Call for Expression of Interest for Postdoctoral Fellow – EUREGIO CIMeC October 2021

Project: How learning maths changes the brain

In the context of the project "*NeuroTrain*", funded by the EUREGIO Science fund, a cross-the-border agency linking together research institutions of Trentino (IT), Alto Adige (IT), and South Tyrol (A), **the general objective of this project** is to investigate the **functional as well as micro-structural plastic changes** occurring in the brain **during learning** to perform **novel mathematical operations** under two different training regimes: language-based rote memorization vs. the use of algorithmic strategies.

Position: A Post-Doc position for 2 years, potentially renewable for the 3rd year

The postdoctoral fellow will contribute with the planning, acquisition, and analyses of longitudinal data acquired from different task-related and resting-state fMRI protocols as well as from high resolution MRI anatomical and diffusion protocols, in healthy human adults, using the research-dedicated 3T Prisma Siemens scanner at CIMeC. The fellow will mainly work at CIMeC in Mattarello (TN), where s/he will be supervised by Prof. Manuela Piazza, head of the Per2Con Group, in close collaboration with Prof. Jorge Jovicich, head of the MRI Methods Group.

The fellow will also interact with the other partners of the *NeuroTrain* project who investigate the behavioral efficacy of learning novel mathematical operations with different learning regimes in young children (University of Bolzano, Italy) and in acalculic adult patients with acquired brain lesions (Innsbruck Medical University, Austria).

The fellow will enjoy the vibrant academic atmosphere of CIMeC, in Trento, Italy, becoming part of a highly motivated, inter-disciplinary and international group of cognitive neuro-scientists interested in unravelling the neural underpinning of different aspects of cognition.

The fellow will also participate in the co-supervision of Master and Trainee students assisting with the project.

Starting date: the tentative starting date is March 2022.

Requirements: Experience with MRI data analysis required. Italian language is *NOT* required.

Contacts: If you want to express your interest in this position and/or ask for more specifications, please contact the PI (Manuela Piazza) including a brief motivation letter: **manuela.piazza@unitn.it**