

Scientific Programme

Wednesday, 19. May 2021

PLENARY LECTURE / CONFÉRENCE PLÉNIÈRE
09:00 - 09:30

Channel 1

PL01, Plenary Lecture / Conférence plénière

Chairs:

A.-L. Boutillier
L. Buée

How life experiences leave traces in descendants: Epigenetic mechanisms in the germline. / Comment les expériences de la vie laissent des traces dans la descendance : Mécanismes épigénétiques dans la lignée germinale.

I. Mansuy (Zurich)

09:00 - 09:20

Discussion

09:20 - 09:30

POSTER SESSION / COMMUNICATIONS AFFICHÉES
09:30 - 10:30

ePosters sessions

P1, Poster session 1

The ePosters are available 24/24 during the whole time of the conference, however, a one-hour time block is dedicated to live discussions with the authors.

Epigenetic control of brain wiring: role of axonal miRNAs in fetal alcohol spectrum disorders
M. Altounian (Marseille)

Functional impact of Tcf12 inactivation in glioma cells of origin and gliomagenesis
S. Archontidi (Paris)

Homeostatic plasticity at the neuromuscular synapse
T. Bal (Gif-sur-Yvette cedex)

Imaging biomarkers and language development in children with neonatal stroke
I. Ben Abdallah (Strasbourg)

Myelination of parvalbumin interneurons shapes inhibitory circuits and cortical function
N. Benamer (Paris)

Modelling the Midbrain-Hindbrain boundary using human pluripotent stem cells
C. Boissart (Corbeil-essonnes)

Functional characterization of TRIO variants associated with distinct, domain-specific neurodevelopmental disorders
M. Bonnet (Montpellier)

Perinatal exposure to TiO₂ nanoparticles induces long term anxiety and social interaction deficits in the offspring of mice.
M. Boulain (Bordeaux Cedex)

Structural brain plasticity upon learning is affected by imidacloprid in honey bees
A. Cabirol (Lausanne)

Scientific Programme

Galvanotropism enables navigating axons to locate

S. Calvet (Lyon)

Migration of projecting neurons in embryonic neocortex requires SELENOT expression

E. Carpentier (Mont-Saint-Aignan)

Gephyrin interacts with the K-Cl co-transporter KCC2 to regulate its surface expression and function in cortical neurons

S. Al Awabdh (Paris)

Importance of Calcium homeostasis in Axonal Mitochondria

A. Amrapali Vishwanath (Paris)

In vitro experimental design to study axonal behavior after a traumatic injury

T. Andriot (Paris)

Studying the interaction between alpha-synucleinopathy and mitochondrial dysfunction in a neuronal in vitro model of Parkinson's disease

N. Asfogo (Paris)

Evaluation of astrocytes morphology in tauopathies

E. Augustin (Fontenay-aux-Roses)

The role of RXR γ in T3-mediated oligodendrocytes maturation.

V.A. Baldassarre (Illkirch-Graffenstaden)

Effects of nutritional status on hypothalamic glial hemichannels activity

M. Barbot (Marseille)

Effects of Gamma oscillations entrainment by visual stimulation on behavioral performances and global brain network dynamic in a new mouse model of Alzheimer's disease

M. Aguilera (Strasbourg)

Striatal procedural memory-induced transcriptome and epigenome are severely impaired in Huntington's disease mice

R. Alcalá Vida (Strasbourg)

Stroke-related alterations in inter-areal communication revealed via Granger causality analysis.

M. Allegra (Marseille)

EEG and behavioral correlates of intermodal time prediction in a motor task

A. Arrouet (Strasbourg)

Epileptiform events in the Tg2576 mouse model of Alzheimer's disease worsen during REM sleep but not with age: involvement of monoaminergic transmission

A. B. Szabo (Toulouse)

Functional integration of grafted hiPSC derived dopamine neurons in a murine model of Parkinson's disease

B. Ballion (Poitiers)

Gene Therapy For Spinocerebellar Ataxia 7: Restauring Cholesterol Metabolism

E.-G. Banchi (Paris)

The physical activity reduces the brain irradiation-induced skeletal muscle damage in the rat

J. Bécam (CAEN)

Scientific Programme

Role of the amygdalo-cingulate pathway in depression, chronic pain and their comorbidity

L. Becker (Strasbourg)

Contribution of the adipocyte hormone leptin in the pathogenesis of Rett syndrome

Y. Belaidouni (Marseille Cedex 9)

The potential of motor cortical neurons derived hiPSC transplantation for brain repair following traumatic brain injury

L. Belnoue (Poitiers)

Targeting psychiatric symptoms in Alzheimer's disease through local induction of astrocyte JAK2-STAT3 pathway

L. Ben Haim (FONTENAY-AUX-ROSES)

An inhalation study combining nanoTiO₂ and Paraquat exposure in a transgenic mouse model of Parkinson's disease: a novel approach to study nanopesticides impact on brain function

A. Bencsik (Lyon)

Perineuronal net formation during a transient stay in an enriched housing is necessary for cognitive improvements of the Tg2576 mouse model of Alzheimer's disease

G. Bouisset (Toulouse)

The rostromedial tegmental nucleus in hedonic feeding: A role for sucrose versus fat preference?

R. Bourdy (Strasbourg)

Blocking A β -VEGF interaction in Alzheimer's disease models : consequences on A β toxicity

P. Bouvet (Lyon)

Potential of dopamine neurons derived from human induced pluripotent stem cells reprogrammed by mRNA for Parkinson's disease

S. Brot (Poitiers)

The enzymes of nuclear Acetyl-coa synthesis as potential key factors for striatal histone dysregulation in Huntington's disease

B. Brûlé (Strasbourg)

Molecular and cellular bases of cortical hyperexcitability in a mouse model of amyotrophic lateral sclerosis: the noradrenergic contribution

A. Brunet (Strasbourg)

Pathophysiological context shape serotonin descending control of nociceptive transmission

F. Aby (Bordeaux)

mTORC1 signaling and microglia in obesity

C. Allard (Bordeaux)

Accessing prefrontal cortex attention information is biased by neural states associated with levels with distractibility and impulsivity

J. Amengual (BRON CEDEX)

Does sucrose or alcohol bingeing modulate nociceptive sensitivity ?

G. Awad (Strasbourg)

Transformation of population representations of sounds throughout the auditory system

S. Bagur (Paris)

Scientific Programme

Anatomical and functional relationship of Locus Coeruleus and trigeminocervical complex in male and female rats.

M. Barnet (Clermont-Ferrand)

Characterization of functional vestibulospinal pathways in the larval *Xenopus laevis*

G. Barrios (Bordeaux)

Entrainment of brain circadian clocks by light, food and exercise

N. Billon (Strasbourg)

Suppressive waves influence the spatial representation of apparent motion in awake monkey V1.

K. Blaize (Marseille)

Autonomic regulation at rest in children and adults with Autism Spectrum Disorder

M.R. Bufo (TOURS)

Oxytocin neuromodulation of cardiorespiratory coupling

J. Buron (Marseille)

Daily and circadian profile of tph2 mRNA expression within Raphe nuclei in a diurnal rodent, *Arvicanthis ansorgei*

R. Caputo (Strasbourg)

Identification of the mesencephalic locomotor region in larval zebrafish and its functional coupling to V2a reticulospinal neurons.

M. Carbo-Tano (Paris)

Anatomy of the OXT system in non-human primates

A. Ameloot (Bron)

Epigenetic modifications linked to memory impairments induced by a high-fat diet during adolescence

A. Bora (Bordeaux)

Expression of atypical chemokine receptor 3 and CXCL12 in reactive astrocytes

M. Coray (Basel)

Representation of spatial relations between multiple faces, bodies or people in the visual cortex

E. Abassi (BRON)

Behavioral effect of selective deletion of beta2* nicotinic acetylcholine receptors in neuropeptide Y expressing interneurons

A. Abbondanza (Prague)

Peptidergic control of pain: modulation of descending pathways by the relaxin systems

C. Alkhoury Abboud (BORDEAUX)

Intermittent working memory training protects from age-related decline of spatial memory in rats.

A. Barbelivien (Strasbourg)

The valence bias in healthy and impaired reinforcement learning: a meta-analysis

S. Bavard (PARIS)

Counting flies: Evidence of numerical discrimination in *Drosophila melanogaster*

M. Bengochea (Paris)

Scientific Programme

Responsiveness of dentate neurons generated throughout adult life is associated with resilience to cognitive aging

N. Blin (Bordeaux Cedex)

No role for the thalamic reuniens and rhomboid nuclei in spatial memory encoding.

L. Boch (Strasbourg)

Task-evoked pupil response reflects adaptive urgency signal

Y. Boubenec (Paris)

Is repeated forced swim stress paradigm a good model for mouse depressive-like disorders ?

S. Bullich (TOULOUSE)

Chronic distress compromises both effort and reward processing with altered anterior insular cortex and basolateral amygdala neural network activation entailing motivation in mice

L. Cabeza Alvarez (Besançon)

A role for the ventral midline thalamus in processing spatial information in a temporary memory?

J.-C. Cassel (Strasbourg)

In vivo study of prefrontal and posterior parietal cortex neuronal activity during the acquisition of a delayed spatial alternation task.

C. Castelli (Bordeaux Cedex)

Learning an attention-based neurofeedback impacts function and behaviour within theta band

F. Afdideh (Bron)

A computational model of GPe prototypic and arkypallidal neurons with automated parameter fitting.

N. Azevedo Carvalho (Villers-lès-Nancy)

Context-dependent population dynamics in auditory cortex during flexible behaviour

J. Barbosa (Paris)

Are continuous and discrete adaptations two facets of meta-learning ?

S. Beaumont (Paris)

SYMPOSIUM

10:45 - 12:00

Channel 1

S01, Theoretical and computational approaches in neuroscience: information theory and functional network analyses. / Approches théoriques et computationnelles en neurosciences : théorie de l'information et analyses des réseaux fonctionnels.

Chairs:

A. Brovelli (Marseille)

Inference of functional networks to model collective activity in zebra fish larvae. / Inférence de réseaux fonctionnels pour modéliser l'activité collective dans les larves de poisson zèbre.

S. Cocco (Paris)

10:45 - 11:00

Scientific Programme

Dynamic core-periphery structure of information sharing networks in entorhinal cortex and hippocampus A. Barrat (Marseille)	11:00 - 11:15
Differentiable information decomposition for learning in neural networks. / Décomposition de l'informations pour l'apprentissage dans les réseaux de neurones. M. Wibral (Göttingen)	11:15 - 11:30
Information theoretical approaches for the analysis of cognitive brain networks from MEG and intracranial SEEG data. / Approches basés sur la théorie de l'information pour l'analyse des réseaux cérébraux cognitifs à partir de données MEG et SEEG intracrâniennes. A. Brovelli (Marseille)	11:30 - 11:45
Discussion	11:45 - 12:00

SYMPORIUM
10:45 - 12:00 Channel 2

S02, The brain-endocrine system dialogue as a dynamic continuum. / Le dialogue entre le cerveau et le système endocrine est un continuum dynamique. Jointly convened with the British Neuroscience Association / Supported by the Journal of Neuroendocrinology

Chairs:
P. Campos (Exeter)

Neuropeptide co-transmission underlying the GnRH pulse generator. / Co-transmission de neuropeptides sous-jacente au générateur d'impulsions GnRH. A. Herbison (Cambridge)	10:45 - 11:00
Dynamic control of brain-periphery signal transmission by pituitary cell networks. / Contrôle dynamique du dialogue cerveau-périphérie par des réseaux de cellules hypophysaires. P. Mollard (Montpellier)	11:00 - 11:15
The dynamics of brain adrenal interactions. / Les dynamiques des interactions cerveau-glandes surrénales. S. Lightman (Bristol)	11:15 - 11:30
Hypothalamus-Pituitary-Adrenal axis: when physiology challenges the clinicians. / L'axe HPA : quand la physiologie questionne les cliniciens. F. Castinetti (Marseille)	11:30 - 11:45
Discussion	11:45 - 12:00

Scientific Programme

SYMPOSIUM
10:45 - 12:00

Channel 3

S03, New insights into purinergic signaling in the brain. / Nouvelles perspectives sur la signalisation purinergique dans le cerveau.

Chairs:

T. Grutter (Illkirch)

Cell-specific P2X4 receptor functions in the CNS revealed using P2X4 internalization-defective knock-in mice. / Fonctions du récepteur P2X4 neuronal révélées à l'aide de souris P2X4 knock-in augmentant son expression en surface
E. Boué-Grabot (Bordeaux)

10:45 - 11:00

P2X7, a multifaceted receptor in the central nervous system. / P2X7, un récepteur multiface du système nerveux central.
C. Delarasse (Paris)

11:00 - 11:15

A2AR signalling regulates synaptogenesis in the developing brain. / La signalisation A2AR régule la synaptogénèse dans le cerveau en développement.
S. Lévi (Paris)

11:15 - 11:30

Contribution of microglial P2X4 in Alzheimer disease. / Contribution de P2X4 microglial dans la maladie d'Alzheimer.
L. Ullmann (Montpellier)

11:30 - 11:45

Discussion

11:45 - 12:00

SYMPOSIUM
10:45 - 12:00

Channel 4

S04, Dysfunction of endolysosomal and autophagy pathways in neurodegenerative diseases. / Dysfonction des voies endolysosomales et autophagiques dans les maladies neurodégénératives.

Chairs:

F. Darios (Paris)

Endolysosomal defects in Alzheimer's disease: involvement of phosphoinositides. / Défauts de trafic endolysosomal dans la maladie d'Alzheimer: rôle des phosphoinositides.
M.-C. Potier (Paris)

10:45 - 11:00

Autophagy mediates the hormonal regulation of cognition and brain aging. / Régulation hormonale de la cognition et du vieillissement du cerveau par l'autophagie.
F. Oury (Paris)

11:00 - 11:15

Neurodegeneration through autophagy dysfunctions: brain dead by karyoptosis? / Neurodégénérescence par dysfonctionnement de l'autophagie: mort cérébrale par karyoptose?
M. Fanto (London)

11:15 - 11:30

Scientific Programme

Targeting lysosomes in synucleinopathies: a therapeutic strategy which pays off. / Cibler les lysosomes dans les synucléinopathies: une stratégie thérapeutique payante. 11:30 - 11:45

B. Dehay (Bordeaux)

Discussion 11:45 - 12:00

SYMPOSIUM
10:45 - 12:00

Channel 5

S05, The persistence and transience of memory. / La persistance et labilité de la mémoire.

