

alliance nationale pour les sciences de la vie et de la santé

> ITMO Neurosciences, sciences cognitives, neurologie, psychiatrie



POST-DOC

 Postdoctoral Position in Neuroscience Paris Seine, CNRS UMR 8246, INSERM U1130

Postdoctoral position is open to join the team « Axonal growth and regeneration » at the department « Neuroscience Paris Seine, CNRS UMR 8246, INSERM U1130 : http://www.ibps.upmc.fr/fr/Recherche/umr-8246

Institute of Biology Paris Seine (IBPS), (http://www.ibps.upmc.fr/fr),

University Pierre et Marie Curie, in the heart of Paris, Latin quarter.

Profile: We are looking for experienced neuroscientist to join our team investigating molecular and cellular mechanisms underlying axon regeneration and developing therapeutic strategy for spinal cord injury.

The post-doc should have a PhD in neuroscience with good skills in surgery of rodent experimental model, histology and behavior tests for functional sensory-motor recovery. The post-doc will be involved in a recently developed therapeutic strategy in rodent animal model for spinal cord injury repair, based the use of scaffold biomaterials.

Finding, is available for a period of one year that could be renewed. The position is open from now to March/1st 2015. There is no nationality restriction

Application, including CV, detailed statement of skills and research interest, list of publications, and 2-3 references, should be sent to: Fatiha Nothias, CNRS Research Director, team leader: <u>Fatiha Nothias</u>, Phone: +33144275975

A post-doctoral position at junior or senior level is currently open at the INCIA (CNRS and University of Bordeaux), part of the consortium CNSAflame (ERANET NEURON).

This three-years position is funded by ERA-NET NEURON (Network of European Funding for Neuroscience Research) with a possible starting on March. 1st 2015. The collaborative project between 5 European teams is focusing on neuroinflammatory mechanisms of chronic neurodegeneration and cognitive decline following traumatic brain injury.

This project will be conducted within the dynamic environment of the Aquitaine Institute for Cognitive and Integrative Neuroscience (INCIA, http://www.incia.u-bordeaux1.fr). Eleven researcher teams covering cognitive and integrative neurosciences from the molecular and cellular levels to cognition, including human clinical studies, compose this institute. INCIA is affiliated both with CNRS and the University of Bordeaux.

The ideal candidate would be a recent Ph.D. or M.D./Ph.D. with a background in rat or mice TBI model surgeries and/or some experience with molecular biology, biochemistry and immunohistochemistry techniques. Some experience in animal behavior and/or MRI would be appreciated. Qualified applicants will demonstrate evidence of strong language and writing skills in English as well as the ability to work in a diverse and collaborative research and training environment. Please send a complete resume, motivation letter and contact information of two references to Dr Jerome Badaut .

Post-doc Position Offer in the frame of the AMIDEX Grant

Position: A post--• doctoral position for an enthusiastic and highly motivated individual is available for 18 months (starting March 1rst 2015) in the research team Sensory Processing and Neuroplasticity at the Laboratory of Integrative and Associative Neuroscience (UMR7260 CNRS-AMU) in Marseille, France.

Vestibular Project: Pathophysiology: Mechanisms Markers and Vestibular pathologies are characterized by unpredictable episodes of vertigo accompanied by postural imbalances and loss of gaze fixation during movement. They are often accompanied by dizziness and nausea These pathologies can be highly disabling. When recurrent, they may conduct to psychological and social isolation. Because of their high prevalence, vestibular disorders constitute a significant Burden to our health care system. Therapeutic solutions to these pathologies lack specificity and This relies both on the lack of knowledge of the pathophysiological Mechanisms underlying different vestibular disorders and on the lack of biomarkers to discriminate

vestibular impairments and properly direct therapeutic approaches. Present project associates research teams expert in the study of vestibular physiology and pathophysiology and displaying multidisciplinary approaches to decipher how a vestibular insult Develops into the inner ear and how it governs the heterogeneity of the vertigo symptoms. In turn it ambitions to identify specific biomarkers of the different types and stages of acquired vestibular disorders. The project is based on the development of original animal models of vestibular disorders encountered in human and on the full exploration of the sequence of histological and functional alterations that occur over a one week alter the insult initiation period that recapitulate the main vertigo symptoms encountered both in human and animal models.

