



## Detailed program of the UE NeuroConferences 2021

*Organized by the Master 2 NFC of UCB Lyon 1 - with the support of Labex Cortex*

Please note that a valid sanitary pass is required to access the Neurocampus-Michel Jouvét building (Centre Hospitalier Le Vinatier - Bâtiment 462 - Neurocampus Michel Jouvét, 95 boulevard Pinel, Bron) and the IDEE building (Institut des Epilepsies, 59 bd Pinel, Bron).

As of September 3<sup>rd</sup>, there is no limitation of the number of people allowed to attend. However, this may evolve depending on the evolution of the sanitary situation. Information will be updated on the M2 website.

(<https://masterneuro.univ-lyon1.fr/paths/m2nfc-main/m2nfc-conferences/>).

<b>Pathophysiology of Parkinson's disease: from the clinic to animal models.</b>			Organizer: <b>Dr. Véronique Sgambato</b>  veronique.sgambato@inserm.fr; veronique.sgambato@isc.cnrs.fr
<p><i>Parkinson's disease (PD) is a neurodegenerative disorder characterized by cardinal motor symptoms, secondary to basal ganglia dysfunction. Often in early stage of the disease, a large number of PD patients experience non-motor symptoms (NMS), which have a strong impact on quality of life, and are recognized as a major challenge in the treatment of PD. Indeed, NMS are refractory to conventional antiparkinsonian therapies, such as L-DOPA, the gold-standard medication for PD motor deficits. At late stage of the disease, side-effects of dopamine-replacement therapies emerge and deep brain stimulation might be proposed as an alternative therapeutic approach. The emergence of wide symptoms during the disease correlates with the depletion of dopamine together with the dysfunction of other neurotransmission systems such as acetylcholine and serotonin and the widespread aggregation of alpha-synuclein. These different aspects will be presented at both clinical and preclinical levels.</i></p>			
Mon 04/10	14.00- 16.00	<b>Pr. Elena MORO</b> ( <i>Grenoble Institut des Neurosciences</i> ) Title: Clinical, pathophysiological and therapeutic aspects of Parkinson's disease.	<b>Visioconference</b> Amphi Neurocampus
Wed 06/10	11.00- 13.00	<b>Dr. Benjamin DEHAY</b> ( <i>Institute of Neurodegenerative Diseases, Bordeaux</i> ) Title: Alpha-Synuclein: function, characteristics and impacts.	Amphi Neurocampus
Thu 07/10	14.00- 16.00	<b>Dr. Nicolas MAURICE</b> ( <i>Institut de Biologie du Développement de Marseille</i> ) Title: Innovative approaches to the study of cholinergic interneurons in the pathophysiology of Parkinson's disease.	Amphi Neurocampus
Fri 08/10	15.00- 17.00	<b>Dr. Analia BORTOLOZZI</b> ( <i>Institute of Biomedical Research of Barcelona, Spain</i> ) Title: The emotional circuit affected in PD: role of the serotonin system.	<b>Visioconference</b> Amphi Neurocampus



## Detailed program of the UE NeuroConferences 2021

<b>Language in the sensorimotor brain</b>			Organizers: <b>Dr. Claudio Brozzoli &amp; Dr. Véronique Boulenger</b> claudio.brozzoli@inserm.fr	
<i>We aim to give an overview of the links existing between language and the sensorimotor system, presenting the most recent findings about how sensorimotor functions and activity contribute to and allow language as a faculty to emerge.</i>				
	We 6/10	15.30- 16.30	<b>Dr. Sophie BOUTON</b> ( <i>Laboratoire Dynamique du Langage, Lyon</i> ) Title: Learning to speak through sensorimotor interactions	Amphi Neurocampus
	Mon 11/10	15.30- 16.30	<b>Dr. Marie MONTANT</b> ( <i>Laboratoire de Psychologie Cognitive, Marseille</i> ) Title: Role of the domain-general cognitive components shared by baboons and humans	Amphi Neurocampus