Chairs:

S. Trouche (Montpellier)
J. Felsenberg (Basel)

Role of hippocampo-prefrontal circuits in fear memory consolidation. / Role des circuits hippocampo-prefrontaux dans la consolidation de la mémoire de peur. 10:45 - 11:00

C. Dejean (Bordeaux)

Time-based memory updating and amygdala networks. / Mise à jour de la mémoire temporelle et les réseaux de l'amygdale. 11:00 - 11:15

V. Doyère (Orsay)

Insights into the effects of cued-fear extinction within the reconsolidation window on cell signalling and behaviour. / Aperçus des effets de l'extinction de peur pendant la fenêtre de reconsolidation sur la signalisation cellulaire et le comportement. 11:15 - 11:30

E.N. Cahill (Cambridge)

Re-evaluation of learned information in Drosophila. / Réévaluation d'une information apprise chez la mouche Drosophile. 11:30 - 11:45

J. Felsenberg (Basel)

Discussion 11:45 - 12:00

MEET THE EXPERTS / RENCONTRER LES EXPERTS
12:00 - 12:20

Channel 1

ME1, Meet The Experts - Correlative Atomic Force Microscopy - How to study Cellular Interactions and Mechanics in Health and Disease Organised by Bruker

Tanja Neumann, Torsten Müller, Andre Körnig, Heiko Haschke
JPK BioAFM, Bruker Nano GmbH, Am Studio 2D, D-12489 Berlin

Pathological and healthy tissues exhibit various contrast in functionality, tissue mechanics and their interaction profiles. Cell-cell and cell-substrate interactions through cytoskeletal modulation, determine cell fate, shape and spreading. We will discuss how atomic force microscopy (AFM) and advanced optical measurements, can be combined to study the differences in cell mechanics and adhesion. We will also show how AFM can be combined with super-resolution optical techniques, such as D-STORM and STED, to study high-resolution cytoskeleton structure simultaneous to AFM.

Scientific Programme

Correlative Atomic Force Microscopy - How to study Cellular Interactions and Mechanics in Health and Disease T. Neumann (Berlin)	12:00 - 12:20
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ROUND TABLE CONFERENCE / TABLE RONDE
12:20 - 13:00

Channel 2

MS.1, How to pursue a career in academia

The Young Researchers' office of the French Neuroscience Society proposes 6 special Mentoring sessions to exchange with researchers on various current topics. These sessions are open to all attendees.

Chairs:

F. Chavane (Marseille)
S. Piluso (Fontenay-aux-Roses)

Contributors B. Bathellier (Paris) R. Bourdy (Strasbourg) S. Granon (Orsay) J.-C. Poncer (Paris)	12:20 - 13:00
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ROUND TABLE CONFERENCE / TABLE RONDE
12:20 - 13:00

Channel 3

MS.2, How to build a research team

The Young Researchers' office of the French Neuroscience Society proposes 6 special Mentoring sessions to exchange with researchers on various current topics. These sessions are open to all attendees.

Chairs:

S. Daumas (Paris)
A. Gros (Bordeaux)

Contributors L. Roux (Bordeaux) C. Schmidt-Hieber (Paris) J. De Juan-Sanz (Paris) K. Silm (San Francisco)	12:20 - 13:00
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PAUL BROCA CONFERENCE / CONFÉRENCE PAUL BROCA
13:00 - 14:00

Channel 1

PL02, Paul Broca Conference / Conférence Paul Broca

Chairs:

A. Andrieux (Grenoble)

Scientific Programme

Circuit solutions for programming actions. / Circuits neuronaux pour contrôler les mouvement. 13:00 - 13:45

S. Arber (Basel)

Discussion 13:45 - 14:00

POSTER SESSION / COMMUNICATIONS AFFICHÉES

14:00 - 15:00

ePosters sessions

P2, Poster session 2

The ePosters are available 24/24 during the whole time of the conference, however, a one-hour time block is dedicated to live discussions with the authors.

Mislocalization of FUS in adult projection neurons impairs social memory and executive functions

R. Cassel (Strasbourg)

Target-specific short-term synaptic plasticities of GABAergic synapses in lamina II of the spinal cord dorsal horn

L. Cathenaut (Strasbourg)

Influence of spatial learning on the connectome of adult-born neurons in rats

V. Charrier (Bordeaux Cedex)

Tissue-specific embryonic stem cells-derived organoids to study the role of SHANK3 in human brain development.

L. Chatrousse (Corbeil-Essones)

Structural and functional characterization of the retina and analysis of visual projections in a mouse model of albinism

V. Chotard (Paris)

MAP6 is an intraluminal protein that induces neuronal microtubules to coil

C. Cuveillier (La Tronche)

RSK proteins controls DRG preconditioning effect: Translational control of DRG preconditioning effect via RSK

C. Decourt (La Tronche)

Neuroinflammation is involved in the delayed effects of the very first ethanol binge episodes during adolescence on memory and CA1 hippocampal synaptic plasticity

C. Deschamps (Amiens)

Differential contribution of Nav1.1 and Nav1.6 channels to bistable properties within the lumbar spinal locomotor network.

B. Drouillas (MARSEILLE)

Loss-of-function mutations of RAD51 in congenital mirror movements: a new role under investigation

C. Dubacq (Paris)

Effects of early movement restriction on sensorimotor development and motor performance in rat.

O. Dupuis (Lille)

Scientific Programme

Influence of granule cells clonal development on the functional synaptic organisation in the cerebellar cortex

A. Basnakova (Strasbourg)

Deciphering the central amygdala oxytocin-induced astrocytic and neuronal intracellular activity

A. Baudon (Strasbourg)

The phosphodiesterase 2A (PDE2A) : a novel therapeutic target in Parkinson's disease ?

S. Bompierre (Paris)

Building bridges between emotion and motion: the amygdala to caudate-putamen pathway

A. Braine (Bordeaux)

Phospholipid scramblase 1 (PLSCR1) regulates synaptic vesicle recycling in cerebellar granule cells

M. Caputo (Strasbourg)

RXFP3-induced modulation of basal amygdala neuronal network activity.

E. Clauss-Creusot (Strasbourg)

Creatine Kinase B localizes on vesicles and provides energy for fast axonal transport

E. Cuoc (La Tronche)

Gut microbial metabolite p-cresol induces autistic-like phenotypes in mouse

J. Canaguier (Valbonne)

The JAK2-STAT3 pathway promotes a proteostasis response in reactive astrocytes in Huntington's disease

M.-A. Carrillo-De Sauvage (Fontenay-aux-Roses Cedex)

Toxoplasma gondii infection exacerbates tauopathy in a mouse model of Alzheimer's disease

K. Carvalho (Lille)

Bornavirus X protein and X-derived peptide co-administration delays motor dysfunction and extends motoneurons survival in mouse model of ALS

S. Chevallier (Bordeaux Cedex)

Brain virtual histology with X-ray phase-contrast tomography

M. Chourrout (Bron)

Familial dementia with Lewy bodies: Which genes? What effects?

I. Coku (Lille)

Dopaminergic control of the primary motor microcircuits during motor skill learning.

J. Cousineau (Bordeaux)

Exposure to Enriched environment shortens the delay of action of antidepressant drugs response

B. Coutens (Toulouse Cedex)

Importance of matricial and cellular microenvironment in in vitro models for drug discovery in Parkinson's disease

V. De Conto (Loos)

Scientific Programme

- Involvement of fronto-striatal plasticity in the development of impulse control disorder: in vivo electrophysiology study in an experimental rat model**
M. Decourt (Poitiers Cedex 9)
- Brain structural and functional signature of chronic alcohol effects in mice**
L. Degiorgis (Strasbourg)
- Cell-type specific alteration of excitability in the dopamine-depleted substantia nigra pars reticulata of the mouse**
L. Delgado Zabalza (Bordeaux)
- Role of Phosphodiesterase 2A during neurodevelopment**
S. Delhaye (Valbonne)
- Effects of optogenetic stimulation of external globus pallidus neurons on motor deficits in hemi-Parkinsonian mice**
S. Di Bisceglie Caballero (Marseille)
- The CB1 receptor: a potential target for the cognitive impairment in Down syndrome**
N. Di Franco (Bordeaux)
- Pro-cognitive effects of a Nociceptin/orphaninFQ receptor antagonist in a mouse model of chronic stress**
F. D'Oliveira Da Silva (Toulouse Cedex)
- Two candidate KCC2 enhancers prevent epileptiform activity in vitro and in vivo**
F. Donneger (Paris)
- Α η - α peptide levels dictate long-term depression and impact spatial memory.**
J. Dunot (Valbonne)
- Cerebral networks involved in visuo-tactile flow perception in humans: an fMRI study**
J. Caron-Guyon (Marseille)
- Anatomo-functional characterization of voice-selective regions in the human frontal and temporal lobe**
M. Cordeau (Marseille)
- The mouse corticospinal tract encodes motor command and control of sensory inputs through segregated circuits**
M. Cordero-Erausquin (Strasbourg)
- Mesoscopic (local field potential) prefrontal neural correlates of attentional lapses**
C. De Sousa (Bron)
- Study of the cortico-spino-cerebellar circuit in the sensorimotor integration.**
G. Delbecq (Strasbourg)
- Dopaminergic activity in the ventral tegmental area in a chronic pain induced-depression model**
P.-A. Derrien (Strasbourg)
- Target-specific muscarinic excitation of olfactory bulb periglomerular cells by basal forebrain cholinergic inputs**
D. Desaintjan (Strasbourg)
- Decoding the hippocampal oscillatory complexity to predict behaviour**
V. Douchamps (Strasbourg)

Scientific Programme

Unravelling cell-specific role of P2X4 in neuropathic pain using P2X4 internalization-defective knock-in mice

A. Duveau (Bordeaux Cedex)

Neural networks involved in olfaction - food intake interactions : Role of the hypothalamus in odor processing

M. Faour (Paris)

Overcoming a perceptual bias in reasoning: evidence for a role of alpha activity in inhibition

M. Ferez (Lyon)

Neural correlates of integration of audio-visual information of congruent social meaning in monkeys

M. Froesel (Bron)

Maternal and paternal methyl-donor deficiency impact newborn rat brain development

P. Dimofski (VANDOEUVRE LES NANCY)

Beneficial effects of anti-influenza vaccination on neuroinflammation in the brain of aged mouse model of atherosclerosis.

N. Djellouli (Nouzilly)

Comparative tissue-clearing protocols for three-dimensional imaging of central and peripheric nervous system in mice and non-human primate.

M. Habart (Bron Cedex)

Prenatal androgenization of ewes affects their cyclicity and behavior without major neuroendocrine disturbances

M. Chasles (Lille)

Assessing impulsivity and risk-taking contributions to adaptive and maladaptive decision-making in distressed mice

S. Cramoisy (Besançon)

Absence of glutamate co-transmission leads to aberrant emotional memory processing in VGLUT3 knock-out mice

C. De Almeida (Paris)

Cortical and behavioral correlates of active landmark-based navigation with high-density EEG.

J.-B. de Saint Aubert (Paris)

The effects of diet on the central nervous system: from neuronal circuit modulations to behavioral decisions changes

E. De Tredern (Gif-sur-Yvette)

Can rodents create a cognitive map of space through observation only?

T. Doublet (Marseille)

Hippocampal CB1 receptors control obesogenic diet-induced memory deficits

E.-G. Ducourneau (Bordeaux)

Habit induction by procedural overtraining: a new experimental design for adults and children

E. Durosoir (Bordeaux)

Scientific Programme

Unilateral Vestibular Neurectomy induces long-lasting impairments in all domains of spatial memory associated with post-lesional plasticity in spatial cognitive network.

N. El Mahmoudi (Marseille)

The role of ACC GABAergic neurons in neuropathic pain-induced depression

H. Elseedy (Strasbourg)

Neural coding of reward value in monkey ventrolateral prefrontal cortex.

R. Falcone (Bron)

Serotonergic neurons of the median raphe region regulate depressive-like behaviour and vegetative functions without an effect on social behaviour

C.L. Fazekas (Budapest)

Obesogenic diet impairs social odor preference through hippocampal dysfunctions

A. Fermigier (BORDEAUX)

Cognitive Factors and Speech in Cocktail Party Noise Perception in Hearing-aid Wearers.

M. Ferschneider (Lyon)

Temporal computations through dynamics on neural manifolds

M. Beiran (PARIS)

Canonical microcircuits and compressibility of the Drosophila larva's connectome

A. Bénichou (Paris)

A role for parahippocampal cortex in forward-looking choices during multi-step reinforcement learning in humans

F. Cerrotti (Paris)

Group-level inferences of information-based measures for the analyses of cognitive brain networks

E. Combrisson (Marseille)

Reward spatial contingencies induce long lasting deformations of the visual cortical retinotopic maps

M. Gacoin (Lyon)

SYMPORIUM
15:15 - 16:30

Channel 1

S06, Neuroethical issues: challenges in Neuroscience and Neurotechnologies. / Les enjeux de la neuroéthique : les défis en neurosciences et neurotechnologies.

Chairs:
L. Tabouy (Paris)

Challenge of an interdisciplinary dialogue on the ethical and legal issues of neurotechnologies. / Défi d'un dialogue interdisciplinaire autour des enjeux éthiques et légaux des neurotechnologies.

L. Tabouy (Paris)

15:15 - 15:30

Neuroethics Questions in the International Brain Initiatives and Korean research. / Les questions de neuroéthique dans les initiatives internationales sur le cerveau et la recherche coréenne.

S.-J. Jeong (Seoul)

15:30 - 15:45

Scientific Programme

No longer unthinkable: Neuroethics questions for the 21st century neuroscientist K.S. Rommelfanger (Atlanta, GA)	15:45 - 16:00
Cerebroids and cerebral chimeras: what moral status should be accorded to them? / Cérébroïdes et chimères cérébrales: quel statut moral leur accorder? B. Baertschi (Aïre)	16:00 - 16:15
Discussion	16:15 - 16:30

SYMPOSIUM
15:15 - 16:30 Channel 2

S07, Tools for reproducibility in neuroscience. / Des outils pour la reproductibilité en neurosciences.

