

Scientific Programme

Wednesday, 17 May 2017

OPENING CEREMONY / SEANCE INAUGURALE
08:30 - 09:00

Amphi A

OPENING CEREMONY

SEANCE INAUGURALE

PLENARY LECTURE / CONFÉRENCE PLÉNIÈRE
09:00 - 10:00

Amphi A

PL01, Opening Plenary lecture

Chaired by:

P.V. Piazza (Bordeaux)

Neuroplasticity in the brain stress systems in addiction / Plasticité des réseaux neuronaux du stress dans l'addiction aux drogues d'abus

G.F. Koob (Bethesda)

POSTER SESSION / COMMUNICATIONS AFFICHÉES
10:00 - 11:00

Espace Pluriel

P1, Poster session

Poster sessions run from 10:00 to 11:00 and from 13:00 to 17:00 every day. However, a one hour time block is dedicated to discussion with the authors:

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- from 10:00 to 11:00 for even-numbered posters

- from 14:00 to 15:00 for odd-numbered posters

Development, synaptic plasticity

Glutamatergic interneurons in the olfactory bulb: when genetics meets in vivo imaging

A. Angelova (Marseille)

Deletion of neurotrophin signaling through the glucocorticoid receptor pathway in mice

M. Arango-Lievano (Montpellier)

Regulation of hippocampal network and memory by synaptic plasticity in somatostatin interneurons

J. Artinian (Montréal)

Deciphering the role of the kinesin KIF21B during mouse cortical development

L. Asselin (Illkirch)

A global overview of Fidgetin-like 1-interactome-mediated motor circuit wiring

M. Atkins (Paris)

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Conditional inactivation of the eif2b5 gene in radial glial cell or oligodendrocyte cell lineages in mice: models for studying the CACH/VWM syndrome

A. Bark (Paris)

Huntingtin regulates cortical development: from embryo to young adult

M. Barnat (La Tronche)

Presenilin/γ-secretase cleavage of APP controls synaptic vesicles processing by synaptotagmin 7 underlying short-term plasticity

G. Barthet (Bordeaux)

Mutation of Tuba1a leads to straighter microtubules, perturbing saltatory neuronal migration

R. Belvindrah (Paris)

GABAergic synapses onto oligodendrocyte precursors regulate their cellular self-maintenance

N. Benamer (Paris)

Transitory regression of the intrinsic activation properties of V1 interneurons during the early phase of spinal cord network development

J. Boeri (Paris)

A pipeline for processing whole brain distribution of fate mapped glutamatergic neurons

Y. Bollmann (Marseille)

Functional development of newborn neurons leading to the integration into mature circuits

J. Boulanger-Weill (Paris)

Role of kinesin 1 (KIF5) in synaptic function and plasticity

A. Brachet (Bordeaux)

Neonatal perturbations in the spinal motor networks of the SOD1 ALS mouse model

P. Branchereau (Pessac)

Unbalanced corticostriatal connectivity in a mouse model of neonatal dopamine dysfunction

B.Y. Braz (Buenos Aires)

Selection and characterization of new small affinity ligands for AMPA receptor subunits

C. Breillat (Bordeaux)

Regulation of neuronal migration in the postnatal olfactory bulb: insights from in vivo imaging

S. Bugeon (Marseille)

Long-term ketamine self-administration disrupts postsynaptic glutamate elements in rat medial prefrontal cortex and hippocampus

L. Caffino (Milano)

In vivo dynamics of AMPA receptors during experience-dependent cortical plasticity

T. Campelo (Bordeaux)

Characterization of early born pyramidal cells in the CA1 area of the adult hippocampus

D. Cavalieri (Marseille)

Consequences of conditional Tshz3 deletion in the corticostriatal circuitry: implication in autism spectrum disorder

D. Chabbert (Marseille)

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Postsynaptic neurexin partners neuroligin1 and LRRTM2 exhibit distinct nanoscale organization at synapses

I. Chamma (Bordeaux)

Role of the primary cilium in the migration and differentiation of adult-born neurons