Mission: In close collaboration with members of Dr C Chabbert research group, the postdoc will be in charge of developing vestibular insults in adult mice and studying the development of evoked vestibular disorders through specific behaviour tests. He will use DNA micro--• array approach to study alterations of the gene Expression in Scarpa's ganglion and vestibular endorgans during development of the insults. The postdoc, will study the functional consequences of the evoked vestibular insults on the vestibular nerve excitability through patch- clamp recordings in isolated vestibular primary neurons and multiunit extracellular recordings on vestibule explants.

Candidate profile: Candidates should have strong background in molecular electrophysiology and cell culture experience in animal behaviour is welcome. Applicants should have a Ph.D. Degree in Neuroscience or Biomedical Sciences.

Procedure: Please send an email with a CV and two letters of recommendation to: <u>Christian CHABBERT</u>, PhD, Laboratory For Integrative And Adaptative Neurosciences CNRS UMR7260 Marseille

Postdoctoral Fellow in Neuroscience at Neurocampus Bordeaux, France

We are currently accepting applications for a 2-year-funded postdoc research position (possibility for an extension) for a collaborative project of the labs of Andreas Frick and Bruno Bontempi. The goal of this project is to identify the neurons engaged in recent and remote memory formation in the neocortex and to investigate and probe the neuronal mechanisms underlying memory formation. For relevant literature please see (Zhang et al. & Frick, 2014, Nature Neuroscience; Frick et al., 2004, Nature Neuroscience; Lesburguères et al. & Bontempi., 2011, Science; Frankland & Bontempi, 2005, Nature Reviews Neuroscience).

Bordeaux is one of the foremost centers for neuroscience in Europe, and has recently been named one of the few centers of excellence in neuroscience by the National Research Agency in France. Both host labs are participants in this consortium and part of the Neurocampus consisting of three institutes that are connected to each other and that provide a very dynamic and international environment.

Application requirements We are seeking a candidate with a PhD or MD/PhD degree in the fields of neurobiology, biophysics, medicine, or related field with a demonstrated record of

achievements and publications. Candidate must be highly motivated to perform challenging experiments combining opto-/pharmacogenetics, electrophysiological and biochemical approaches with behavioral learning tasks.

How to apply information: Please Andreas Frick with following apply to the CV with list of talks and publications a Brief (1 page) of previous research summary Brief statement of current research interests - Contact information of three referees

Contact information : <u>Andreas Frick</u>, Neurocentre Magendie, INSERM U862, 33077
Bordeaux : <u>http://www.neurocentre-magendie.fr/NCM_Pages/Equipes/eq_frick/UK_equipe_frick.php</u>

<u>Bruno Bontempi</u>, Institute of Neurodegenerative Diseases, CNRS UM 5293, 33077 Bordeaux : http://www.imn-bordeaux.org/index.php?option=com_content&view=article&id=28&lang=en

 Postdoctoral Researchers – Electrical signatures of Autism during delivery and development - Institut de Neurobiologie de la Méditerranee (Inmed)/Neurochlore, South of France

The team of Yehezkel Ben-Ari at Inmed (INSERM) and Neurochlore (a start-up company located in the same Institute) have made important discoveries on the alterations ofintracellular chloride in neurons associated GABA excitatory/inhibitory shifts during delivery and in pathological disorders such as epilepsies and autism (Nardou et al Brain 2011, Tyzio et al., Science, Eftekhari Science 2014). al.. administration of the diuretic bumetanide to 2 animal models of autism shortly before delivery attenuated the severity of the syndrome in off springs stressing the importance the pathogenesis in of These observations have led to a neurochlore sponsored successful double-blind randomized clinical trial inautism using the diuretic bumetanide known to produce an excitatory/inhibitory shift of GABA (Lemonnier et al., Translational Psychiatry, 2012). The team of Yehezkel Ben-Ari at Inmed is looking for 2 post-doctoral candidates with Neurophysiology significant experience having electrophysiological/anatomical and/or imaging techniques to determine the properties of ionic currents and network patterns in immature neurons.. The positions are funded up to Highly motivated scientists are welcome to apply with a letter of intent and a short CV. The jobs will be based at the Inmed in the scientific campus of Luminy (Marseille, France).

Please send your full application (in one pdf document) to <u>Yehezkel Ben-ari</u>. For further information on INMED visit our website http://inmed.coraxis.pro/ or http://www.neurochlore.fr/fr/

POSTDOCTORAL POSITION IN CELLULAR AND SYSTEM NEUROSCIENCE

Applications are invited for a 2-3-year postdoctoral position to study the contribution of neuronal chloride homeostasis to hippocampal rhythmogenesis at the Institut du Fer à Moulin [18] (IFM).