Chairs:
S. Gruen (Juelich)

Collaborative software development and good software development practices in neuroscience. / Le développement collaboratif de logiciels dans le domaine des neurosciences. A. Davison (Gif sur Yvette)	15:15 - 15:30
Orchestrating analysis workflows using Elephant and Neo. M. Denker (Juelich)	15:30 - 15:45
Why data management? / La gestion de données: pourquoi ? T. Brochier (Marseille)	15:45 - 16:00
Services for neuroscience data and metadata storage. / Services de stockage de données et de métadonnées en neurosciences. T. Wachtler (Martinsried-Planegg)	16:00 - 16:15
Discussion	16:15 - 16:30

SYMPOSIUM
15:15 - 16:30 Channel 3

S08, New insights into pathophysiology of Neurodevelopmental Disorders. / Nouvel éclairage sur la physiopathologie des Troubles du Neuro-Développement. Supported by NeurATRIS

Chairs:
P. Gressens (Paris)

Functional dynamics in human infant's cerebral networks. / Dynamique des réseaux cérébraux chez le nourrisson. G. Dehaene-Lambertz (Gif sur Yvette)	15:15 - 15:30
How development sculpts internal hippocampal dynamics. / Comment le développement sculpte la dynamique interne de l'hippocampe. R. Cossart (Marseille)	15:30 - 15:45

Scientific Programme

Is the striatum the missing piece of Autism Spectrum Disorder puzzle? / Le Striatum: pièce manquante pour compléter le puzzle des troubles du spectre autistique? L. Galvan (Poitiers)	15:45 - 16:00
Targeting neocortical alterations to improve atypical sensory experience in genetic ASD mouse models. / Altérations corticales et troubles sensoriels dans les modèles TSA murins: ciblage et thérapeutique. A. Frick (Bordeaux)	16:00 - 16:15
Discussion	16:15 - 16:30
 SYMPOSIUM 15:15 - 16:30	
	Channel 4
S09, Frequency-tagging to understand human brain function. / Comprendre la fonction cérébrale par le marquage fréquentiel.	
Chairs: B. Rossion (Nancy)	
Measuring visual perception in the human brain with frequency-tagging in scalp EEG. / Mesurer la perception visuelle dans le cerveau par étiquetage fréquentiel en EEG de surface. A. Leleu (Dijon)	15:15 - 15:30
Clarifying how the human brain processes musical rhythm using frequency-tagging. / Comprendre comment le cerveau traite le rythme musical à l'aide du marquage par la fréquence. T. Lenc (Brussels)	15:30 - 15:45
Using fast periodic EEG to track developing cortical specialization for visual word recognition. / Comprendre le développement de la spécialisation corticale pour les mots écrits par la stimulation périodique rapide. A. Lochy (Esch-sur-Alzette)	15:45 - 16:00
Fast periodic visual stimulation during human intracerebral recordings to clarify the neural basis of visual recognition. / La stimulation périodique rapide en enregistrements intracérébraux chez l'Homme pour comprendre les bases cérébrales de la reconnaissance visuelle. B. Rossion (Nancy)	16:00 - 16:15
Discussion	16:15 - 16:30

SYMPOSIUM 15:15 - 16:30	Channel 5
S10, Molecular mechanisms of synaptic vesicle trafficking. / Mécanismes moléculaires du trafic des vésicules synaptiques.	
Chairs: S. Gasman (Strasbourg) L. Danglot (Paris)	

Scientific Programme

Deciphering synaptic molecular assemblies remodeling by quantitative super-resolving 3D microscopy. / Decifering synaptic molecular assemblies remodeling by quantitative super-resolving 3D microscopy. L. Danglot (Paris)	15:15 - 15:30
Synaptic vesicle super-pool in glutamatergic and dopaminergic axons of mice. / Le super-contingent de vésicules synaptiques dans les axones excitateurs et modulateurs de souris. E. Herzog (Bordeaux)	15:30 - 15:45
Freeze-frame shots of synapses in action: Correlating ultrastructure and function at the nanoscale. / Arrêt sur image de la synapse en action: corrélation structure-fonction à la nano-échelle. C. Imig (Copenhagen)	15:45 - 16:00
Transbilayer phospholipids scrambling: a checkpoint for exo-endocytosis coupling in neurosecretory cells? / La redistribution des phospholipides entre les feuillets membranaires régule le couplage exo-endocytose dans les cellules neurosecrétrices. S. Gasman (Strasbourg)	16:00 - 16:15
Discussion	16:15 - 16:30

SYMPOSIUM
16:45 - 18:00

Channel 1

S11, Unsuspected roles of the autonomic nervous system: from ontogeny to physio-pathological functions. / Les rôles insoupçonnés du système nerveux autonome : de l'ontogenèse aux fonctions physio-pathologiques.

Chairs:

S. Chauvet (Marseille)
I. Brunet (Paris)

Genetic architecture of the autonomic outflow. / Architecture génétique des voies efférentes viscérales. J.-F. Brunet (Paris)	16:45 - 17:00
Molecular control of sympathetic innervation: from physiological to pathological functions / Contrôle moléculaire de l'innervation sympathique: des fonctions physiologiques aux fonctions pathologiques I. Brunet (Paris)	17:00 - 17:15
Sympathetic regulation of the adipose organ in physiology and obesity. / Effet du système nerveux sympathique sur le tissu adipeux dans la physiologie et l'obésité. A. Bartolomucci (Minneapolis)	17:15 - 17:30
Sympathetic axonal sprouting induces changes in macrophage populations and protected against pancreatic cancer. / Le remodelage des axones sympathiques induit des changements dans les populations de macrophages et protège contre le cancer du pancréas. S. Chauvet (Marseille)	17:30 - 17:45
Discussion	17:45 - 18:00

Scientific Programme

SYMPOSIUM
16:45 - 18:00

Channel 2

S12, From molecules to circuits: cell-type-specific striatal functions in pathophysiological reward? / Des molécules aux circuits : fonctions cellule-spécifiques pour la pathophysiologie du système de récompense ? Supported by Imetronic

Chairs:

P. Vanhoutte (Paris)
P. Trifilieff (Bordeaux)

Nucleus accumbens subcircuits in rewarding and aversive behaviors. / Sous-circuits du noyau accumbens dans le contrôle des composantes récompensantes et aversives.

A.J. Rodrigues (Braga)

16:45 - 17:00

Causal link between brain lipid biostatus and alterations of reward processing: relevance for psychiatric disorders. / Lien causal entre le statut lipidique cérébral et des déficits du système de récompense: pertinence pour les pathologies psychiatriques.

P. Trifilieff (Bordeaux)

17:00 - 17:15

Accumbal dopamine transients and synaptic plasticity in mouse models of addiction. / Mesure des variations de la concentration de dopamine dans le Noyau Accumbens et de la plasticité synaptique dans des modèles murins d'addiction.

V. Pascoli (Geneva)

17:15 - 17:30

Modulation and functions of dopamine and glutamate receptor heteromers in cocaine-evoked long-term adaptations. / Modulation et fonctions des hétéromères formés entre les récepteurs de la dopamine et du glutamate dans les adaptations à long terme évoquées par la cocaïne.

P. Vanhoutte (Paris)

17:30 - 17:45

Discussion

17:45 - 18:00

SYMPOSIUM
16:45 - 18:00

Channel 3

S13, Theoretical and computational approaches in neuroscience: Representations of space(s). / Approches théoriques et computationnelles en neurosciences : représentations spatiales.

Chairs:

R. Monasson (Paris)

Structure, scaffolds, and fragmentation in the place cell cognitive map.

I. Fiete (Cambridge)

16:45 - 17:00

Population dynamics and attractor networks. / Dynamique de population et réseaux attracteurs.

H. Rouault (Marseille)

17:00 - 17:15

Scientific Programme

Internal representation of hippocampal neuronal population span a time-distance continuum. / Représentation interne de la population neuronale de l'hippocampe sur un continuum temps-distance A. Torcini (Cergy-Pontoise)	17:15 - 17:30
Capacity-resolution trade-off in the optimal learning of multiple low-dimensional manifolds by attractor neural networks. / Compromis capacité-résolution dans l'apprentissage optimal d'attracteurs de basse dimension par des réseaux de neurones récurrents. R. Monasson (Paris)	17:30 - 17:45
Discussion	17:45 - 18:00

SYMPOSIUM
16:45 - 18:00

Channel 4

S14, Social Physiology. / Physiologie Sociale.

Chairs:

G. Dumas (Paris)
J.-A. Micoulaud-Franchi (Bordeaux)

Social Physiology for Precision Psychiatry. / Physiologie sociale pour la Psychiatrie de Précision. G. Dumas (Paris)	16:45 - 17:00
Emotional semiology in prefrontal epileptic seizures. / Sémiologie émotionnelle dans les crises épileptiques préfrontales. A. McGonigal (Marseille)	17:00 - 17:15
Brain systems mediating social influence effects on pain, emotion, and decision-making. / Les systèmes cérébraux médiateurs des effets de l'influence sociale sur la douleur, les émotions et la prise de décision. L. Koban (Paris)	17:15 - 17:30
Towards a second-person neuroscience & neuropsychiatry. / Vers une neuroscience et une neuropsychiatrie à la seconde personne. L. Schilbach (Düsseldorf)	17:30 - 17:45
Discussion	17:45 - 18:00

Scientific Programme

Thursday, 20. May 2021

PLENARY LECTURE / CONFÉRENCE PLÉNIÈRE
09:00 - 09:30

Channel 1

PL03, Plenary Lecture / Conférence plénière

Chairs:
M.C. Angulo

Microglia at the crossroads of forebrain wiring and environmental signals./ Les microglies à l'interface entre l'assemblage des circuits cérébraux et des signaux environnementaux.

S. Garel (Paris)

09:00 - 09:20

Discussion 09:20 - 09:30

POSTER SESSION / COMMUNICATIONS AFFICHÉES
09:30 - 10:30

ePosters sessions

P3, Poster Session 3

The ePosters are available 24/24 during the whole time of the conference, however, a one-hour time block is dedicated to live discussions with the authors.

Investigating the role of LGI as a regulator of the mature hippocampal network
E. Fels (Lyon)

Impact of heterotopia on primary somatosensory cortex development and thalamocortical connectivity in Subcortical Band Heterotopia and Periventricular Nodular Heterotopia mouse models
A. Fortoul (Marseille)

Consequences of a maternal high fat diet during lactation on male and female adult offspring in a mouse model of tauopathy.
T. Gauvrit (Lille)

Manipulation of endogenous AMPA receptor surface mobility during high-resolution imaging and activity-dependent synaptic plasticity
A. Getz (Bordeaux)

Neuronal hippocampal activity propagation in a neurodevelopmental mouse disease model
V. Guidal (Nice)

Cholecystokinergic signaling exerts major control on cortico-striatal synaptic plasticity
C. Guillaume (Nantes)

tRNAs: key regulators of cell fate acquisition?
C. Hardion (Illkirch)

Differential contribution of glycine and D-serine to NMDA receptor signaling and brain function
R. Helleringer (Paris)

Scientific Programme

From birthdate to projection range: light on the functions of reticulospinal neurons

X. Jia (Paris)

Early transcriptional modifications of the human neurodevelopment in Huntington disease

R. Kacher (Paris)

Does a chronic sensorimotor restriction disturb early motor development in rats?

M. Kochmann (Marseille)

Acousto-vestibular stimuli elicit a norepinephrine-dependent calcium wave in spinal glial cells following the escape response.

M. Dhanasekar (Paris)

Targeting the Serotonin 5-HT₇ Receptor, new ligands with therapeutical properties

C. El Khamlichi (Orléans Cedex 2)

High throughput standardized microfluidic platform for internalization and axonal transport explorations of a preclinical neurological compound

D. Estrade (Lyon)

Differential excitatory vs inhibitory connectivity maps between granule cell and purkinje cell in the cerebellum.

T. Gagneux (Strasbourg)

Optical control of GluN2B-NMDA receptors

C. Geoffroy (Paris)

Microglial P2X4 in neuropathic pain and associated comorbidities: A gender independent story?

D. Gilabert (Montpellier)

Using Granger causality to identify directional causal influences between neurons in vivo

F. Ginoux (Paris)

Impact of half brain irradiation on the healthy brain tissue and cognition: longitudinal and multiparametric study in the rat

F.-A. Dwiri (Caen)

Neuronal adenosine A_{2A} receptor overexpression exacerbates memory deficits and synaptic loss in an amyloidogenic mouse model of Alzheimer's disease

E. Faivre (Lille)

Translational profiling of mu expressing neurons to elucidate morphine molecular mechanisms

C. Falconnier (STRASBOURG)

Mechanisms controlling neuroblasts migration and reprogramming during myelin repair.

M. Falque (Marseille)

New tools to explore non-motor symptoms in a macaque model of Parkinson's disease.

A. Fayard (Fontenay-aux-Roses)

Identifying Novel Molecules Targeting BKCa Channels As Treatment For Auditory Impairments

C. Ferraguto (Bordeaux)

Scientific Programme

Dawn simulation light as a countermeasure to a weakened cardiovascular system in the morning

V. Gabel (Strasbourg)

Effect of ultra-low dose of Cannabidiol on mechanical allodynia and anxiodepressive comorbid symptoms in neuropathic mice

M. Gaborit (Strasbourg)

Pharmacological activation of RevERB and ROR modulates sleep and depression-like behaviour.

W. Gardner (Strasbourg)

Effect of cannabis on motor and non-motor symptoms of Parkinson's disease: a behavioral and pharmacological study

E. Giorla (Marseille)

Comparative analysis of the mitochondrial proteome in a mouse model of Rett syndrome

G. Golubiani (Tbilisi)

Postnatal neurodevelopment and behavior in a mouse model of intellectual disability

L. Gonzalez (Orsay)

Argon neuroprotection in a non-human primate model of transient cerebral ischemia.

S. González Torrecilla (Marseille)

Targeting the cerebellum using CAV2 vectors

I. Gonzalez-Doposo Reyes (Montpellier cedex 5)

Characterization of new mouse models of Lewy Body Disease: impact of the hApoE4 risk factor

I. Grgurina (Strasbourg)

The role of new N-terminally truncated Tau species in Alzheimer's disease

S. Guedjdal (Lille)

Sleep and orexinergic pathway alterations in SOD1G86R mice model of amyotrophic lateral sclerosis

S.J. Guillot (Strasbourg)

Dysregulations of expression of genes of the Ubiquitin/SUMO pathways in an in vitro model of amyotrophic lateral sclerosis combining oxidative stress and SOD1 gene mutation.