M. Chaulet (Paris)

Hippocampal LTP and contextual learning require surface diffusion of AMPA receptors

D. Choquet (Bordeaux)

Multicolor clonal analysis to study astrocyte network development in the mouse cerebral cortex

S. Clavreul (Paris)

Guided growth of neural networks on switchable polymer microtrails

F. Cohen (Paris)

Various long term depressions trigger different nanoscale reorganization of AMPA receptors

B. Compans (Bordeaux)

Calcium signals triggered by the microenvironment regulate neural stem cell proliferation and self-renewal in the brain subventricular zone

V. Coronas (Poitiers)

AMPK-related kinase NUA1 haploinsufficiency impairs cortical development and behavior in the mouse

J. Courchet (Villeurbanne)

Development of photoactivatable tools for the study of the dynamics of AMPA glutamate receptors

S. Crespillo Torreño (Bordeaux)

Cortex-related molecular, synaptic and behavioral deficits in mice deficient for the transcription factor NeuroD2

A. de Chevigny (Marseille)

Abnormal wiring of CCK+ basket cells disrupts theta oscillatory activity and spatial information coding

I. Del Pino (Bordeaux)

New P2X4mCherryIN knockin transgenic mice expressing non-internalized P2X4 receptors revealed alteration in hippocampal plasticity and memory

T. Deluc (Bordeaux)

Hierarchical input integration at glutamatergic synapses of the nucleus accumbens

M. Deroche (Marseille)

Vangl2 inhibits neuronal outgrowth on N-cadherin substrates by controlling the interface between actin dynamics and adhesion

S. Dos Santos Carvalho (Bordeaux)

Signalisation, cellular communications

The molecular mechanisms leading to alternative splicing of the NXNL1 gene: the origin of the RdCVF metabolic signaling

N. Ait Ali Maamri (Paris)

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Astrocytes withdraw from synapses during long-term potentiation boosting glutamate spillover

L. Bard (London)

Functional characterization of afferents inputs received by prototypic and arkypallidal GPe neurons

M. Barresi (Bordeaux)

Insulin regulates P2X4 receptor function and promotes its rapid delivery to the cell surface

E. Bertin (Bordeaux)

Hippocampal gamma oscillations are modulated by acetylcholine via activation of the M1 receptor

R. Betterton (Bristol)

Early endosome aggregation in Down syndrome revealed by high-resolution microscopy

A. Botté (Paris)

Study of CRMP4 functions in MAP6 dependent axonal outgrowth induced by semaphorin 3E

B. Boulan (La Tronche)

Benchmarking various clarification protocols to characterize EAE inflammatory plaques in the whole spinal cord of triple fluorescent mice

C. Boutres (Marseille)

Molecular characterization of dopamine D1 receptors in the mouse amygdala

L. Castell (Montpellier)

Vesicular treadmilling in axons defines how synapses adapt to high neuronal activity

M. Cazorla (Grenoble)

A key role for amygdala astrocytes in regulation of negative affective processing by oxytocin

A. Charlet (Strasbourg)

Investigating the homodimer interface of Smoothed: structure-based discovery of novel Hedgehog antagonists

P. Chatterjee (Gif sur Yvette)

Hyperexcitability of GABAergic interneurons can trigger cortical spreading depression: a new pathological mechanism of migraine?

O. Chever (Valbonne)

Aquaporin-4 surface dynamics regulate astrocytic process motility in an isoform-dependent manner

S. Ciappelloni (Bordeaux)

Dynamics of GTP hydrolysis of dynamin, the last step of endocytosis, measured in living cells

L. Claverie (Bordeaux)

Characterization of dopamine D2 receptors in the cerebellum

L. Cutando Ruiz (Montpellier)

Role of Pyk2 in striatal function

B. De Pins (Paris)

Scientific Programme

G protein as key regulators of GPCR-regulating survival and migration of high-grade gliomas

K.P. Dembélé (Rouen)

Modulation of NMDA receptor mediated excitatory synaptic currents in dopamine neurons of the substantia nigra

