your CV and a brief motivation letter to:

Félix Ritort: fritort@gmail.com

Isabel Pastor: i.pastordelcampo@gmail.com