S. Haouari (Tours Cedex 2)

Silencing the epileptogenic network to mitigate seizures in an animal model of cortical malformation.

D. Hardy (Marseille)

Central metabolism as a potential origin of sex differences in morphine analgesia but not in the induction of analgesic tolerance in mice

F. Gabel (Strasbourg)

Prefrontal Alpha-Theta Phase Amplitude Coupling Strength Modulates Attentional Performances

C. Gaillard (Bron)

Directional and contextual modulation of spatial representations in the hippocampus

B. Gandit (Paris)

Scientific Programme

Time-scale dynamics of striatal dopamine control of movements kinematics in rats
S. Gauthier (Bordeaux)

Circadian Clock Disruption is a Compounding Factor for Retinal Photoreceptor Degeneration
S.T. Gegnaw (Strasbourg)

Spinal integration of hot and cold nociceptive stimuli by wide dynamic range neurons in anesthetized adult rats
C. Gieré (Strasbourg)

A perturbative approach uncovers context-dependent processing of natural scenes in the retina
M.A. Goldin (Paris)

A synaptic novelty signal in the dentate gyrus supports switching hippocampal attractor networks from generalization to discrimination
R. Gómez-Ocádiz (Paris)

Models of non-linear transformation of auditory representations from cochlea to inferior colliculus
E. Gosselin (Paris)

Optogenetic dissection of the cerebellar microcircuit in the context of postural adjustment
A. Gouhier (Paris)

Stable isotope-labelled morphine to study in vivo central and peripheral morphine glucuronidation and brain transport in tolerant mice
Y. Goumon (Strasbourg)

Coordination of neural dynamics between midcingulate and lateral prefrontal cortex during adaptive behaviour: simultaneous linear recordings in monkeys
C. Goussi (Bron)

Vitamin A5/X - a new class of vitamin A with promnemonic and stress-protective activities in mice.
W. Krezel (Illkirch)

Characterization of the biophysical properties of the frontier between the median eminence and the arcuate nucleus by atomic force microscopy
L. Kuczynski-Noyau (Lille)

Molecular and functional mapping of POMC neuronal heterogeneity in obesity
S. Léon (Bordeaux Cedex)

Bottlenose dolphins (*Tursiops truncatus*) use burst-pulsed vocalisations with multiple harmonics in non-agonistic human-dolphin interactions
E. Fleck (Paris)

Development of pathway specific DREADDs in macaque monkeys: behavioral and histological studies.
C. Gandaux (Bron)

The impassable gap between experienced and described values
B. Garcia (Paris)

Anesthesia impacts functional connectivity patterns in macaques' frontal cortex
C. Giacometti (Bron)

Scientific Programme

Different versions of 'Manque du mot'. An Analysis.

S. Gjeci (Tirana)

Dissociable effects of positive feedbacks on the capture and the inhibition of impulsive actions in adolescents with ADHD

A. Grandjean (Marseille cedex 3)

Unraveling the effects of simulated microgravity on adult hippocampal neurogenesis in the rat

A. Gros (Bordeaux)

Pulegone anti-hyperalgesic properties

L. Hilfiger (Strasbourg)

Title: Coding of sequence statistics in the auditory cortex of passive vs. active mice

S. Jamali (Paris)

Disruption of Tsc2/mTOR pathway in amygdala during adolescence leads to exaggerated fear behavior and impacts mPFC functionality at adult age in rats

F. Joly (Orsay)

Large EEG amplitude effects are highly similar across Necker cube, smiley, and abstract stimuli

E. Joos (Strasbourg)

Towards a new dimensional approach to addiction: linking addiction markers to the connectivity profiles of striatum subdivisions

K. Kadri (Plymouth)

Astrocytes mediate the effect of oxytocin in the central amygdala on neuronal activity and affective states in rodents.

D. Kersvern (Strasbourg Cedex)

Complementary roles of dimensionality and population structure in neural computations

A. Dubreuil (Paris)

Can the basal ganglia perform selection without segregated pathways?

B. Girard (Paris)

Visualisation and analysis of large neural volumes in virtual reality

C. Godard (Paris)

Reconstructing voice from fMRI patterns using deep neural networks

C. Lamothe (Marseille)

Development of an AAV-based model of tauopathy in the mouse visual pathway to study the role of microglia in Tau protein propagation

C. Duwat (FONTENAY-AUX-ROSES)

Scientific Programme

SYMPOSIUM
10:45 - 12:00

Channel 1

S15, Food for thoughts. A molecular focus on the hypothalamic control of metabolism. / Nourriture pour l'esprit. Un accent moléculaire sur le contrôle hypothalamique du métabolisme. Supported by the Journal of Neuroendocrinology

Chairs:

C. Quarta (Bordeaux)

Hypothalamic AMPK signalling in obesity and diabetes. / La signalisation hypothalamique AMPK orchestre le métabolisme systémique de l'énergie.	10:45 - 11:00
M. López (Santiago de Compostela)	
Central inflammatory pathways in obesity and diabetes. / Voies inflammatoires centrales dans l'obésité et le diabète.	11:00 - 11:15
C. Rovère (Valbonne)	
EphrinB1 modulates glutamatergic synaptic inputs onto POMC neurons and controls glucose homeostasis / La perte d'EphrinB1 dans les neurones à POMC module les contacts excitateurs et l'homéostasie glucidique	11:15 - 11:30
S. Croizier (Lausanne)	
Molecular Control of Hypothalamic Neurons Functional Identity. / Contrôle Moléculaire De L'identité Fonctionnelle Des Neurones Hypothalamiques.	11:30 - 11:45
C. Quarta (Bordeaux)	
Discussion	11:45 - 12:00

SYMPOSIUM
10:45 - 12:00

Channel 2

S16, Control of mRNA translation in neurons. / Contrôle de la traduction dans les neurones.

Chairs:

J. Godin (Illkirch)
S. Belin (La tronche)

Axonal protein synthesis in health and disease: a new role for endosomes. / Synthèse protéique dans l'axone en condition physiologique et pathologique: un nouveau rôle pour les endosomes.	10:45 - 11:00
J.-M. Cioni (Milan)	
In vivo regulation of neuronal RNA granules, platforms for spatio-temporal control of translation. / Régulation in vivo des granules à ARN neuronaux, plateformes pour le contrôle spatio-temporel de la traduction.	11:00 - 11:15
F. Besse (Nice)	
Huntingtin protein is essential for CNS regeneration through protein translation. / La huntingtine, une protéine essentielle à la régénération des axones via son rôle dans la régulation de la traduction protéique.	11:15 - 11:30
S. Belin (La tronche)	

Scientific Programme

Differential regulation of local mRNA dynamics and translation following long-term potentiation and depression. / Synthèse protéique local dans les neurones. 11:30 - 11:45

P. Donlin-Asp (Frankfurt am Main)

Discussion 11:45 - 12:00

SYMPOSIUM
10:45 - 12:00

Channel 3

S17, Neurobiological processes of brainstem-spinal motor circuits. / Processus neurobiologiques des circuits neuronaux du tronc cérébral et de la moelle épinière.

Chairs:

M. Thoby-Brisson (Bordeaux)

Phox2b defines brainstem reticular neurons for licking. / Phox2b définit des neurones de la formation réticulée du tronc cérébral pour lapper. 10:45 - 11:00

B. Dempsey

Light on an axial sensory system detecting spinal curvature and instructing morphogenesis. / Un système sensoriel axial détectant la courbure de la colonne vertébrale et instruisant sa forme. 11:00 - 11:15

A. Orts-Del'Immagine (Paris)

Astrocytic modulation of neuronal rhythmicity through K⁺ uptake in the spinal locomotor network. / Contribution astrocytaire à la rythmicité neuronale au sein du réseau locomoteur spinal. 11:15 - 11:30

R. Bos (Marseille)

Modulation and operation of the fore- and hindlimb locomotor networks. / Fonctionnement et modulation des réseaux locomoteurs spinaux. 11:30 - 11:45

L. Juvin (Bordeaux)

Discussion 11:45 - 12:00

SYMPOSIUM
10:45 - 12:00

Channel 4

S18, Psychological and neurobiological bases of non-human primates' social behaviors. / Bases psychologiques et neurobiologiques des comportements sociaux des primates non-humains. Supported by Rogue

Chairs:

J. Sallet (Bron)

S. Ballesta (Niederhausbergen)

Beyond the core face processing system: the role of hippocampus and orbitofrontal cortex. / Au-delà des régions centrales du traitement des visages: le rôle de l'hippocampe et du cortex orbitofrontal. 10:45 - 11:00

S. Wirth (Bron)

Scientific Programme

Socio-economic decision-making in semi-free ranging Tonkean macaques / Prise de décision socio-économique chez le macaque de Tonkéan en semi-liberté. S. Ballesta (Niederhausbergen)	11:00 - 11:15
Comparing human and monkey neural networks for processing social scenes. / Comparaison des réseaux neuronaux impliqués dans le traitement des scènes sociales chez l'humain et le singe. J. Sliwa (Paris)	11:15 - 11:30
"Human-specific" brain lateralization landmarks found in monkeys and their socio-cognitive correlates in both adults and infants (Papio anubis). / Des marqueurs de la latéralisation cérébrale « humaine » chez les singes et ses corrélats socio-cognitifs chez les adultes et les nouveau-nés (Papio anubis). A. Meguerditchian (Rousset)	11:30 - 11:45
Discussion	11:45 - 12:00

SYMPOSIUM
10:45 - 12:00

Channel 5

S19, Cortical network dysfunction in neurodegenerative diseases. / Altération des réseaux corticaux dans les maladies neurodégénératives. Supported by Bruker

Chairs:

C. Rouaux (Strasbourg)

How memories are stored and recalled - insights from models of Alzheimer's disease. / Stockage et rappel de la mémoire - leçons des modèles de maladie d'Alzheimer. M. Fuhrmann (Bonn)	10:45 - 11:00
Epileptiform activity during REM sleep at early stages of Alzheimer Disease. / Activité épileptique en sommeil paradoxal aux stades précoce de la maladie d'Alzheimer. L.S. Dahan (Toulouse)	11:00 - 11:15
Putting on the brakes on circuit dysfunction in ALS/FTD / Freiner les dysfonctionnements des circuits neuronaux des SLA / DFT S. Liebscher (Martinsried)	11:15 - 11:30
Presymptomatic cortical network dysfunction in ALS. / Altérations présymptomatiques des réseaux corticaux dans la SLA. C. Rouaux (Strasbourg)	11:30 - 11:45
Discussion	11:45 - 12:00

Scientific Programme

MEET THE EXPERTS / RENCONTRER LES EXPERTS

12:00 - 12:20

Channel 1

ME2, Meet The Experts - Bruker microscopy solutions for neuroscience Organised by Bruker

In these 20 minutes we will demonstrate how the Bruker Vutara Superresolution and Ultima2Pplus Multiphoton Microscopy systems for deep imaging and optogenetics in 3D can boost your research. The Luxendo Lightsheet systems are the ideal choice for live, developing samples and for looking deep inside cleared brains.

Bruker microscopy solutions for neuroscience

C. Schneider

12:00 - 12:20

ROUND TABLE CONFERENCE / TABLE RONDE

12:20 - 13:00

Channel 2

MS.3, Prepare the end of your PhD thesis and the transition to a post-doc

The Young Researchers' office of the French Neuroscience Society proposes 6 special Mentoring sessions to exchange with researchers on various current topics. These sessions are open to all attendees.

Chairs:

S. Morceau (Bordeaux)
M. Obliger (Marseille)

Contributors

S. Fayad (Paris)
A. Gros (Bordeaux)
V. Mathis (New York)
F. Occelli (Tokyo)

12:20 - 13:00

ROUND TABLE CONFERENCE / TABLE RONDE

12:20 - 13:00

Channel 3

MS.4, Work-life balance

The Young Researchers' office of the French Neuroscience Society proposes 6 special Mentoring sessions to exchange with researchers on various current topics. These sessions are open to all attendees.

Chairs:

S. Daumas (Paris)
S. Piluso (Fontenay-aux-Roses)

Contributors

M. Beaudoin (Bron)
Q. Gaucher (Paris)
S. Trouche (Montpellier)
J. Naudé (Paris)

12:20 - 13:00

Scientific Programme

PLENARY LECTURE / CONFÉRENCE PLÉNIÈRE
13:00 - 13:30

Channel 1

PL04, Plenary Lecture / Conférence plénière

Chairs:

D. Cota (Bordeaux)

Cellular and subcellular control of behavior./ Contrôle cellulaire et subcellulaire du comportement.

13:00 - 13:20

G. Marsicano (Bordeaux)

Discussion

13:20 - 13:30

PLENARY LECTURE / CONFÉRENCE PLÉNIÈRE
13:30 - 14:00

Channel 1

PL05, Plenary Lecture / Conférence plénière

Chairs:

E. Procyk

Modeling of large-scale cortical circuits: macroscopic gradients and distributed cognition. / Modélisation des circuits corticaux à grande échelle : gradients macroscopiques et cognition distribuée.

13:30 - 13:50

X.-J. Wang (New York)

Discussion

13:50 - 14:00

POSTER SESSION / COMMUNICATIONS AFFICHÉES
14:00 - 15:00

ePosters sessions

P4, Poster Session 4

The ePosters are available 24/24 during the whole time of the conference, however, a one-hour time block is dedicated to live discussions with the authors.

Sex-dependent processing of the nociceptive transmission in the dorsal horn of the spinal cord of mice

R. Kuster (Strasbourg)

Elucidating how floor-plate electrical activity influence motor behaviour at foetal stages.

A.G. Lafont (Paris)

The AMPK-related kinase NUAK1 kinase controls axon branching through a local remodeling of metabolic pathways during development

M. Lanfranchi (Lyon)

Developmental defect of the cortico-striatal circuit in a mouse model of Huntington's disease

M. Lebouc (Bordeaux)

mir-124-dependent tagging of glutamatergic synapses by synaptopodin controls non-uniform and input-specific homeostatic synaptic plasticity

M. Letellier (Bordeaux)

Scientific Programme

Major motor and gait deficits with sexual dimorphism in a Shank3 mutant mouse model

A. Maisterrena (Poitiers)

Exploring the impact of an autism-related CNTNAP2/Caspr2 missense variant on PNS myelinated fiber organization and function.