IFM is a research institute located in the center of the Quartier Latin in Paris and is devoted to the study of the development and plasticity of the nervous system. It hosts 7 research teams using multidisciplinar approaches from molecules to behavior and advanced technological platforms including imaging (confocal, 2 photon, PALM/STORM...) and complete behavioral phenotyping.

Our team combines advanced imaging techniques with both in vitro and in vivo electrophysiology to explore the consequences of altered GABA signaling in hippocampal epileptogenesis. We currently seek a highly motivated and experienced postdoctoral fellow join project aiming at understanding how alterations in chloride transport affects hippocampal rhythmogenesis seizures and cognitive deficits. to promote The position is funded by the Human Frontier Science Program (HFSP) and the Fondation pour la Recherche Médicale (FRM). It is available for 2-3 years, starting in January-March 2015.

The successful candidate will perform i) viral transduction in rats to manipulate chloride transporter expression in vivo and ii) behavioral assays combined with in vivo (EEG) and in vitro (patch-clamp) recordings to evaluate the functional impact of these manipulations. Candidates should be experienced in vitro or in vivo electrophysiologists. Some experience in animal behavior and surgery would be appreciated. Please send a complete resume, motivation letter and contact information of two references to Jean Christophe Poncer.

Post-doctoral position in neuroscience - Center for Interdisciplinary Research in Biology (Collège de France, Paris, France)

A 2-year post-doctoral position is open at the Center for Interdisciplinary Research in Biology (Collège de France, Paris, France) in the team « Junctional communication and interaction between glial and neuronal networks » headed by Dr. C. Giaume. This team focuses on the role of astroglial connexins (Cxs), membrane proteins forming gap junction channels and hemichannels, in physiological and pathological situations.

The proposed post-doctoral project aims at understanding the contribution of astroglial Cxs to neuronal dysfunction in a murine model of Alzheimer's disease (AD), the APPswe/PS1dE9 mouse. Since in these mice, hemichannels are chronically activated allowing for gliotransmitter release, the consequences on neuronal function and

behavioral performances of APPswe/PS1dE9 mice in which hemichannel activity is suppressed will be investigated.

This project will be conducted in collaboration with the team of Dr L. Rondi-Reig (UPMC, Paris, France) for the behaviour Candidates with previous experience in behavioural tests and electrophysiology should send their CV, motivation letter and at least one letter of reference to Annette Koulakoff

The grant is supported by LECMA. The position begins in january 2015.

 Post-doctoral position Neural stem cells microgenomics - A post-doctoral position at junior or senior level is currently open at the NeuroPSI Institute (CNRS and Paris-Saclay University), in collaboration between the research teams of Jean-Stéphane Joly and Laure Bally-Cuif.

This position is funded for one year by the Paris-Saclay Idex, starting on Jan. 1st, 2015.

Our teams are focusing on the biology of neural stem cells, using the zebrafish model (Danio rerio). Teleost fish have the incomparable advantage of maintaining high numbers of active neural stem cells in their adult brain, and we have developed transgenic lines specifically highlighting these stem cells in several brain subdivisions. The proposed microgenomics post-doctoral project will aim to characterize the genome active sites of different neural stem cell subtypes (radial glia or neuroepithelial cells) in different states (quiescent or activated) and different brain territories (forebrain, midbrain). This comparative approach will permit a first identification of the epigenetic signature underlying the specific properties of these stem cells within the mature brain.

This project will be conducted within the dynamic environment of the new NeuroPSI Institute, which will open on Jan 1st, 2015. This Institute unites 29 research teams focusing on the biology of the nervous system, from its embryonic development to the generation of its emerging properties and the computation of its circuits.

Key necessary expertise: excellent theoretical and experimental knowledge of state-ofthe art molecular biology and biochemistry techniques, especially re. the analysis of chromatin marks. Additional relevant expertise: cell sorting, bioinformatics and genome analysis.

Websites of the host teams: http://www.inaf.cnrs-gif.fr/ned/equipe01/accueil_01.html et http://www.inaf.cnrs-gif.fr/ned/equipe08_eng/accueil_08.html

Contact : please email your CV, your motivation letter and at least one letter of reference simultaneously to both addresses: <u>Jean-Stépahne Joly</u> et <u>Laure Bally-Cuif</u>

 Post-doc position at Neurospin, Saclay (France) to collaborate to the highresolution human brain mapping subproject of the Human Brain Project, in collaboration with S. Dehaene and B. Thirion

Postdoctoral position in neurophysiology (dopamine and synaptic plasticity).

