



EU Marie-Curie Initial Training Network



TRANSPOL

A European Research Training Network at the interface of
Cell/Molecular Biology and Membrane Physics

Topic: Transport and Signalling mechanism in Polarized Cells

Call: FP7-PEOPLE-ITN-210

Proposal Number: 264399

Project title: Tracking biochemical and physical parameters of the dynamin-mediated fission reaction in vivo and in vitro

Type of position: Early Stage Researcher (ESR)/ PhD position

Reference Code: TRANSPOL-P4

Eligibility: To this position applies a mobility rule. The respective candidate must not have worked for more than 12 months in Switzerland within the last three years. Furthermore, the candidate needs to be in his/her first four years of his/her research career. The four years are counted from the date a degree was obtained which formally entitles to embark on a doctorate.

Starting date: March 1st, 2011

Duration: 36 months

Salary: According to the Marie Curie-ITN rules: around 36000 Euro/year plus monthly mobility allowance of 500 Euro/month

Short description: The protein dynamin is a major player of the clathrin endocytic pathway, as it is mechanically involved in the fission reaction of clathrin buds from the plasma membrane. Even though a lot of detailed findings have characterized the role of dynamin in membrane fission, little is known about how dynamin-mediated membrane fission is temporally and spatially regulated. This is critical as in synapses, dynamin is involved in the quick replenishment of synaptic vesicle pool after stimuli depletion, suggesting a tight time control. It is also involved in the precise control of size of synaptic vesicles, suggesting that the fission reaction is highly spatially controlled to enclose the exact same volume and membrane surface into vesicles. By associating in vivo fast imaging techniques (Spinning disk confocal, TIRF), high resolution photonics imaging (STED) and in vitro assays, the student will be characterizing the precise timing of fission and

triggering events, as well as where fission occurs at the clathrin coated buds.

Job

Requirements: Experimental background in cell biology, biochemistry or biophysics.

Host Institute: Department of Biochemistry
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How to apply:

please send the following documents via e-mail to the TRANSPOL coordinating office: transpol@rub.de.

- Clearly indicate the project you are applying for by referring to the Reference code of this job offer
- Letter of motivation (research interests, reasons for applying to this program and project, respectively)
- A complete CV
- Certified copies of University Diploma or Master certificates
- Proof of proficiency in English language
- Two letters of recommendations

Deadline

for application: April 29th

For further information:

Please contact the supervisor of this project or directly the TRANSPOL coordinating office: transpol@rub.de