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EU Marie-Curie PhD Student Opening: Developing Single-Cell Technologies for Systems Biology

We have an opening for a PhD student in a 3-year research training program (**EU Marie Curie Initial Training Network**) in a consortium of institutions from the public and private sector. The student will work in the field of microtechnology and microfluidics, to develop an array-based microfluidic cell cultivation system, primarily for yeast cells.

The central activity includes the development of microfluidic devices that allow for single-cell cultivation under controllable environmental conditions and that feature the capability to perform single-cell handling as well as options for subsequent transfer to off-chip analysis techniques (microscopy, mass spectrometry). For long-term observation, it is necessary that the budded cells are continuously removed. Moreover, it is necessary to be able to release individual cells from the cultivation device to transfer those to further downstream analysis functionalities. The respective lossless handover strategies have to be developed.

(Information on current activities: <http://www.bsse.ethz.ch/bel/research/CellHandling>)

A suitable candidate should hold a master's degree in engineering or physics. He should have experience in microtechnology and cleanroom work, knowledge in data evaluation and processing (basic programming skills), and he should be familiar with cell handling techniques and cell biology. The candidate must be able to communicate fluently in English (oral and written), and will be involved in multi- and interdisciplinary work in the areas of microtechnology and biology. The successful candidate will participate in a research training program of an EU-funded Marie Curie Initial Training Network (ITN) and will work in a highly interactive international environment with other Marie-Curie PhD students, researchers (Gothenburg, Oxford, Groningen etc.), and industry. Network-wide courses and trainings will be organized by partners in 7 different EU countries.

Important note: Eligibility to the Marie-Curie ITN scheme includes that the candidate has not spent more than 12 months in Switzerland in the 3 years immediately preceding his appointment for this position. Candidates from EU countries are preferred.

If you are interested, please contact, preferably via e-mail:

carlos.escobedo@bsse.ethz.ch

He is also collecting all applications (CV, Transcripts, 2 Recommendation letters)

More information on the group and activities at: <http://www.bel.ethz.ch>