G. Destreel (Liège)

ColQ binds to LRP4 at the neuromuscular junction

A. Dobbertin (Paris)

Ultrastructural, molecular and functional heterogeneities of cerebellar granule cell presynaptic terminals

F. Doussau (Strasbourg)

Improved biosensor technique to study the release of ATP by spinal cord glial cells

V. Eersapah (Strasbourg)

LG11 tunes intrinsic excitability by regulating the density of axonal Kv1 channels

O. El Far (Marseille)

Unsuspected role of glutamate NMDA receptors dynamics in the firing of midbrain dopamine neurons

L. Etchepare (Bordeaux)

Determinants of action potential threshold in rat layer 5 pyramidal neurons

A. Fekete (Marseille)

Co-agonists differentially tune GluN2B-NMDA receptor trafficking at hippocampal synapses

J.S. Ferreira (Bordeaux)

Synaptic changes and role of O-GlcNAcylation in the sensorimotor cortex after a chronic period of sensorimotor perturbation in adult rats

J. Fourneau (Loos)

Image analysis of synaptic alteration in the brain of a mouse model of Huntington's disease

M. Garret (Bordeaux)

Critical role of Pyk2 at hippocampal excitatory synapses and in Huntington's disease

A. Giralt (Paris)

A study of the contribution of alkaline phosphatase and ecto-5'-nucleotidase to the synthesis of adenosine in mouse piriform cortex

M. Gleizes (Toulouse)

Neurological and psychiatric diseases, experimental therapeutics

Impact of repeated administration of cocaine on the expression of genes involved in cholesterol metabolism in the brain

J. Alsebaaly (Poitiers)

Alterations of synaptic morphology and plasticity in a mouse model of Alzheimer's Disease

A. Androuin (Paris)

Plasticity of the glutamatergic synapse proteome in a mouse model of intellectual disability

M.F. Angelo (Bordeaux)

Scientific Programme

Identification of a novel neuroprotective antioxidant enzyme in Parkinson's disease

Y. Anouar (Mont saint Aignan)

Generation of Alzheimer's disease (AD) patients' induced pluripotent stem cells (iPSC) derived neurons for diagnostic and therapeutic research of AD

L. Auboyer (Montpellier)

Focal motor seizure induced by striatal pharmacological manipulations in the monkey

J. Aupy (Bordeaux)

Beneficial effects of inflammation in delayed cortical transplantation

N. Ballout (Poitiers)

The NFL-TBS.40-63 peptide enters in human fetal neural stem cells in vitro and boosts their differentiation

K. Barreau (Angers)

Functional duality of Fas (CD95) death signalling in spinal muscular atrophy and amyotrophic lateral sclerosis

S. Benlefi (Montpellier)

Electrophysiological investigation of cell therapy in a mouse model of Parkinson's disease

M. Benoitmarand (Poitiers)

Alcohol withdrawal induced excessive levels of corticosterone in the prefrontal cortex-hippocampus circuitry and prolonged alterations of working memory

D.J. Beracochea (Bordeaux)

Prevent the onset of cognitive deficits induced by cannabis abuse during adolescence: benefits of early blockade of 5-HT6-mTOR pathway

C. Berthoux (Montpellier)

Seizures can worsen the severity of epileptic and cognitive phenotypes in mouse models of epileptogenic Scn1a mutations

I. Bethus (Valbonne)

Effect of vitamin A supplementation in Alzheimer's disease prevention

E. Beyong (Bordeaux)

Inhaling xenon ameliorates L-DOPA-induced dyskinesia in Parkinson disease through normalizing maladaptive corticostriatal plasticity

E. Bezard (Bordeaux)

A new Drosophila lysosomal protein with functions in stress resistance and neuroprotection in Parkinson's disease models

S. Birman (Paris)

Understanding the impact of LRRK2 on mitochondrial function in Parkinson's disease

F. Bonello (Paris)

Epigenomic correction of defective plasticity in a tauopathy mouse model

A.-L. Boutillier (Strasbourg)