T. Manett (Paris)

Impact of chemogenetic silencing of the dentate gyrus on CA3 circuits in head-fixed awake mice

C. Marneffe (Bordeaux)

Inferring ligand-receptor interactions between GABAergic and glutamatergic cells during somatosensory cortex development

R. Mathieu (Marseille)

Role of Kif7 in cortical interneuron migration

C. Métin (Paris)

Major contribution of adenosine signalling in glutamatergic synapse remodeling during synaptogenesis

C. Montmasson (Paris)

Cell-type-specific dopamine signaling in ventral hippocampus tracks anxiety

A. Godino (New York)

Pro- and mature- brain-derived neurotrophic factor (BDNF) control neuronal chloride homeostasis through cation-chloride cotransporters activity NKCC1 and KCC2

M. Hamze (Marseille)

Investigating the cellular and molecular response of human dopaminergic neurons to mitochondrial stress

J. Heneine (Paris)

siRNA-mediated knockdown of murine astrocyte lipolysis stimulated lipoprotein receptor leads to disruption of cholesterol trafficking - potential role in Alzheimer's disease.

A. Herzine (Vandoeuvre-lès-Nancy)

Characterization of the roles of the sodium channel Na_v>1.5 in astrocytes

C. Jajkiewicz (Nantes)

Pridopidine rescues pre- and postsynaptic events in Huntington Disease corticostriatal network-on-a-chip

R. Lahaye (La Tronche)

The contribution of automatic online motor control in a rehabilitation program for hemiplegic patients

L. Havé (Lyon)

Cannabinoid type-1 (CB1) receptors control the choice between feeding and exercise in a closed economy setting

I. Hurel (Bordeaux)

Amyloid pathology and sex-dependent effect of antibiotics: diet matters

C. Ismeur (Montpellier)

Correction of vasopressin deficit in the lateral septum ameliorates social deficits of mouse autism model

F. Jeanneteau (Montpellier)

Scientific Programme

Dopaminergic control of free-choice high-fat high-sugar diet preference in male Sprague Dawley rats

A. Joshi (Strasbourg)

Role of the ACC-LHb pathway in the emotional consequences of chronic pain

S.H. Journée (Strasbourg)

Involvement of adult hippocampal neurogenesis in memory disturbances associated with Post-Traumatic Stress Disorder

M.-L. Kaci (Bordeaux)

Exploration of the nuclear functions of Fragile X Mental Retardation Protein involved in Fragile X syndrome

F. Kieffer (Valbonne)

Medium-throughput screening device based on multi-compartment microfluidic neuron co-cultures that permit physiologically-relevant amyloid- β toxicity

D. Kilinc (Lille)

Characterization of an innovant Knock-In Tau mouse model that recapitulates early events of Tau pathology

S. Kraiem (Lille)

PAS-induced recovery of intracortical inhibition in patients with ALS

A. Lackmy-Vallée (Paris)

Therapeutic effects of hyaluronan-based hydrogel after cortical traumatic injury

A. Lainé (Poitiers)

GRN and C9ORF72 mutations lead to hypereactivity of a common neuropathological pathway in microglia via the activation of the NLRP3 inflammasome by TDP-43 aggregates.

M. Latouche (Paris)

How the hypothalamic supramammillary-hippocampal network is altered by psychiatric disease

E. Lepicard (PARIS)

Extracellular vesicles: major actors of heterogeneity in tau spreading among human tauopathies

E. Leroux (Lille)

Involvement of inhibitory neurons in amyotrophic lateral sclerosis and frontotemporal dementia linked to Fused in Sarcoma protein

F. Lorenc (Strasbourg)

Behavioural and dopaminergic responses in the shell part of the nucleus accumbens are disrupted after MK-801 administration in adult rats subjected to neonatal functional inactivation of the ventral subiculum.

A. Louilot (Strasbourg)

Discovering the biological basis of neuronal-activity induced myelin repair

D. Maas (Paris)

Altered circadian clock gene expression in the mPFC of mouse model of depression and its modulation by ketamine and acute sleep deprivation

C. Marchese (Strasbourg)

Scientific Programme

Life-long olfactory enrichment induces broad cognitive benefits and structural remodeling of the noradrenergic system in aged mice.

J. Greco (Bron)

Role of the cholinergic system in early sensorimotor acquisition

J. Lawlor (Baltimore)

A topological study of point-attractor dynamics of neuronal assemblies in the zebrafish optic tectum

E. Hansen (Paris)

A Dendritic calcium code of cerebellar Purkinje cells in vivo during postural adaptation

C. Hatton (Paris)

Morphine-3-Glucuronide as a key actor of the sexual dimorphism in morphine-induced analgesia

V. Hovhannisyan (Strasbourg)

A sensorimotor task to seek neuronal signatures of tactile sensory prediction in the mouse primary somatosensory cortex

S. Hubatz (Paris)

Emergence of structure in hippocampal network dynamics during learning of a delayed non-match to sample task

C.-A. Mosser (Montréal)

Short-term western diet reversibly alters the physiology of the peripheral olfactory system

D. Jarriault (Bordeaux)

Visualizing neuronal correlates of sensory prediction in the barrel cortex of mice engaged in a whisker-guided locomotion task

T. Jost-Mousseau (Gif sur Yvette)

Monoamine precursors modulation of locomotor activity in the newborn rat

I. Khsime (Bordeaux)

Processing of orientation precision in the primary visual cortex

H. Ladret (Marseille)

Distinct populations of vsx2+ reticulospinal neurons organised by birth-date encode power and direction of locomotion

M. Lapoix (Paris)

Influence of the cerebellum on the predictive coding in the medial prefrontal cortex

F. Lareno Faccini (Strasbourg)

HSV-1 infection in the olfactory epithelium and spread in the brain.

L. Merle (Aurora)

Oxytocin and vasopressin secretion : the unexpected role of the endolysosomal Two-Pore Channel (TPCs)

L.L. Martucci (Orsay Cedex)

Cytokine-induced DNA breaks, a new player in chronic inflammation-induced behavioral impairment?

F. Marty (Toulouse Cedex 3)

Scientific Programme

Midbrain projection to the basolateral amygdala encodes anxiety-like but not depression-like behaviors

C. Morel (NEW YORK)

A collateral direct pathway from the striatum to the GPe supports motor control

M.A. Labouesse (Zurich)

The role of striatal parvalbumin interneurons in decision-making

O. Lavielle (Paris)

Role of acetylcholine release in prefrontal cortex in social cognition

C. Lhopitalier (Orsay)

The neural circuits of spatial and object-based reversal learning in rhesus macaques

M. Lojkiewicz (Bron)

Hippocampal theta-nested oscillations during spatial exploration and memory-guided behavior

V. Lopes dos Santos (Oxford)

Axon structural characterization of the Sapap3 knockout model of pathological repetitive behaviours, using AxonDeepSeg

E. Lopes Rio Da Silva Lousada (Paris)

Role of perinatal dietary n-3 polyunsaturated fatty acid in memory and hippocampal synaptic plasticity in male and female mice

M. Martinat (Bordeaux)

Early social adversity influences executive function in juvenile macaques

A. Massera (Bron)

Mice performance under a Fixed Consecutive Number (FCNcue) schedule as a parameter of vulnerability to nicotine addiction

M.-C. Medrano (Bordeaux)

Overexpression of chloride importer NKCC1 contributes to the sensory-affective and sociability phenotype of rats following neonatal maternal separation

M. Melchior (Strasbourg)

Creating a free and easy to use animal tracking software for 2D videos recorded in a wide range of different laboratory settings

O. Mirat (Paris)

Medial entorhinal cortex neurons signal relevant positions in a distance estimation task

J.-Y. Montenay (Marseille Cedex 3)

Cortical and thalamic determinants of the exploration/exploitation trade-off

S. Morceau (Bordeaux)

What is a burst? How to systematically detect single trial oscillatory dynamics - a test on simulated data.

Z.D. Langford (Bron)

Long-term desynchronization by coordinated reset stimulation in a neural network model with synaptic and structural plasticity

T. Manos (Cergy-Pontoise)

Scientific Programme

A diversity of discounting horizons explains ramping diversity in dopaminergic neurons

P. Masset (Cambridge)

A comprehensive and data-driven model of free exploration in mice

E. Massi (Paris)

SYMPOSIUM

15:15 - 16:30

Channel 1

S20, Theoretical and computational approaches in neuroscience: European neuroinformatics platform EBRAINS. / Approches théoriques et computationnelles en neurosciences : Plateforme européenne de neuroinformatique EBRAINS.

Chairs:

V. Jirsa (Marseille)

A. Destexhe (Gif-sur-Yvette)

Linking brain structure, activity and cognitive function through computation. / Introduction à EBRAINS.

15:15 - 15:30

K. Amunts (Jülich)

Learning a functional (iEEG) connectome

15:30 - 15:45

W. Senn (Bern)

Human Intracerebral Platform of the Human Brain Project. / Plateforme pour les enregistrements intracérébraux chez l'homme.

15:45 - 16:00

O. David (La Tronche)

Multiscale Brain Modelling in EBRAINS. / Modélisation multi-échelle du cerveau dans EBRAINS.

16:00 - 16:15

E. D'Angelo (Pavia)

Discussion

16:15 - 16:30

SYMPOSIUM

15:15 - 16:30

Channel 2

S21, Encoding value in neuronal circuits. / Encodage de la valeur dans les circuits neuronaux.

Chairs:

A. Lüthi (Basel)

Neural basis of social approach and avoidance behaviour. / Base neurale de l'approche sociale et du comportement d'évitement.

15:15 - 15:30

C. Bellone (Geneva)

Dynamical population coding of negative emotional states in prefrontal circuits. / Codage dynamique de la population des états émotionnels négatifs dans les circuits préfrontaux.

15:30 - 15:45

C. Herry (Bordeaux)

Scientific Programme

Neural mechanisms for memory and emotional processing during sleep. / Bases neurales du traitement de la mémoire et des émotions pendant le sommeil. G. Girardeau (Paris)	15:45 - 16:00
Value coding for adaptive behavior in amygdala circuits. / Codage de valeur pour le comportement adaptatif dans les circuits d'amygdale. A. Lüthi (Basel)	16:00 - 16:15
Discussion	16:15 - 16:30

SYMPOSIUM
15:15 - 16:30

Channel 3

S22, Gender effect in cognitive decline during normal and pathological ageing: from mice to (wo) men. / Effet du genre sur le vieillissement cognitif normal et pathologique : des souris, des femmes et des hommes.

Chairs:
C. Mathis (Strasbourg)

"Sex difference in Neurosciences". / Différence sexuelle dans les neurosciences. M.T. Ferretti (Guntershausen)	15:15 - 15:30
Gender effect in Alzheimer's disease. / Effet du genre dans la maladie d'Alzheimer. M. Didic (Marseille)	15:30 - 15:45
Sex-dependent alteration of hippocampal function and plasticity in the APPxPS1 mouse model of Alzheimer's disease. / Les altérations hippocampiques des souris APPxPS1 modèles de la maladie d'Alzheimer diffèrent en fonction du sexe. C. Rampon (Toulouse)	15:45 - 16:00
Adult neurogenesis in the aging brain: impact of sex and early life stress. / Neurogenèse adulte et vieillissement cérébral: impact du sexe et des événements de vie précoce. M. Koehl (Bordeaux)	16:00 - 16:15
Discussion	16:15 - 16:30

SYMPOSIUM
15:15 - 16:30

Channel 4

S23, Neuroscience of consciousness in the clinics. / Neuroscience de la conscience dans la recherche clinique.

Chairs:
B. Rohaut (Paris)

Scientific Programme

Uncovering Consciousness in Unresponsive ICU Patients: Technical, Medical and Ethical Considerations. / Détecter la conscience des patients en réanimation. B. Rohaut (Paris)	15:15 - 15:30
Olfactory Sniffing Signals Consciousness in Vegetative Patients. / Reniflement olfactif signale la conscience chez les patients végétatifs. A. Arzi (Cambridge)	15:30 - 15:45
How neuroscience of consciousness helps the clinician to target therapeutic interventions to improve recovery in DOC patients. / Comment les neurosciences de la conscience peuvent aider le clinicien à cibler les interventions thérapeutiques visant à améliorer la récupération des patients ayant une altération de la conscience. J. Llau (Saint Genis Laval)	15:45 - 16:00
TMS/EEG perturbational strategies in disorders of consciousness. / Stratégies perturbationnelles TMS / EEG dans les troubles de la conscience. M. Rosanova (Milan)	16:00 - 16:15
Discussion	16:15 - 16:30

SYMPOSIUM
16:45 - 18:00

Channel 1

S24, Development and regeneration of the visual system. / Développement et régénérescence des voies visuelles. In partnership with the Canadian Association for Neuroscience

Chairs:

O. Goureau (Paris)
M. Cayouette (Montréal (Québec))

Regenerating the visual system: developmental regulators in the spotlight. / Régénérescence des voies visuelles: les régulateurs développementaux à la rescousse. M. Cayouette (Montréal (Québec))	16:45 - 17:00
Retinal organoids from human pluripotent stem cells: from development to disease. / Organoïdes de rétine issus de cellules souches pluripotentes humaines: du développement à la maladie. O. Goureau (Paris)	17:00 - 17:15
Cell-cell interaction in material exchange during cell transplantation. / Interactions cellule-cellule dans le transfert de matériel cytoplasmique dans la transplantation cellulaire. V. Wallace (Toronto, Ontario)	17:15 - 17:30
Linking neuroinflammation to retinal regeneration. / Régénération de la rétine et neuro-inflammation. M. Perron (Gif-sur-Yvette)	17:30 - 17:45
Discussion	17:45 - 18:00

Scientific Programme

SYMPOSIUM
16:45 - 18:00

Channel 2

S25, Neurocognitive impacts of early nutrition. / Impacts neurocognitifs de la nutrition précoce.

Chairs:

G. Ferreira (Bordeaux)

Adolescent obesogenic diet impairs memory through hippocampal endocannabinoid system. / Les perturbations de mémoire suite à la consommation d'un régime obésogène à l'adolescence impliquent le système endocannabinoïde de l'hippocampe.

