



Announcement of competition for a PhD position (36 months) - XXXVI cycle (academic year 2020/2021) - at the Department of Medicine and Surgery of the University of Insubria in the frame of the European Training Network (ETN) from the Marie Skłodowska-Curie Innovative Training Networks (MSCA ITN) of the European Commission's Horizon 2020 framework entitle "NEUROtransmitter TRANSporters: From single molecules to human pathologies" funded by the European Commission (Grant agreement no: 860954)

Item 1. Admission requirements

The position is open to candidates of any nationality, as long as they fulfill the requirements for the Early Stage Researchers (ESRs) funded by Marie Skłodowska-Curie actions:

The applicants must have acquired a Master Degree diploma giving access to doctoral studies in Biology, Biotechnology, Pharmacology or Medicine (e.g. MSc in Biology, Biotechnology, Pharmacy, Physics, Medicine) in the Country where the diploma was earned.

The ideal candidate must have a background and practical experience in biology, cell physiology molecular biology documented by MSc thesis or scientific publications, as well as practical experience in common laboratory methods (cell culture, molecular biology, HPLC). A background in electrophysiology and biophysics constitutes a preferable additional qualification. Excellent knowledge of English.

The PhD candidates must fulfill the following conditions to be eligible as PhD candidate for NeuroTrans:

- Excellent oral and written English language skills (if English is not his/her first language)
- At the date of commencing their employment, be in the first four years (full-time equivalent research experience) of their research careers, including any period of research training. The time is measured from the date when the PhD candidate obtained the first degree entitling him/her to embark on a doctorate (either in the country in which the degree was obtained or in the country in which the PhD candidate is recruited, even if a doctorate was never started or envisaged).





- At the time of recruitment be in possession of a university degree that allow for enrolling in a PhD programme, but have not completed a PhD. Being already enrolled in a PhD programme (unfinished) does not constitute an exclusion criteria. Date of commencing their employment means the first day of the employment of the PhD candidate (i.e. the starting date indicated in the employment contract or equivalent direct contract).
- PhD candidates must not have resided or carried out their main activity (work, studies, etc.) in the country of the recruiting University of Company for more than 12 months in the 3 years immediately before the recruitment date. This time is measured from the date of signing the employment contract. Compulsory national service, short stays such as holidays, and time spent as part of a procedure for obtaining refugee status under the Geneva Convention are not taken into account..
- Have a Master's degree (or an equivalent diploma allowing to pursue a PhD) in the fields as requested for each NeuroTrans positions.
- Criteria specific for each project/PhD position can be found on the homepage of NeuroTrans (www.neurotrans.org).
- The PhD candidates can be of any nationality.

Item 2. Goals of the Neuro Trans project

The vision of NeuroTrans is to reach an improved understanding of neurotransmitter:sodium symporter (NSS) function reaching from the molecular level to human pathologies, to investigate how psychoactive substances target these transporters, to elucidate how disruption of transporter function contributes to neuropsychiatric disease pathobiology.

NeuroTrans makes use of cutting-edge methods to reach this goal, but also develops enabling techniques in biophysics, molecular and structural biology. Especially the industrial partners will establish novel devices for detection in live cells. Training will include most important subdisciplines in quantitative biology, including molecular modelling, computer simulations, biophysics, biochemistry, neurobiology, molecular and structural biology.

Early Stage Researcher (ESR)

PhD Project Title: Electrophysiological approaches to study, ion coupling and transport by NSS.

PhD Project description: The aim of this project is to comprehend how sodium electrochemical gradient energizes the translocation of the substrates in the various steps of the cycle of GABA transporters. The sodium ions and substrates interaction in each step will be investigated by examining with electrophysiological approaches the currents (pre-steady state, leakage and steady-state currents) recorded in different conditions. The biophysical data





will be integrated with the uptake data: acquiring, in the same experiments, in a radiolabelled free approach. This study will help to develop a complete model of the transport cycle in the presence of the substrate and of the inhibitors. Wild type, mutants, and chimeric GABA transporters will be analyzed. for more information see (<https://www.neurotrans.org/projects/project-6-electrophysiological-approaches-to-study-ion-coupling-and-transport-by-nss/>)

Academic Supervisor

Prof. Dr. Elena Bossi – Department of Biotechnology and Life Sciences, university of Insubria- Varese Italy

The e-mail addresses elena.bossi@uninsubria.it can be used for informal enquiries regarding the project.

