



## Post-doctoral position in computational neuroscience

### Job description

In the context of an ERC Starting Grant (WAVES), Dr. Dugué's lab is looking for a post-doctoral researcher who will develop a computational neural model of brain oscillations, which will be tested against MEG and/or EEG empirical data. The post-doctoral candidate will work under the supervision of Dr. Dugué and will collaborate with Prof. David Heeger (New York University). Previous experience in computational modelling in the field of neuroscience is necessary, and with EEG and/or MEG is appreciated. The post-doctoral candidate will be part of a growing research group focusing on the neural mechanisms underlying the attentional rhythms, using a multimodal approach including behavioral measures, neuroimaging (EEG, MEG, TMS, fMRI) and computational modelling (for more info: <https://duguelaura.wixsite.com/mysite>). He/She will be part of the Vision group of the Integrative Neuroscience and Cognition Center (INCC) of Université de Paris and CNRS and will have access to many training opportunities. The position will be appointed for one year with possibilities for renewal, starting on September 1<sup>st</sup> (flexible).

### Job requirements

- Candidate should be skilled, highly motivated, have excellent communication and organizational skills, able to work independently and as part of a team.
- Candidate must have previous experience in neural computational modelling in the field of neuroscience.
- Candidate must be fluent in programming with Matlab and/or Python.
- Previous experience with EEG and/or MEG will be appreciated.
- An excellent level of English is necessary.

### Vision group of the INCC, CNRS (<https://incc-paris.fr>)

Located in the center of Paris at the Centre Universitaire des Saints Pères in Saint-Germain des Près, the INCC is a research department affiliated with the CNRS and Université de Paris. The INCC breaks barriers between disciplines and addresses the complex functional and neurophysiological aspects of behavior and brain functions, using multimodal approaches including behavior, neuroimaging and computational modelling. INCC researchers come from disciplines as diverse as cognitive sciences, computational neuroscience, movement science, medical science, engineering, physics, neurophysiology and biology.

Research conducted in the Vision Group in particular is aimed at better understanding the mechanisms underlying perception, attention, consciousness and the links between perception and action. Our interests include the properties of visual attention and of spatial maps, visual perception during and across eye and head movements and visual motion perception. We also perform research on hearing and touch, especially their interactions with vision. We deploy multiple techniques including behavioral methods such as psychophysics and eye tracking, computational modelling and brain imaging techniques such as fMRI, EEG, MEG and TMS. We use decoding methods to better understand brain processes and for designing the online control of robotic upper limbs.

### Université de Paris (<https://u-paris.fr/en/498-2/>)

With its exact and experimental sciences, broad and well-established human and social sciences and a strong tradition of work at the interface of disciplines, Université de Paris is fully multidisciplinary, in terms of both training and research. It is a unique university community based on strong values: freedom of thought in study, teaching and research; the service of society and the general interest; openness to the world, the city and the immediate environment; respect and promotion of the well-being of everyone; scientific integrity.

The excellence of its 142 laboratories, associated with French research organizations, makes it a major player in international research. Université de Paris has more than 30 international labs in the fields of health, science and technology, humanities and social sciences, humanities and languages. In March 2018, an international jury appointed by the French government awarded Université de Paris the "Initiative d'excellence" label. This label aims to create 5 to 10 world-class universities in France hence allowing Université de Paris to be a world class research university and one of the leading actors in the evolving landscape of higher education and research in France. Université de Paris will publish no less than one in ten articles in France. 5 % of PhD students in France will come from Université de Paris.

### **Application process**

Applications should be sent to Dr. Dugué directly ([laura.dugue@u-paris.fr](mailto:laura.dugue@u-paris.fr)) and must include a CV as well as three letters of recommendation. We will review applications until the position is filled. Candidates will be short listed based on CV and reference letters. Interviews will be conducted via videoconference.

### **Salary**

The gross monthly salary will be between 2235€ and 2766€ depending on the former research experience. After standard deductions, the net salary will be between 1800€ and 2257€, which includes unemployment insurance, work-site insurance, health insurance and pension plan.