G. Ferreira (Bordeaux)

16:45 - 17:00

Impact of juvenile exposure to high-fat diet on prefrontal plasticity and social memory. / Effets de l'exposition précoce à un régime obésogène sur la plasticité du cortex préfrontal et la mémoire sociale.

M. Maroun (Haifa)

17:00 - 17:15

Maternal high-fat diet impacts hippocampal activity and spatial representation in offspring. / L'obésité maternelle affecte l'activité hippocampique et la représentation spatiale de la progéniture.

P.-Y. Jacob (Marseille)

17:15 - 17:30

Nutritional supplementation prevents neurobehavioral deleterious effects of chronic stress during adolescence. / Une supplémentation nutritionnelle prévient les effets neurocomportementaux délétères d'un stress chronique pendant l'adolescence.

B. Passani (Firenze)

17:30 - 17:45

Discussion

17:45 - 18:00

SYMPOSIUM
16:45 - 18:00

Channel 3

S26, Theoretical and computational approaches in neuroscience: exactly linking neural dynamics across scales. / Approches théoriques et computationnelles en neurosciences : connecter les dynamiques neurales à travers les échelles avec des approches exactes.

Chairs:

M. Di Volo (Cergy-Pontoise)

A mean field model for fluctuation driven oscillations in heterogeneous networks of spiking neurons. / Un modèle de champ moyen pour les oscillations collectives dans les réseaux neuronaux hétérogènes.

M. Di Volo (Cergy-Pontoise)

16:45 - 17:00

Exact neural mass model for synaptic-based working memory. / Modèle exact de masse neurale pour la mémoire de travail synaptique.

S. Olmi (Sophia Antipolis)

17:00 - 17:15

Coherence states of inter-communicating oscillatory neural circuits. / Etats cohérents entre circuits neuronaux oscillants en inter-communication.

G. Dumont (Paris)

17:15 - 17:30

Scientific Programme

Timescales of ongoing cortical activity and their relationship to the local connectivity and attentional state. / Echelles temporelles de l'activité corticale spontanée et leur relation avec la connectivité locale et l'état attentionnel. A. Levina (Tübingen)	17:30 - 17:45
Discussion	17:45 - 18:00
 SYMPORIUM 16:45 - 18:00	Channel 4
S27, Glial cell functions in neurodegeneration, immunity and regeneration. / Fonctions des cellules gliales dans la neurodégénérescence, l'immunité et la régénération.	
Chairs: S. Birman (Paris) A. Giangrande (IILkirch)	
Immune cells within and outside the nervous system. / Paysages transcriptionnels et épigénétiques des cellules gliales et immunitaires à l'échelle de la cellule unique. A. Giangrande (IILkirch)	16:45 - 17:00
The Amyloid Precursor Protein regulates neuronal survival and neuro-glia interactions in Drosophila. / La protéine précurseur d'amyloïde régule la survie neuronale et les interactions neuro-gliales chez la drosophile. B. Hassan (Paris)	17:00 - 17:15
Gene network underlying the glial regenerative response to central nervous system injury. / Réseau de gènes à la base de la réponse régénérative gliale aux lésions cérébrales. A. Hidalgo (Birmingham)	17:15 - 17:30
Role of cellular interactions in the progression of Parkinson-like neurodegeneration in an insect brain. / Rôle des interactions cellulaires dans la progression des neurodégénérescences de type Parkinson dans un cerveau d'insecte. S. Birman (Paris)	17:30 - 17:45
Discussion	17:45 - 18:00

Scientific Programme

Friday, 21. May 2021

PLENARY LECTURE / CONFÉRENCE PLÉNIÈRE
09:00 - 09:30

Channel 1

PL06, Plenary Lecture / Conférence plénière

Chairs:
F. Chavane (Marseille)

Primate social cognition: role of the cortico-limbic system. / Cognition sociale chez le primate : rôle des circuits cortico-limbiques. **09:00 - 09:20**
J.-R. Duhamel (Lyon)

Discussion **09:20 - 09:30**

POSTER SESSION / COMMUNICATIONS AFFICHÉES
09:30 - 10:30

ePosters sessions

P5, Poster Session 5

The ePosters are available 24/24 during the whole time of the conference, however, a one-hour time block is dedicated to live discussions with the authors.

Bidirectional modulation of endocannabinoid-mediated inhibitory plasticity and social memory by environmental factors: effect of high-fat diet and environmental enrichment
M. Muller (Paris)

Bioorthogonal labeling unveils the masked epitopes of transmembrane AMPA receptor-auxiliary proteins in living neurons
D. Neto (Bordeaux)

MECP2 expression and role in progenitors of the primate cerebral cortex
K. Nikolla (Lyon)

The role of AMPA receptor surface mobility in high-frequency short-term synaptic plasticity
A. Nowacka (Bordeaux)

The SNARE protein VAMP4 controls constitutive recycling and sorting of post-synaptic receptors in neuronal dendrites
D. Perrais (Bordeaux)

Impaired development of hypoglossal motoneurons in a Magel2 suckling deficit mouse model
M. Richardeau (Marseille)

Kif21b: an atypical kinesin that controls brain cortex development
J. Rivera Alvarez (Illkirch)

Neurite growth kinetics regulation through hydrostatic pressure in a novel triangle-shaped neurofluidic system
J. Rontard (Lyon)

Scientific Programme

VPS35 deficiency in the embryonic cortex leads to prenatal cell loss and abnormal development of axonal connectivity.

M. Roque (Marseille)

Effects of 5-HT₄R activation on CA1 hippocampal synaptic plasticity: an add-on to the GABAergic hypothesis

C.M. Roux (Caen)

Disruption of the transcription factor NEUROD2 causes an autism syndrome via cell-autonomous defects in forebrain glutamatergic neurons.

K. Runge (Marseille)

Pallidin in drosophila surface glia modulates sleep via amino acid availability

H. Li (Bron)

Co-culture model of glutamatergic neurons and pediatric high-grade glioma cell lines in microfluidic devices to evaluate electrophysiological impact

L. Margot (Lyon)

Central sensory neurons detect and combat Streptococcus pneumoniae invading the cerebrospinal fluid

H. Marnas (Paris)

Protective role of microglia - T lymphocyte interaction in a mouse model of temporal lobe epilepsy

M. Moreno (MONTPELLIER)

Anti-FGFR3 antibodies induce neuronal cell death in sensitive neuronopathies through MAP kinase and autophagy pathways

Y. Nasser (Saint-Etienne)

Activity-driven presynaptic exocytomics to identify novel regulators of neurotransmission

C. Pascual-Caro (Paris)

Vitamin A : A key micronutrient for Parkinson's disease ?

A. Marie (Bordeaux)

Detrimental effects of myeloid cell derived VEGF on cerebral vasculature in early ischemic stroke

T. Mathivet (Poitiers Cedex 9)

Histamine in Narcolepsy Type 1: what do animal models tell us?

S. Melzi (Bron)

Exploring the link between myelin biology and Alzheimer's disease.

O. Mercier (Marseille Cedex 09)

Neuronal substrates of TSHZ3-linked autism spectrum disorder: focus on striatal cholinergic interneurons

J. Molitor (Marseille)

Prediction and prevention of compulsive behaviors by closed-loop optogenetic recruitment of striatal interneurons

S.L. Mondragon Gonzalez (Paris)

Neuroanatomical studies identify VPS13B as an important regulator of brain architecture and hippocampal formation in both genders

C. Montillot (Dijon)

Scientific Programme

Brain administration of the platelet secretome improves traumatic brain injury in animal models

O. Nebie (Taipei)

Design of copper-selective peptidic transporters to prevent β -amyloid toxicity in Alzheimer's Disease

M. Okafor (Strasbourg)

Dysregulation of the cholesterol pathway alters epigenomic signatures of hippocampal neurons in Alzheimer's disease

I. Paiva (Strasbourg)

A new in vivo model of hTau excess with sustained activation of caspases

M.-L. Parmentier (Montpellier)

Comparison of the sensitivity of murine and human astrocytes after different modalities of irradiation

N. Pasquet (Caen)

Host to graft propagation of α -synuclein in Parkinson's disease: intra-nigral versus intra-striatal transplantation.

M. Patrigeon (Poitiers)

Impaired α -tubulin (re)-tyrosination leads to synaptic dysfunction and is a feature of Alzheimer's disease

L. Peris (Grenoble)

Deciphering the implication in schizophrenia of the endogenous metabotropic glutamate mGlu2 receptor novel signaling in the prefrontal cortex of the mice

C. Philibert (Montpellier)

THERAPEUTIC EFFECTS OF CHLORZOXAZONE, A BKCA CHANNEL AGONIST, IN A MOUSE MODEL OF FRAGILE X SYNDROME

S. Pietropaolo (Pessac)

Impaired GABAergic system contributes to hippocampal hyperactivity in a model of Alzheimer's like tauopathy

S. Pouvreau (Bordeaux)

Inhibition of β -oxidation: a promising therapeutic approach for amyotrophic lateral sclerosis

C. Quessada (Strasbourg)

Biomaterials to enhance the survival of grafted human iPSC-derived motor cortical neurons in a mice model of traumatic injury

O. Rabesandratana (Poitiers)

Continuity within somatosensory cortical map shapes the integration of optogenetic input.

H. Lassagne (Gif-sur-Yvette)

Involvement of serotonergic descending pathways in pain in a mouse model of Parkinsonism

Z. Grivet (Bordeaux)

Role of chandelier interneurons in controlling prefrontal neuronal assemblies in vivo

C. Lheraux (Bordeaux)

Scientific Programme

Odor information processing by glomerular interneurons of the olfactory bulb: a structural/functional *in vivo* Imaging study

M. Loizeau (MARSEILLE)

Non-invasive real-time access to spatial attention information from EEG signals

C. Loriette (Bron)

Spinal hyperexcitability in amyotrophic lateral sclerosis (ALS) is extrinsic to motoneurons

V. Marchand-Pauvert (Paris)

Ripple-associated hippocampus to prefrontal cortex communication during memory processing.

Y. Humeau (Bordeaux Cedex)

Beyond somatotopy: functionally relevant information content distributed across S1 and M1 Homunculus

D. Muret (London)

A novel network slow oscillation in the claustrum *in vitro* is driven by GABA-A rhythmic inhibition.

G. Ouanounou (Gif-sur-Yvette Cedex)

Atomic force microscopy as a tool for evaluating the regenerative potential of neural cells in brain repair

D. Stamov

Cortico-striatal dynamics during fast learning

C. Piette (Paris)

Characterization of dopaminergic projections from the ventral tegmental area to the primary motor cortex

V. Plateau (Bordeaux)

Boosting non-verbal auditory processing: a new training strategy validated with MEG recordings

A. Pralus (Bron)

Role of NLRP3 inflammasome pathway in dopaminergic neuronal loss induced by chronic systemic inflammation in Parkin-deficient mice

F. Magno (Paris)

Effect of thyroid disrupting chemicals on seasonal functions in male and female Siberian hamsters.

M.-A. Moralia (Strasbourg Cedex)

Thyroid hormone receptors are required for melatonin-dependent control of Rfrp gene expression in mice

C. Quignon (Strasbourg)

Environmental enrichment attenuates the behavioral abnormalities and structural alterations in the cerebellum in rats prenatally exposed to valproic acid

L. Kruashvili (Tbilisi)

Role of the endocannabinoid system in the effects of obesogenic diet on memory: is there a gender difference?

M. N'Diaye (Bordeaux)

Scientific Programme

Frontal Pole activity of macaque monkeys in a fast-learning task

S. Nougaret (Marseille)

Ventral hippocampus is required for updating action-outcome associations but not outcome value in goal-directed behaviour

R. Piquet (Bordeaux)

A new behavioural paradigm in the study of action control in rats

J. Poitreau (Marseille)

The neuronal basis of self-generated behavior in the zebrafish larva

M. Privat (Paris)

Molecular changes in hippocampal energy metabolism in mice selectively bred for extremes in stress reactivity

V. Rappeneau (Osnabrück)

Encoding vs retrieval of episodic memory in rats: different theta oscillatory signatures in hippocampo-cortical networks according to individual episodic memory profile

N. Ravel (Bron)

Odors assist the categorization of ambiguous stimuli in the human visual cortex

D. Rekow (Dijon)

Impact of motor speed/accuracy requirements on decision-making in human and non-human primate.

A.J. Reynaud (Bron)

Tracking elapsed time: contrasting striatal vs. hippocampal neural activity

F. Rolando (Lyon)

Social prediction modulates activity of macaque superior temporal cortex

L. Roumazeilles (Oxford)

To what extent is temporal working memory similar in appetitive and aversive conditions in rats?

L. Saleille (Orsay)

Dissociating the impact of movement time and energy costs on decision-making and action initiation in humans

C. Saleri Lunazzi (Bron)

Task-related neuronal states shape prefrontal neuronal responses and its core spatial properties

A. Mouille (Bron)

Automated extraction and categorization of dolphin whistles

F. Mustun (Paris Cedex 05)

Shape deformation analysis of multi-omics data suggests that neuronal death in Huntington's disease is mainly driven by the loss of homeostatic responses

C. Neri (Paris)

A model/hardware framework for arbitrary waveform stimulation of peripheral nerve fibers

L. Regnacq (Cergy)

Scientific Programme

Early memory deficits and extensive brain network disorganization in the AppNL-F/MAPT double knock-in mouse model of familial Alzheimer's disease
C. Borcuk (Strasbourg)

SYMPOSIUM
10:45 - 12:00

Channel 1

S28, Theoretical and computational approaches in neuroscience: modelling subcortical networks. / Approches théoriques et informatiques des neurosciences : modélisation des réseaux sous-corticaux.

Chairs:
A. Leblois (Bordeaux)

Modelling two-step learning in the basal ganglia-cortical network. / Modélisation de l'apprentissage en deux étapes dans le circuit ganglions de la base-coortex. R. Sankar (Bordeaux)	10:45 - 11:00
Dopamine and Avoidance: The Good, the Bad, and Something Inbetween / Dopamine et évitement: le bon, le mauvais et quelque chose entre les deux P. Dayan (Tubingen)	11:00 - 11:15
Computational models of dopamine signalling in the striatum. / Modèles computationnels de la signalisation dopaminergique dans le striatum. R. Schmidt (Sheffield)	11:15 - 11:30
Modeling hippocampal awake replay with model-based bidirectional search. / Modélisation de la lecture éveillée de l'hippocampe avec la recherche bidirectionnelle basée sur un modèle. M. Khamassi (Paris)	11:30 - 11:45
Discussion	11:45 - 12:00

SYMPOSIUM
10:45 - 12:00

Channel 2

S29, Lateral habenula dysfunctions are central in brain pathologies: from cognitive deficits to mood disorders. / Habénula latérale et développement de pathologies cérébrales : des déficits cognitifs aux désordres de l'humeur.