<b>Changing scales in Neural Stem Cells research</b>			Organizer: <b>Dr. Olivier Raineteau</b> olivier.raineteau@inserm.fr	
<i>The main aim of this course is to understand how changing scale (from tissue to cellular populations to single cells) influences our understanding of biological processes. To this end, we will focus on neural stem cells and brain development. We will introduce the concept of neural stem cells as well as the general principles of mammalian forebrain development. We will then discuss recent technical advances allowing one to study neural stem cells at different scales in histology and transcriptomic, as well as the interest of using reductionist or integrated models. We will finally discuss strengths and limits of these approaches and comment on their complementarities in exploring fundamental biological questions.</i>				
	Wed 13/10	11.00- 13.00	<b>Dr. Colette Dehay / Dr. Florence Wianny</b> ( <i>Stem cell and Brain Research Institute, Lyon</i> ) Title: Specific features of cerebral cortex development in primates	Amphi Neurocampus
	Fri 15/10	09.00- 11.00	<b>Dr. Ludovic Telley</b> ( <i>Ecole Polytechnique Fédérale de Lausanne</i> ) Title: Probing neural progenitor's heterogeneity and dynamics with transcriptomics	Amphi Neurocampus
		11.00- 13.00	<b>Dr. Jean Livet</b> ( <i>École des Neurosciences Paris Île-de-France</i> ) Title: Tracing cell lineage in the nervous system: past, present and future	
		14.00- 15.00	<b>Dr. Olivier Raineteau</b> ( <i>Stem cell and Brain Research Institute, Lyon</i> ) Title: Changing scale and its impact on our understanding of biological processes	



## Detailed program of the UE NeuroConferences 2021

<b>Learning, memory consolidation, and (local) sleep</b>		Organizers: <b>Dr. Deszo Nemeth &amp; Dr. Romain Quentin</b> nemethd@gmail.com romain.quentin@inserm.fr	
<p><i>Implicit learning and non-declarative memory occur when information is acquired from an environment of complex stimuli without conscious access either to what was learned or to the fact that learning occurred. In everyday life, this learning mechanism is crucial for adapting to the environment and for predicting events unconsciously. This fundamental learning underlies not only motor but also cognitive and social skills; it is therefore an important aspect of life from infancy to old age. Moreover, this kind of learning does not occur only during practice, in the so-called online periods, but also between practice periods, during the so-called offline periods. The process that occurs during the offline periods is referred to as consolidation. Understanding the multiple aspects and influencing factors of consolidation can help us to reveal the nature of memory and changes in brain plasticity. Our NeuroConf focuses on how consolidation varies with factors such as the length of offline periods, the effect of sleep, and the age of participants. We highlight that consolidation is not a single process; instead, there are multiple mechanisms in the offline period, which are differently influenced by these factors.</i></p>			
Mon 18/10	09.00-12.00	<b>Pr. Deszo Nemeth</b> ( <i>Centre de Recherche en Neurosciences de Lyon</i> ) Title: Learning and memory consolidation	Amphi IDEE (Inst. Des Epilepsies, 59 bd Pinel, Bron)
	12.00-13.00	Discussion	
Wed 20/10	9.00-11.00	<b>Dr. Romain Quentin</b> ( <i>Centre de Recherche en Neurosciences de Lyon</i> ) Title: Short-scale dynamics of learning and consolidation	Amphi IDEE (Inst. Des Epilepsies, 59 bd Pinel, Bron)
	11.00-12.00	Discussion	
Thr 21/10	9.00-10.30	<b>Dr Peter Simor</b> ( <i>Université Libre de Bruxelles and Eotvos Lorand University, Budapest</i> ) Title: The microstructure of sleep facilitating disconnection, monitoring, and internal processing	Amphi Neurocampus
	11.00-12.30	<b>Dr Peter Simor</b> ( <i>Université Libre de Bruxelles and Eotvos Lorand University, Budapest</i> ) Title: The heterogeneity of REM sleep: phasic and tonic REM microstates	