Start date

The expected start date of the PhD project is 1st November 2020.

Item 3. Applications

The application for admission to PhD studies shall be submitted by the deadline **22 june 2020, 12 pm (CET)**.

Applicants should consult the webpage of NeuroTrans (www.neurotrans.org) for complete information.

Applicants should email the completed application form and all other requested documents and information to the NeuroTrans office: office@neurotrans.org. The language for applying to NeuroTrans is English. At the time of application, applicants do not need to have finished their Master's study (or equivalent) that allows for enrolling in a PhD programme, but it must be completed at the time of recruitment. Applicants may apply for a maximum of three positions and indicate their preference in the application form.

Applications include the following documents:

- Curriculum Vitae (Europass format preferred)
- Written recommendations from two senior referees. Note that you must contact your referees and make sure that they independently send a reference letter to office@neurotrans.org. The reference letters should be on institutional headed paper and come from the referee's institutional rather than personal email address. We will not contact





your referees; it is your responsibility to ensure that references reach us by the application deadline.

- Completed Application Form of the European Training Network (ETN) NeuroTrans that can be download from the NeuroTrans webpage (www.neurotrans.org)
- Certificates of University degrees and intermediate certificates. If a master's degree (or equivalent) has not been obtained, this must be stated and the estimated date of completion provided. The degree allowing for enrollment in a PhD programme needs to be completed at the time of commencing their employment contract.
- Academic record: University transcripts, including photocopies of transcripts of marks (academic record).
- University transcripts documenting your career must be sent in one of the NeuroTrans languages, preferably English (Danish, Dutch, English, German, French, Italian, and Portuguese are also accepted).

The complete application requirements are described at the homepage of NeuroTrans (www.neurotrans.org)

- Additional documents (if available) supporting your applications that can include language certificates, additional education certificates or training certificates. The complete application requirements are described on the homepage of NeuroTrans (www.neurotrans.org).

Item 4. Evaluation Committee and Examinations

After the deadline, applications will be evaluated by the supervisory board. Interviews with shortlisted candidates will be conducted through videoconference. Candidates will be selected by a evaluation panel and the supervisory board of NeuroTrans. Selected PhD candidates will be hired by the hosting institution and enroll in a University PhD programme. All positions are limited to a duration of 36 months.

The PhD candidates should consult the webpage of NeuroTrans (www.neurotrans.org) for complete information

On equal qualification, the youngest applicant will the selected

The final Evaluation Committee is composed of three members chosen among professors and researchers of the University and, if necessary, of external experts.

Item 5. Course Enrollment

Candidates will be admitted to the courses according to the final ranking and the number of available places for each PhD course. Eligible candidates not completing their enrollment by





the deadline, will be excluded. The competent offices will proceed further in the ranking giving formal notice to the parties concerned.

The rankings will be published on the website of the University (www.uninsubria.it/bandodottorati). The publication replaces in all respects any personal communication. Candidates are requested to view the ranking, the possible scrolling of the ranking list and the peremptory terms of registration, in the notices published on the website www.uninsubria.it/bandodottorati.

Foreign applicants and Italian applicants with a foreign qualification will be required to produce the following documents by the date of enrolment into the PhD Program.

- Diploma and transcript of records legalized and officially translated by the Italian Diplomatic body (Embassy or Consulate) in the country where the qualification has been attained;
- “Dichiarazione di Valore in Loco” issued by the Italian Diplomatic body (Embassy or Consulate) in the country where the qualification has been attained;

Item 6. Marie Sklodowska Curie Actions Grants

The gross EU contribution for an Early Stage Researcher under MSCA-Innovative Training Network foresees a living allowance (adjusted through the country correction coefficient), a mobility allowance and, if applicable at the date of the recruitment in the action, a family allowance. The final amount will not change in case of secondments to another beneficiary of NeuroTrans project or partner organization.