Chairs:
L. Lecourtier (Strasbourg)

Lateral habenula dysfunction leads to emotional memory impairments in the Rat. / Un dysfonctionnement de l'habénula latérale induit des déficits de mémoire émotionnelle chez le Rat. L. Lecourtier (Strasbourg)	10:45 - 11:00
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Scientific Programme

Mapping rat brain networks associated with cognitive aspects of depression and their modifications in a preclinical MRI setting. / Modifications au sein des réseaux cérébraux associés aux déficits cognitifs liés à la dépression: étude à l'aide de l'imagerie à résonance magnétique.	11:00 - 11:15
N. Gass (Mannheim)	
Circadian timekeeping in the lateral habenula: possible implications in neurological ailments. L'habénula latérale comme horloge circadienne: implications possibles dans les désordres neurologiques.	11:15 - 11:30
J. Mendoza (Strasbourg)	
Stress-driven cognitive impairment require synaptic adaptations in the lateral habenula. / Les déficits cognitifs induits par le stress requièrent des adaptations synaptiques dans l'habénula latérale.	11:30 - 11:45
M. Mameli (Lausanne)	
Discussion	11:45 - 12:00

SYMPOSIUM
10:45 - 12:00

Channel 3

S30, Cellular mechanisms of neuronal migration in health and disease. / Mécanismes cellulaires de la migration neuronale en conditions physiologiques et pathologiques.

Chairs:

I. Caillé (Paris)

Oligodendrocyte precursor cells guide the migration of cortical interneurons into the developing cerebral cortex. / Les progéniteurs d'oligodendrocytes contrôlent la migration des interneurones du cortex cérébral.	10:45 - 11:00
L. Nguyen (Liège)	
Perturbation of CaMKIIbeta expression in the developing cerebral cortex impairs neuronal migration, dendritic patterning and social behavior. / Une perturbation de CaMKIIbeta dans le cortex cérébral affecte la migration neuronale, l'arbre dendritique et le comportement social.	11:00 - 11:15
E. Pacary (Bordeaux)	
Novel role of the synaptic scaffold protein Dlgap4 in early stages of cortical development. / Rôle nouveau de la protéine d'échafaudage synaptique Dlgap4 dans les stades précoce du développement cortical.	11:15 - 11:30
F. Francis (Paris)	
Primary cilium dependent cAMP/PKA signaling at the centrosome regulates neuronal migration. / La signalisation AMPc/PKA au centrosome dépendant du cil primaire régule la migration neuronale.	11:30 - 11:45
I. Caillé (Paris)	
Discussion	11:45 - 12:00

Scientific Programme

SYMPOSIUM
10:45 - 12:00

Channel 4

S31, Sleep and wake brain activities and memory processes. / Activités cérébrales pendant l'éveil et le sommeil en lien avec les processus de mémorisation. Supported by Viewpoint

Chairs:

C. Peyron (Bron)

Hippocampal rhythms, brain hemodynamics and functional Ultrasound (fUS): a novel approach to study brain function during sleep and wake. / Rythmes de l'hippocampe, réseau vasculaire et ultrasons fonctionnels (fUS): une nouvelle approche pour l'étude du cerveau pendant le sommeil et l'éveil A. Bergel (Paris)	10:45 - 11:00
Characterizing the activity and function of neural assemblies occurring in the hippocampus during rapid eye movement sleep. / Activité et fonction des assemblées de neurones hippocampiques pendant le sommeil paradoxal. R. Boyce (Marseille)	11:00 - 11:15
Investigating the developmental advantage of slow sleep oscillations on memory-related brain connectivity mechanisms in children and adults. / Bénéfice développemental des oscillations lentes pendant sommeil sur la connectivité cérébrale chez les enfants et les adultes. C. Urbain (Bruxelles)	11:15 - 11:30
The role of sleep in memory, vocabulary learning and cognitive development in children. / Le rôle du sommeil dans la mémoire, l'apprentissage du langage et le développement cognitif chez l'enfant. A.R. Weighall (Sheffield)	11:30 - 11:45
Discussion	11:45 - 12:00

SYMPOSIUM
10:45 - 12:00

Channel 5

S32, NMDA receptor signalling: old actor, new vista! / Signalisation du récepteur glutamatergique NMDA: vieil acteur cérébral, nouvelle vision !

Chairs:

L. Groc (Bordeaux)

Glutamate-insensitive NMDA receptors: new players in the brain. / Récepteurs NMDA insensibles au glutamate: nouveaux acteurs du cerveau. P. Paoletti (Paris)	10:45 - 11:00
Unconventional role of NMDA receptor in synaptic plasticity and psychosis. Rôle non-conventionnel du récepteur NMDA dans la plasticité synaptique et psychose. L. Groc (Bordeaux)	11:00 - 11:15
The genetic and clinical spectrum of GRIN-related disorders. / Génétique et clinique des troubles liés aux gènes GRIN. J. Lemke (Leipzig)	11:15 - 11:30

Scientific Programme

Amyloid precursor protein peptides: physiological modulators of NMDA receptor signaling. / Les peptides dérivés de la protéine précurseur de l'amyloïd: modulateurs physiologiques de la signalisation des récepteurs NMDA. **11:30 - 11:45**

H. Marie (Valbonne)

Discussion **11:45 - 12:00**

ROUND TABLE CONFERENCE / TABLE RONDE

12:20 - 13:00

Channel 2

MS.5, Carrying on outside academia

The Young Researchers' office of the French Neuroscience Society proposes 6 special Mentoring sessions to exchange with researchers on various current topics. These sessions are open to all attendees.

Chairs:

L. Becker (Strasbourg)

R. Goutagny (Strasbourg)

Contributors **12:20 - 13:00**

M. Lacroix (Paris)

M. Lods (Paris)

L. Meyer (Illkirch-Graffenstaden)

A. Schramm (Paris)

ROUND TABLE CONFERENCE / TABLE RONDE

12:20 - 13:00

Channel 3

MS.6, Good practices in Neuroscience

The Young Researchers' office of the French Neuroscience Society proposes 6 special Mentoring sessions to exchange with researchers on various current topics. These sessions are open to all attendees.

Chairs:

A. Gros (Bordeaux)

S. Morceau (Bordeaux)

Contributors **12:20 - 13:00**

I. Balansard (Marseille)

A. Beyeler (Bordeaux)

M. Karnani (Amsterdam)

A. René (Paris)

Scientific Programme

SPECIAL CONFERENCE / CONFÉRENCE SPÉCIALE
13:00 - 14:00

Channel 1

PL07, Special Lecture / Conférence spéciale

Chairs:

S. Daumas (Paris)

The retention of memory and first steps in one facet of social neuroscience.

13:00 - 13:45

R.G. Morris (Edinburgh)

Discussion

13:45 - 14:00

POSTER SESSION / COMMUNICATIONS AFFICHÉES
14:00 - 15:00

ePosters sessions

P6, Poster Session 6

The ePosters are available 24/24 during the whole time of the conference, however, a one-hour time block is dedicated to live discussions with the authors.

Guidance modalities of regenerative axons after CNS injury

J. Schaeffer (Grenoble)

3D imaging reveals distinct Oxytocin and Vasopressin cell development in the mice brain

A. Soumier (Bron)

Role of the dopamine D1 receptor in the regulation of cortical interneuron migration

A.-G. Toutain (Paris)

Afferent-specific deficits in cerebellar Purkinje cell synapses in the neonatal phencyclidine model of schizophrenia

M. Veleganu (Paris)

The M-current works in tandem with the persistent sodium current to set the speed of locomotion

J. Verneuil (Marseille)

Implication of glial cells in activity dependent plasticity of spinal inhibition in the dorsal horn

L. Vial-Markiewicz (Strasbourg)

Axon guidance modalities in CNS regeneration revealed by quantitative proteomic analysis

N. Vilallongue (Grenoble)

Huntingtin regulates dendritic spine morphogenesis through a cofilin-mediated control of the actin cytoskeleton

D. Wennagel (La Tronche)

Investigation of cell cycle dysfunctions in the murine Em1 conditional knockout model of heterotopia

D. Zaidi (Paris)

Learning-dependent reconfiguration of hippocampal-prefrontal synaptic communication

C.-L. Zhang (Paris)

Scientific Programme

Relationship between Tau proteins and brain insulin resistance pathways: cellular and molecular approaches.

W. Pinheiro (Chilly Mazarin)

Regulation of the SUMOylation balance at the mammalian synapse.

M. Pronot (Valbonne)

Genetic activation of Hedgehog signaling in Glast+ cells prevents high fat diet-induced obesity and alteration of glucose response

M. Russo (Gif sur Yvette)

Endosomes can respond autonomously to local calcium concentrations to direct long-range retrograde neurotrophin signaling

C. Scaramuzzino (GRENOBLE)

Patched deficiency in Glast+ astrocytes prevents age-associated metabolic alterations through increased fatty acid oxidation.

L. Tirou (Gif sur yvette)

Characterization of novel optic and optogenetic tools to study the pleiotropic functions of phosphatidic acid during neurosecretion

A. Wolf (Strasbourg)

Epigenetic biomarkers by whole-genome DNA methylation profiles in AN cohorts of patients and remitters

N. Ramoz (Paris)

Endogenous regulation of the Cannabinoid Type-1 Receptor (CB1) by the neurosteroid pregnenolone: Characterization of the novel CB1-E134G mutant mouse line.

P.-L. Raux (Bordeaux)

Early blockade of serotonin 5-HT6 receptor-dependent mTOR activation prevents onset of cognitive deficits in a developmental model of schizophrenia

A. Rogliardo (Montpellier)

Effect of andrographolide, an NFkB inhibitor, on cocaine intake and motivation for the drug in rats

P. Romieu (Strasbourg)

Mechanisms of atypical sensory information processing within the somatosensory cortex of an autism mouse model

V. Sakka (Bordeaux)

Capturing and profiling cocaine-recruited neuronal ensembles in the nucleus accumbens.

M. Salery (New York)

Cerebellar cognitive affective syndrome (CCAS) : an emphasize on its affective dimensions using resting-state connectivity.

L. Sebag (Bordeaux)

Longitudinal modifications of the connectome of a mouse model of Alzheimer's disease

M. Soury (Strasbourg)

Reducing amyloid pathology and neuroinflammation in APPSwe/PSEN1dE9 mice with a non-competitive β -secretase inhibitor

M. Tautou (Lille)

Scientific Programme

ZINC CHELATION REDUCES ALPHA-SYNUCLEIN-INDUCED NEURODEGENERATION IN A MOUSE MODEL OF PARKINSON'S DISEASE

M. Teil (Bordeaux)

Modelling Parkinson's disease with patient induced pluripotent stem cells

N.P. Thamrin (Poitiers)

Remote thalamic iron accumulation following cortical stroke predicts long term volume loss: an MRI longitudinal study

M. Tible (Bordeaux Cedex)

Mutant mice expressing polymorphisms for α 5 nicotinic receptors as preclinical models of type 1 and 2 alcoholism

L. Tochon (Bordeaux)

Memory dysfunctions in Frontotemporal dementia FusANLS/+ mouse model and associated epigenetic and transcriptomic changes

L. Tzeplaeff (Strasbourg)

Comparative assessment of network-level defects in rodent models of subcortical band heterotopia and periventricular heterotopia

J.-C. Vermoyal (Marseille)

Developing 2-D and 3-D models to disentangle the interplay between mitochondrial vulnerability and inflammation in Parkinson's disease

H. Winterberg (Paris)

A VH₁ directed against tau as a novel therapeutic approach in tauopathies?

O. Zejneli (Lille)

Involvement of retinoic acid receptor α signaling in the physiopathology of Huntington disease

N. Zinter (Illkirch Graffenstaden)

Lifespan cerebral grey matter changes in the marmoset monkey

F. Rémy (Toulouse)

Olfactory modulation of barrel cortex activity during active whisking and passive whisker stimulation

A. Renard (Paris)

The central role of the claustrum in the interareal cortical network

A.R. Ribeiro Gomes (Bethesda)

Functional investigation of the lateral entorhinal cortex input to hippocampal area CA3

V. Robert (New York)

Neural basis of sensory substitution in songbirds

M. Rolland (Orsay)

MONITORING THE HETEROGENEOUS ORGANIZATION OF SHORT-TERM PLASTICITY AT CEREBELLAR GRANULE CELLS TERMINALS

T. Rossi (Strasbourg)

Investigating how humans perceive differences between drops of water

L. Samain-Aupic (Marseille)

Scientific Programme

- Use of Crispr-cas9 in *Psammomys obesus* to examine the increased vulnerability of cones to *Abca4* gene mutations implicated in Stargardt's disease.**
F. Sassone (Strasbourg)
- Functional connectivity patterns between the fundus of the intraparietal sulcus and the primary somatosensory area S1 in awake macaque monkey**
W.-A. Sheng (Bron)
- Spatial attention selection mechanisms drive saccadic eye movements in the prefrontal cortex**
R. Thiboud (Bron Cedex)
- Diversity and specialization of V2a reticulospinal neurons in controlling locomotion and orienting behaviors**
G. Usseglio (Gif-Sur-Yvette)
- Impact of a weekly shift of the light-dark cycle on sleep, brain activity and behavior.**
G. Vanotti (Strasbourg)
- The effects of gravity on perception and cortical activation : an innovative study using fNIRS and anteroposterior GVS.**
E. Vayssade (Toulouse)
- Effect of a Sunflower oil enriched diet on microglial reactivity, neuroinflammation and cognitive disorders associated with obesity**
C. Sanchez (Valbonne)
- Tacnocyte plasticity regulation by TSH**
A. Shiba (Strasbourg)
- Distinct functions of phospholipase D-derived phosphatidic acid unsaturated species during regulated exocytosis in neuroendocrine cells.**
E. Tanguy (Strasbourg)
- Controlled manipulation of microglial phenotype in culture**
P. Wolf (Strasbourg)
- Emotional behavior, brain anatomy and therapeutical approaches study of the mdx52 mouse model of Duchenne muscular dystrophy**
A. Saoudi (Orsay)
- Resilience to pain-induced anxiodepressive consequences in a Sprague-Dawley rat model of neuropathic pain.**
M. Schott (Strasbourg)
- Motivational control of decision making in wildtype mice and the Sapap3-KO mouse model of compulsive-like behaviour using an automated, high throughput behavioral task**
C. Schreweis (Paris)
- Dorsal raphe serotonin neurotransmission is required for the expression of nursing behavior and for pup survival**
S. Scotto-Lomassese (Paris)
- Balance between retention and forgetting of declarative memory in aging**
A. Sellami (Bordeaux)

Scientific Programme

Interaction between the endogenous opioid system and the FLT3 receptor during pain chronification

M. Thouaye (Montpellier)

Evolution of performance during acquisition of a cognitive task in a group of related common marmosets (*Callithrix jacchus*)

B. Tia (Marseille)

Radial Glial Cells in the optic tectum of zebrafish display synchronized activity events associated with activation of the locus coeruleus.