Applications are invited for a 3-year postdoctoral position to study dopamine modulation of calcium influx underlying synaptic plasticity, at the Center for Interdisciplinary Research in Biology (College de France, Paris, France). We are seeking a highly motivated and talented research candidate to work on a project concerning the pathophysiology of dopamine and its impact on calcium influx in striatal neurons underlying corticostriatal synaptic plasticity. The position is funded by the National Agency for Research (ANR) associated with the National Science Foundation (NSF) in the NSF program Partnerships for International Research and The available Education. position is for vears. The successful application will perform 2-photon imaging (Trimscope II, LaVision) combined with patch-clamp experiments with optogenetics first in acute brain slices and in a second step an upgrade to in vivo experiments would be developed. Center for Interdisciplinary Research in Biology of the College de France is home to a collegial, interdisciplinary and vibrant neuroscience community and has excellent research facilities. Candidates, preferably with a previous experience of in 2-photon imaging and electrophysiology (patch-clamp), should send their CV, brief statement of research interests contact information of two references and representative publications to:

Postdoctoral Positions (Multi-Modal Brain Analysis)

Laurent Venance

Postdoctoral research opportunities are available in the area of biomedical signal treatment at the Inserm Group (Inserm U 1105) in the University Hospital of Amiens, France.

The GRAMFC U1105 constitutes a competitive multidisciplinary team of around 20 peoples allowing strong interactions between clinical and fundamental neurophysiologists, neuropaediatricians, and specialists in signal processing. The group is well implanted in the University Hospital for clinical evaluation through the clinical unit of Exploration Fonctionnelles du Système Nerveux pédiatrique and is also localized in the Faculty of medecin for signal treatment and more fundamental study on animal models. The GRAMFC is the only group in France to develop tools for high-resolution electric imaging (EEGHR) coupled with high-resolution optical imaging (HR NIRS) applied to children and newborns at a moment where it has to be considered as an emerging approach in the field of neurosciences. In this, they were the first to publish results about the relationship between electric and local hemodynamic activity during seizures or during interical spikes. This group participates in a new upcoming field investigating mechanisms at the origin of physiological and pathological neuronal synchronization during development. Translational research on neurovascular coupling is supported by the use of preclinical research in rodents. The U1105 developed different patents for simultaneous EEG NIRS acquisition and is at the origin of the development of Medelopt, spin off of the U 1105. Collaborations with Neurospin (Orsay, France), University of Montréal (Canada) and Illinois (USA) are among the most important.

Candidate Profile

Candidates with an advanced background and experience/interest in signal treatment are sought to join leading efforts in the development and application of advanced electrophysiological and optical imaging approaches such as High density EEG/Near infra-red spectroscopy. Application areas include the clinical translation of multimodality imaging of the brain function and disorders, the diagnosis of neurovascular disease in children and premature. The candidates will actively participate in the international cooperations and in the encadrement of PhD students. will have present its work in international to Requirements:

PhD (or equivalent) in strong backgrounds in Biomedical Engineering, Physics, Medical Physics, Computer Science, Electrical Engineering, Optics, or closely related fields is required. Advanced programming skills in Matlab. Familiarity with multimodal image reconstruction/visualization and light propagation models is preferred. To

Interested candidates should send their detailed CV, a cover letter describing training and research experience, and names and contact information of three referees. Send correspondence via email to Pr. Fabrice Wallois with the subject line: Postdoctoral application in cortical signal treatment. Salary

The grant is supported by Inserm and Region Picardie. The amount is 2539,39EUR brut per month.

ACCUEIL D'EQUIPE

 Institut Pasteur - Creation of new research groups in the department of Neuroscience

The Department of Neuroscience at Institut Pasteur launches a call for junior, midcareer and senior group leaders.

Institut Pasteur is located in central Paris and offers an outstanding and unparalleled research environment through its state-of-the-art research laboratories with integral biological services capability, cutting-edge scientific equipment, and technologically-advanced platforms.

Within this campus, the major focus of the Department of Neuroscience is the elucidation of genetic (and epigenetic), molecular, cellular and circuit mechanisms underlying the neural basis of behavior. Further information can be found on the Departmental website: http://www.pasteur.fr/en/research/neuroscience. Detailed description of the Institute and on-campus facilities can be found at: http://www.pasteur.fr/en.

