Five postdoc positions and one PhD position to study neuronal synchronization

Five postdoc positions and one PhD position are available in the lab of Pascal Fries at the F.C. Donders Centre for Cognitive Neuroimaging, Nijmegen, The Netherlands (http://www.ru.nl/fcdonders/staff/neuronal_coherence/pascal_fries/).

We investigate rhythmic neuronal synchronization, its potential functional roles and the mechanisms through which it might subserve these functions. We use primarily magnetoencephalography (MEG, 275 channel CTF system) in humans and large-scale (e.g. 256-site) recordings in awake, behaving monkeys. The centre also provides a 128 channel EEG system, a TMS lab and three MRI systems (1.5, 3 and 7 Tesla), as well as central storage (>30 TB) and compute (>50 nodes) facilities, and these resources are available for the projects.

Two postdoc projects and the PhD project will be concerned with the role of neuronal synchronization, particularly synchronization between brain areas, for attention and related cognitive functions. These projects can use human MEG, monkey neurophysiology or a combination of both, depending on the interests of the applicants.

Two postdoc projects will be concerned with Brain Computer Interfacing (BCI). One of them will use large-scale epidural grid recordings in behaving monkeys to decode movement plans, and the other will develop optimized data analysis for those data.

One postdoc project will use an existing genetic database (>700 subjects) together with MEG to study the genetic basis of the inter-individual variability in the human gamma-band response and its consequences for behavioral performance.

Candidates for the postdoc positions should hold a PhD in a neuroscience related field. For the BCI data analysis project, we also encourage applications from PhDs with a background in signal processing or machine learning, with affinity to neurophysiology. Candidates for the PhD position should hold a master in a neuroscience related field.

For all positions, experience in quantitative data analyses (e.g. MATLAB) is a significant plus. But first and foremost, we are looking for candidates with outstanding track records and a convincing commitment to scientific excellence.

The postdoctoral appointments are inititally for one year, with the possibility of extension by two to four more years. The PhD appointment is initially for 1.5 years, with the possibility of extension by 2.5 more years. Maximal salaries are 4284 €/month for the postdoctoral positions and 2558 €/month for the PhD position.

Candidates should indicate clearly for which position(s) they apply. They should submit
- a detailed Curriculum Vitae, including a list of prior publications and presentations
- a list of university courses followed and marks obtained
- the names and e-mail addresses of two scientists who may be contacted for confidential references

Applications including the above mentioned information can be sent to:
info@fcdonders.ru.nl
or
F.C. Donders Centre for Cognitive Neuroimaging, Mrs. Tildie Stijns, P.O. Box 9101, NL-6500 HB Nijmegen, The Netherlands.

Application deadline: 31 April 2008.