A. Uribe (Paris)

A place with a view: parietal and hippocampal neuronal activities during virtual navigation in the macaque

M. Vericel (Bron)

Involvement of the subthalamic nucleus in social recognition in rat -lesional and optogenetics approach

C. Vielle (Marseille)

Human frontal neural dynamics reflect strategies for performance monitoring and decisions to check

L. Viñales (Bron)

In vivo examination of social circuits in mice.

C. Viollet (Paris)

Coupling between the phase of a neural oscillation or bodily rhythm with behavior: evaluation of different statistical procedure

N. Wolpert (Paris)

Attention-tracking using a novel digital interface in non-human primates

Y. Yang (Bron)

Inhibition and gait initiation in Parkinson's disease: an EEG study

D. Ziri (Paris)

Investigating animal behavioural dynamics used to react to external cues on the level of sequences

G. Sridhar (Paris)

Cooperative maintenance of cellular identity in the network of neuron-like Hodgkin-Huxley-type of models with intercellular communication defects

N. Stankevich (Nizhny Novgorod)

Modulation of neuronal anticipatory activity in a topographical model of V1

A.A. Vergani (Marseille)

Modeling astrocyte-neuron interactions shows that potassium regulated by astrocytes modulates afterhyperpolarization and burst-interburst dynamics

L. Zonca (Paris)

Scientific Programme

SYMPOSIUM
15:15 - 16:30

Channel 1

S33, Cell programming and reprogramming in the brain. / Programmation et reprogrammation cellulaire dans le cerveau.

Chairs:

O. Raineteau (Bron)
C. Heinrich (Bron)

Temporal controls over interareal cortical projection neuron fate diversity. / Plasticité temporelle des neurones de projection intracorticaux dans le néocortex de souris en développement.

D. Jabaudon (Geneva)

15:15 - 15:30

Origin, transcriptional specificities and regenerative potential of postnatal cortical progenitors. / Origine, spécificités transcriptionnelles et potentiel régénératif des progéniteurs corticaux postnatals.

O. Raineteau (Bron)

15:30 - 15:45

Engineering new interneurons for the cerebral cortex. / Ingénierie de nouveaux interneurones pour le cortex cérébral.

B. Berninger (London)

15:45 - 16:00

In vivo reprogramming of glial cells into induced neurons: A new avenue towards brain repair. / Reprogrammation des cellules gliales en nouveaux neurones: Vers une nouvelle stratégie pour la réparation du cerveau.

C. Heinrich (Bron)

16:00 - 16:15

Discussion

16:15 - 16:30

SYMPOSIUM
15:15 - 16:30

Channel 2

S34, Value-based learning and decision-making: insights from flies to humans. / Apprentissage et prise de décision fondés sur la valeur : de la mouche à l'Homme.

Chairs:

E. Perisse (Montpellier)
S. Palminteri (Paris)

Context-dependence induces distorted memories of values: a test with across three decision-making modalities, four preference elicitation methods and nine countries / Apprentissage par renforcement dépendant du contexte.

S. Palminteri (Paris)

15:15 - 15:30

Neural circuits and mechanisms for relative aversive value coding in flies and mice. / Circuits neuronaux et mécanismes du codage de la valeur relative aversive chez la mouche et la souris.

E. Perisse (Montpellier)

15:30 - 15:45

Stimulus-reward learning and generalization in structured environments. / Apprentissage stimulus-récompense et généralisation dans des environnements structurés.

M.M. Garvert (Leipzig)

15:45 - 16:00

Scientific Programme

Stress modulates learning and decision-making under uncertainty. / Le stress module l'apprentissage et la prise de décision dans l'incertitude. C.M. Raio (New York) **16:00 - 16:15**

Discussion **16:15 - 16:30**

SYMPOSIUM
15:15 - 16:30

Channel 3

S35, Neural bases of memory formation, stabilisation and representation. / Les bases neurales de la formation, la stabilisation et la représentation de la mémoire.

Chairs:

S. Tronel (Bordeaux)

Molecular Mechanism of Information Storage in Engram Cells. / Mécanisme moléculaire du stockage de l'information dans les cellules de l'engramme. T.J. Ryan (Dublin) **15:15 - 15:30**

Memory inception in mice. / Implantation du souvenir artificiel chez la souris. G. Vetere (Paris) **15:30 - 15:45**

A Cortical switch in the composition of synaptic GluN2-containing NMDA receptors drives the formation of long-lasting associative olfactory memory. / Un changement dans la composition en sous unité GluN2 des R-NMDA synaptiques corticaux contrôle la formation et le maintien d'une mémoire olfactive. O. Nicole (Bordeaux) **15:45 - 16:00**

Immature adult-born neurons primed by learning are necessary for remote memory reconsolidation. / Les nouveaux neurones hippocampiques sélectionnés par l'apprentissage sont nécessaires à la reconsolidation de la mémoire à long terme. S. Tronel (Bordeaux) **16:00 - 16:15**

Discussion **16:15 - 16:30**

SYMPOSIUM
15:15 - 16:30

Channel 4

S36, Central and peripheral determinants of microglia biology in health and disease. / Déterminants centraux et périphériques de la biologie de la microglie en conditions physiologiques et pathologiques. Supported by the Journal of Neuroendocrinology

Chairs:

S. Layé (Bordeaux)

Microglia in early brain development: from ontogeny to impact on circuit wiring. / Les microglies dans le développement précoce du cerveau: de l'ontogénie à l'impact sur le câblage des circuits. M.S. Thion (Paris) **15:15 - 15:27**

Scientific Programme

Poor nutritional habits impact on microglia-neuron interactions. / Impact des mauvaises habitudes nutritionnelles sur les interactions microglie-neurone. C.M. Madore (Bordeaux)	15:27 - 15:39
Implication of peripheral macrophages in Amyotrophic Lateral Sclerosis. / Implication des macrophages périphériques dans la Sclérose Latérale Amyotrophique. A. Chiot (Paris)	15:39 - 15:51
Relative contribution of parenchymal and amyloid plaques associated microglia to Alzheimer Disease progression. / Microglies du parenchyme versus microglies associées aux dépôts A_B : rôles respectifs dans la maladie d'Alzheimer. H. Hirbec (Montpellier)	15:51 - 16:03
Life and Fate of CNS macrophages. M. Greter (Zürich)	16:03 - 16:15
Discussion	16:15 - 16:30

SYMPOSIUM
15:15 - 16:30

Channel 5

S37, Pain in Parkinson's disease: translational advances from the clinic to models in rodents. / Douleur dans la maladie de Parkinson : avancées translationnelles de la clinique aux modèles rongeur.

Chairs:

M. Barrot (Strasbourg)

Clinical and pathophysiological aspects of pain in parkinsonian patient. / Aspects cliniques et physiopathologiques de la douleur chez le patient parkinsonien. C. Brefel-Courbon (Toulouse)	15:15 - 15:30
Pain in Parkinson's Disease: Current Concepts and a New Diagnostic Algorithm. / La douleur dans la maladie de Parkinson: concepts actuels et nouvel algorithme de diagnostic. J.-P. Lefaucheur (Créteil)	15:30 - 15:45
Monoaminergic control of nociceptive integration in the spinal cord of animal models of Parkinson's disease. / Implication des monoamines dans l'intégration nociceptive chez un modèle de parkinsonisme chez le rat. A. Benazzouz (Bordeaux)	15:45 - 16:00
Subthalamic nucleus and pain, involvement in Parkinson's disease. / Noyau subthalamique et douleur, implication dans la maladie de Parkinson. V. Coizet (La Tronche)	16:00 - 16:15
Discussion	16:15 - 16:30

Scientific Programme

SYMPOSIUM
16:45 - 18:00

Channel 1

S38, Neuroendocrinology of early life programming. / Neuroendocrinologie de la programmation périnatale. Supported by the Journal of Neuroendocrinology

Chairs:

S. Bouret (Lille)

Developmental programming of hypothalamic melanocortin circuits. / Programmation développement des circuits hypothalamiques impliqués dans la régulation de la prise alimentaire.	16:45 - 17:00
S. Bouret (Lille)	
Role of the gut-brain axis in early stress-induced emotional vulnerability. / Rôle de l'axe intestin-cerveau dans les altérations émotionnelles associées au stress précoce.	17:00 - 17:15
M. Darnaudery (Bordeaux)	
Neuroendocrine programming by maternal photoperiod. / Programmation neuroendocrine par la photopériode maternelle.	17:15 - 17:30
D. Hazlerigg (Tromsø)	
Transgenerational effects of endocrine disruptors. / Effets transgénérationnels des perturbateurs endocriniens.	17:30 - 17:45
A.-S. Parent (Liège)	
Discussion	17:45 - 18:00

SYMPOSIUM
16:45 - 18:00

Channel 2

S39, The neural representation of auditory sequences: from birdsong to human language. / Représentation cérébrale des séquences auditives: du chant des oiseaux au langage humain.

Chairs:

C. Del Negro (Orsay)

The neural representation of sequences in humans. / La représentation cérébrale des séquences chez les humains.	16:45 - 17:00
F. Meyniel (Gif-sur-Yvette)	
Processing of auditory sequences in humans from an evolutionary perspective. / Le traitement des séquences auditives chez l'humain selon une perspective évolutive.	17:00 - 17:15
B. Poulin-Charonnat (Dijon)	
Neural encoding of auditory sequences in songbirds. / Traitement cérébral des séquences auditives chez les Oiseaux chanteurs.	17:15 - 17:30
N. Giret (Orsay)	
Sensorimotor and Hierarchical Modeling of Sequence Processing: Songbirds, Humans, Robots / Modélisation sensorimotrice et hiérarchique de séquences : chant d'oiseaux, humains, robots.	17:30 - 17:45
X. Hinaut (Talence)	
Discussion	17:45 - 18:00

Scientific Programme

SYMPOSIUM
16:45 - 18:00

Channel 3

S40, Structural plasticity and adaptive processes in neuronal networks. / Plasticité structurelle et processus adaptatifs dans des circuits neuronaux.

Chairs:

U. Egert (Freiburg)
S. Rotter (Freiburg)

Principles of functional circuit connectivity: Insights from the zebrafish optic tectum, / Principes de connectivité fonctionnels dans le toit optique du poisson zèbre,
G. Sumbre (Paris)

16:45 - 17:00

Homeostatic growth and remodeling of cortical networks. / Croissance homéostatique et remodelage des réseaux corticaux.
S. Rotter (Freiburg)

17:00 - 17:15

Homeostatic structural plasticity of neuronal connectivity in response to external stimulation - A combined study using computer simulations and in vivo experiments. / Plasticité structurelle homéostatique de la connectivité neuronale en réponse à une stimulation externe : Une étude combinée utilisant des simulations computationnelles et des expériences in vivo
H. Lu (Strasbourg)

17:15 - 17:30

Self-organized network inhomogeneity governs spontaneous activity dynamics. / L'inhomogénéité des réseaux auto-organisés régit la dynamique des activités spontanées.
S. Okujeni (Freiburg)

17:30 - 17:45

Discussion

17:45 - 18:00

SYMPOSIUM
16:45 - 18:00

Channel 4

S41, Cerebellum, timing and schizophrenia: complementary approaches in humans and rodents. / Cervelet, temps et schizophrénie: des approches complémentaires chez l'homme et les rongeurs.

Chairs:

P. Isopé (Strasbourg)
A. Giersch (Strasbourg)

A synaptic mechanism for encoding time within neural circuits. / Un mécanisme synaptique pour le codage du temps dans les circuits neuronaux.
D. Digregorio (Paris)

16:45 - 17:00

Alterations in the mechanisms of temporal prediction in schizophrenia: what is the link with the sense of self? / Altérations des mécanismes de prédiction temporelle dans la schizophrénie: quel est le lien avec le sentiment de soi?
A. Giersch (Strasbourg)

17:00 - 17:15

Scientific Programme

The cerebellum: a potential diagnostic and therapeutic target for schizophrenia? / Le cervelet: une cible potentielle pour le diagnostic et le traitement dans la schizophrénie? C. Laidi (Créteil)	17:15 - 17:30
Time processing and communication between the cerebellum and the frontal cortex: translational approaches. / Traitement du temps et communication entre le cervelet et le cortex frontal : approches translationnelles. K. Parker (Iowa City)	17:30 - 17:45
Discussion	17:45 - 18:00
 SYMPOSIUM 16:45 - 18:00	Channel 5
S42, Neurological and psychiatric impact of COVID-19 / Impact neurologique et psychiatrique de l'infection par COVID-19	
Chairs: P. Vidailhet (Strasbourg)	
The hypothalamus as a hub for SARS-CoV-2 brain infection and pathogenesis / L'hypothalamus comme hub de l'infection cérébrale et de la pathogenèse du SRAS-CoV-2 V. Prévot (Lille)	16:45 - 17:00
Neurological impact of COVID-19 O. Collange (Strasbourg)	17:00 - 17:15
NeuroCovid- Neuroimaging Patterns. / Patterns Neuroradiologiques des lésions cérébrales dans la COVID 19. S. Kremer (Strasbourg)	17:15 - 17:30
Psychological and physical impact of COVID-19 pandemia: short and long-term effects in Germany A. Felsenheimer (Berlin)	17:30 - 17:45
Discussion	17:45 - 18:00