We encourage applications from outstanding individuals interested in the development, plasticity, computational and pathophysiology of sensory and cognitive circuits in mammalian brain (rodents to humans). Applications will be evaluated on the basis of scientific excellence. Successful candidates will be appointed with a

permanent position. In addition, highly attractive packages to match the experience of the candidate will be provided, including institutional salaries (principal investigator, technician, secretary, post-doctoral fellows), a substantial contribution to running costs and equipment, access to on campus state-of-the-art technology core facilities, as well as support for relocation expenses and administrative issues.

Applicants should provide a letter of intent (LOI) in a single PDF file (in order):

1. A brief introductory letter
2. A Curriculum Vitae, 10 most important publications and a full publication list
3. A description of past and present research activities (up to 2 pages with 1.5 spacing;
Times 11 or Arial 10 font size).
4. The proposed research project (up to 2 pages with 1.5 spacing; Times 11 or Arial 10 font size).

A pdf copy of the LOI should be electronically submitted to neuroloi@pasteur.fr no later than December 30, 2014 by 5:00 pm (Central European Time). Shortlisted applicants will be notified by e-mail by February 1st 2015. A complete application will be requested and due for submission by mid-March 2015. Applicants will be invited for interview to take place at the end of April 2015.

FINANCEMENTS / BOURSES

 L'Académie des sciences décerne des Grands Prix scientifiques, qui relèvent des disciplines suivantes: Chimie; Biologie moléculaire et cellulaire, génomique; Biologie intégrative; Biologie humaine et sciences médicales et leurs applications.

Des appels à candidatures pour l'année 2015 sont lancés pour l'attribution des Grands Prix dans le domaine des sciences chimiques, biologiques, médicales et leurs applications (Grand Prix Madame Victor Noury – Grand Prix Mergier Bourdeix – Grand Prix Emilia Valori pour l'application des sciences).

Le détail des appels à candidatures et formulaires sont consultables sur le site Internet de l'Académie des sciences aux adresses suivantes :

- Grand Prix Madame Victor Noury : http://www.academie-sciences.fr/activite/prix/gp_noury.htm
- Grand Prix Mergier Bourdeix : http://www.academie-sciences.fr/activite/prix/gp_mergier.htm
- Grand Prix Emilia Valori pour l'application des sciences : http://www.academie-sciences.fr/activite/prix/gp_valori.htm

Si vous souhaitez nous faire des propositions pour ces Grands Prix scientifiques, les dossiers de candidature doivent être adressés par courrier électronique à Sandrine

<u>Chermet</u> et <u>Muriel Touly</u> en un fichier unique (format PDF) et par courrier postal avant le 12 février 2015 à l'adresse ci-dessous:

Académie des sciences

Service des séances et des Prix

23, quai de Conti – 75006 Paris.

Les informations concernant les conditions de nominations à ces prix peuvent être également téléchargées sur le site Internet de l'Académie des sciences à l'adresse suivante : http://www.academie-sciences.fr/activite/prix.htm

Fondation Thierry Latran

Financer la recherche fondamentale, appliquée et clinique ayant un bénéfice potentiel pour traiter la Sclérose Latérale Amyotrophique sporadique : http://www.fondation-thierry-latran.org/recherches-financees/7eme-appel-a-projets/

Sélection en deux étapes : Deadline des abstracts : 18 décembre 2014 Deadline projets après sélection : 26 mars 2015

- **IREB** (Institut Recherches **Scientifiques Boissons** de sur les Prix Vachonfrance (2 de thèse Gérard 000 d'infos euros) Deadline: 31 décembre 2014
- Fondation NRJ : http://prod-nrjfond.integra.fr./
 Subventions 2015. Appels d'offres : "Optogénétique et système nerveux"
 Prix scientifique 2015 : "Neuro-imagerie fonctionnelle"
 Deadline : January 10, 2015

Retina France

Promouvoir la recherche et ses applications thérapeutiques dans le domaine des dégénérescences rétiniennes, et autres affections visuelles entrant dans le cadre des maladies rares : http://retina.fr/spip.php?article30

Deadline: 16 Février 2015

Pain Relief Foundation

Fund research on the mechanisms and/or relief of human chronic pain

Grants

Prize PhD Studentship http://www.painrelieffoundation.org.uk/docs/20141027E.pdf

Deadline: 16 Janvier 2015