2 PhD studentships

in Synthetic Biology and Microfluidic Systems in LIA group (FI-UPM)

1. **PhD grant 1. Synthetic Biology. Beca FPI**. Design of synthetic genetic circuits for programming multicellular bacterial ecosystems and computational simulation of its dynamical behaviour.

   This 4-year PhD grant (Spanish "beca FPI") has been assigned to project TIN2012-36992 to be developed by LIA team. Imminent call.

2. **PhD grant 2. Microfluidic systems**. Design, programming and simulation of droplet microfluidic systems for application in cellular computing and synthetic biology.

   This 4-year PhD proposal is in the scope of a new FP7 - FET European research project that will begin in October 2013. The chosen candidate will have the opportunity to work and interact with leading European research groups in this area.

Background and Profile: Strong mathematical background and programming skills are mandatory requirements. No biology background is required but the applicant must be willing to acquire it. Good working knowledge in English. Applicants should preferably hold a Degree or a Master in Bioengineering, Biophysics, Biotechnology, Computer Science, Telecommunications Engineering, Mechanical/Materials/Electrical Engineering or a related discipline.

Research topics: Synthetic biology, individual-based modelling, non-linear dynamics, open hardware (ARDUINO), bio-MEMS, lab-on-a-chip, 3D printing.

Applications: Applicants please send an email to Alfonso Rodríguez-Patón, arpaton@fi.upm.es with CV, grade transcripts, motivation letter, and two letters of recommendation. **Deadline:** September 10th, 2013.

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