PhD scholarship – European ITN program EBRAMUS - Musical deficit or musical benefit in language impairment

Supervisor: Dr. Daniele Schön; CNRS-UMR 6193, Mediterraean University, Marseille, France

A PhD scholarship (3 years) is available as part of the European research project EBRAMUS (Europe **BRA**in and **MUS**ic). Enrolment as a PhD student will begin in October or November 2010.

EBRAMUS is a consortium of European research centres based in Belgium, France, Germany, Great Britain, and Poland (for further information: http://leadserv.u-bourgogne.fr/ebramus). EBRAMUS offers a unique interdisciplinary graduate programme to study the behavioural, functional, structural, and plastic effects of music on cognitive functions such us language, memory, learning, and motor behaviour through an integrative and interdisciplinary approach. Its goal is to train PhD students in the multidisciplinary aspects of music in rehabilitation, learning, and facilitation of cognitive processes with behavioural and neuroscience (EEG, fMRI, etc.) methods.

As a member of the EBRAMUS project, the PhD will be:

- working in collaboration with the other centres of the network based in Belgium, France, Germany, Great Britain, and Poland.
- participating, together with the 9 other PhD students of the network (1 per team), at 3 workshops and 2 summerschools organized by the EBRAMUS consortium.
- including mobility to at least one other research site up to 6 months.

For details on project, application and eligibility criteria: http://leadserv.u-bourgogne.fr/ebramus
For further information, contact EBRAMUS at: EBRAMUS@gmail.com
Applications should be submitted to: EBRAMUS@gmail.com and schon@incm.cnrs-mrs.fr

NOTE: Applications will be evaluated as they come in, and the position will be open until filled (or at the latest for August 30, 2010).

Project Description

Objective of the PhD research

The PhD project investigates the relation of musical and temporal structures and the influence of metrical structures on language processing.

Methods planned for the PhD research:

Behavioural methods, EEG and fMRI methods with healthy populations and patient populations with language deficits (e.g., cochlear implants, aphasics, basal ganglia)

Expected added value provided by the ITN

Collaborations with network partners with the relevant expertise in language, neuropsychology and EEG (Kotz, Tillmann), as well as access to patient pools (Kotz).

Competences of the candidate:

(in addition to general requirements, see: http://leadserv.u-bourgogne.fr/ebramus)

Required

Master in experimental psychology, neuroscience or neuropsychology.

Preferable

Knowledge of research design, statistical skills, basic programming skills (e.g., MATLAB)

Interest in music and/or language processing

French fluency

Prior experience of EEG/fMRI techniques