Net amount, paid on a monthly basis, results from deducting all compulsory social security contributions. All allowances will be recognized according to Marie Sklodowska Curie Actions rules stated in the Guide for Applicants:

http://ec.europa.eu/research/participants/data/ref/h2020/other/guides_for_applicants/h2020-guide-appl-msca-itn_en.pdf

Item 7. Incompatibility

The registration to a PhD program is incompatible with the registration to any other PhD program, undergraduate or graduate programs, first or second level master programs, non medical specialization programs, in Italy and abroad, with the exception of joint programs agreements.

Item 8. Attendance

The admission to a PhD program implies an exclusive and full time commitment. The Early Stage Researcher is obliged to attend the training activities and with full commitment to





programs of study and the assigned research activities. The Teachers Board disciplines the attendance modalities of the PhD.

ESRs, as part of their training program, may perform tutoring activities for Bachelor and Master's students as well as integrative teaching activities. The PhD title will be issued at the end of the PhD cycle, once the final examination has been passed implying the submission and the discussion of a written dissertation (thesis) with a scientific research relevance, conducted with method from which important scientific results arise.

The final thesis will be filed in the open access University institutional archive, that will ensure the preservation and public consultation, total, partial, or only in bibliographic data.

Item 9. Tuition fees

All PhD students (assignees and non-scholarships) are required to pay an annual contribution of €156.00

Item 10. Personal data

According To legislative Decree No. 196 of June 30, 2003 ("Code for the protection of Personal data"), and of the general Regulations for the protection of data-EU Regulation 2016/679, the information on the processing of personal data is published on the University website

The university in implementation of the legislation on the subject adopted its three-year plan for the prevention of corruption and appointed the responsible for the prevention of corruption:

<https://www.uninsubria.it/amministrazione-trasparente/disposizioni-general/piano-triennale-la-prevenzione-della-corruzione-e>

Item 11. Reference laws

For everything not specifically included in this competition notice, the University of Insubria complies with the legislation in force and the University regulation for the PhD courses.

Item 12. Recruitment and HRS4R

Recruitment of the ESRs will be in accordance to the European Charter for Researchers (ECR) and the Code of Conduct for the Recruitment of Researchers (CCRR), which provide the overarching framework of guidelines and requirements for the roles, responsibilities and entitlements of such positions, ensuring that selection procedures are open, transparent and merit-based. University of Insubria has been awarded the European Label "HRS4R – Human





Resources Strategy for Researchers” in February 2019, therefore it is fully compliant with art. 32 “Recruitment and working conditions for recruited researchers” of the Grant Agreement signed with European Commission.

For information relating to the competition procedures: scuola.dottorato@uninsubria.it

Varese, *digital signature date*

The Rector
F, to Prof. Angelo Tagliabue
digitally signed

Person in charge of the administrative procedure (L. 241/1990): Dott. Luca Azimonti –
scuola.dottorato@uninsubria.it





Annex 1 to call for the admission to PhD courses – XXXVI cycle

EXPERIMENTAL AND TRANSLATIONAL MEDICINE	
Scientific field:	Medicine; Biology; Biomedicine
Referent:	Prof.ssa Daniela Negrini, daniela.negrini@uninsubria.it
PhD Supervisor	Prof. elena.bossi@uninsubria.it
Duration:	3 years
Department:	Medicine and Surgery
MSCA grants	1
Requirements:	Master's Degree in Biology, Biotechnologies; Pharmacy; Chemistry and Pharmaceutical Technologies, Biophysics, Medicine and Surgery;
Assessment:	Interview
Assessment criteria:	The PhD candidates should consult the webpage of NeuroTrans (www.neurotrans.org) for complete information
Calendar:	Date, time and place will be made public at the following address www.neurotrans.org
Assessable Qualifications	The PhD candidates should consult the webpage of NeuroTrans (www.neurotrans.org) for complete information

