



## 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:** Stoichiometry and regulation of AMPA receptor-TARP complex formation in receptor trafficking and ion channel function

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

**Reference code:** TRANSPOL-P3

**Eligibility:** To this position applies a mobility rule. The respective candidate must not have worked for more than 12 months in Germany 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:** February 1<sup>st</sup>, 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:** Proper expression of AMPA-type glutamate receptors in synapses and their specific functional properties crucially depend on the transmembrane AMPA receptor-regulatory proteins (TARPs),  $\gamma 2$ ,  $\gamma 3$ ,  $\gamma 4$ , and  $\gamma 8$ , homologs of the calcium channel subunit  $\gamma 1$ . Three more  $\gamma 1$  homologs,  $\gamma 5$ ,  $\gamma 6$ , and  $\gamma 7$ , had been classified as non-TARPs, a view which has recently been disputed for  $\gamma 7$  and  $\gamma 5$ , which are now designated Type II-TARPs. The successful candidate will 1) investigate what role these Type II-TARPs have in modulating AMPA receptor properties, and if they may interact with other glutamate receptor

subfamilies such as kainate and NMDA receptors; 2) investigate the trafficking and stoichiometry of AMPAR-Type II-TARP complexes; 3) elucidate the molecular mechanism of Type II-TARP modulation by generating chimeric constructs to identify TARP-interacting domains of AMPARs.

**Job**

**requirements:** Experimental background in molecular biology, protein biochemistry and/or electrophysiology.

**Host institute:** Department of Biochemistry I - Receptor Biochemistry  
Ruhr University Bochum  
Universitätsstrasse 150, NC6/170  
44780 Bochum  
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**How to apply:** Please send the following documents via e-mail to the TRANSPOL coordinating office: [transpol@rub.de](mailto: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, 2011**

**For further  
information:** Please contact the supervisor of this project or directly the TRANSPOL coordinating office: [transpol@rub.de](mailto:transpol@rub.de)