Lifelong effect of perinatal stress on basal ganglia motor function in rats

H. Bouwalerh (Villeneuve d'Ascq)

Scientific Programme

Spg11 knockout mouse, a model of slowly progressive Amyotrophic Lateral Sclerosis with juvenile onset

J. Branchu (Paris)

Differentiation, characterization and transplantation of dopaminergic neurons derived from mouse embryonic stem cells

S. Brisson (Poitiers)

Dopamine neurons derived from human induced pluripotent stem cell reprogrammed by mRNA

S. Brot (Poitiers)

Huntingtin-mediated axonal transport of APP determines synaptic A β accumulation and memory alterations in Alzheimer's disease

J. Bruyère (Grenoble)

Orexinergic dysregulation in Huntington's disease

M. Cabanas (Pessac)

Alcohol use disorder and dual-process model: a question of imbalance?

N. Cabé (Caen)

Role of TRANSIENT RECEPTOR POTENTIAL VANILLOID 1 in the control of both nicotine-related behaviors and nicotine-induced dopamine neuronal activity in mice

S. Caillé (Bordeaux)

Autism-related CNTNAP2 heterozygous missense variants impair cortical neuron axonal outgrowth in vitro

G. Canali (Paris)

European network on brain malformations neuro-MIG (COST action CA16118)

C. Cardoso (Marseille)

Involvement of the urotensin II peptide system on vascular remodeling in subarachnoid hemorrhage

H. Castel (Rouen)

The R67C intellectual disability mutation of the pak3 gene impairs adult hippocampal neurogenesis and cognitive functions

C. Castillon (Orsay)

Enriched housing rescues the decrease of parvalbumin expression of interneurons in the hippocampus of the Tg2576 mouse model of Alzheimer's disease, without reversing the loss of their perineuronal nets

V. Cattaud (Toulouse)

Dual role of endogenous neural stem cells in myelin repair?

M. Cayre (Marseille)

Role of VGLUT3 in the Amygdala: modulation of amygdalar network and acquired fear

N. Chabbah (Paris)

In vivo brain imaging in a tauopathy mouse model: a NMR longitudinal study at 11.7 tesla

D. Cheramy (Croissy sur Seine)

Evaluation of the therapeutic potential of Bornavirus X protein and X-derived peptide in amyotrophic lateral sclerosis

S. Chevallier (Bordeaux)

Scientific Programme

Rod-derived cone viability factor delivery through adeno-associated viral vector, the pass toward the clinic for treating retinitis pigmentosa

E. Clérin-Lachapelle (Paris)

Association between baseline pro-inflammatory cytokines and orbitofrontal activation during social exclusion in suicidal vulnerability

I. Conejero (Nîmes)

The role of mitochondrial CB1 receptors on motor control

S. Corinti (Bordeaux)

P42: Its action on BDNF pathway in Huntington's disease

S. Couly (Montpellier)

Investigating α -synuclein aggregation propagation with microfluidic culture chips for oriented neuronal networks reconstruction

J. Courte (Paris)

The LRRK2 G2019S mutation but not its dead kinase form increases the neurotoxicity of mutant A53T α -synuclein

N. Cresto (Fontenay aux Roses)

Effects of deep brain stimulation on speech in patients with primary generalized dystonia

M.-C. Cuartero (Aix-en-Provence)

Stimulation of endogenous striatal GDNF: a neuroprotective therapy for Parkinson's disease?

X. d'Anglemont de Tassigny (Sevilla)

Development of an inducible model of Tau oligomerization in mice by CNS gene transfer with AAV vectors

G. Das Dores (Croissy sur Seine)

β 4-nicotinic receptors mediate a bi-directional control of nicotine reward via functional regulation of the ventral tegmental area

V. David (Pessac)

Optogenetic dissection of circuit mechanism underlying beta-oscillation expression in Parkinsonism

B. de la Crompe (Bordeaux)

The role of the protein kinase Dclk3 in mechanisms of neurodegeneration in Huntington's disease

L. De Longprez (Fontenay aux Roses)

The subthalamic nucleus controls development and expression of cocaine-induced addiction-like behaviors in rats

M. Degoulet (Marseille)

α -synuclein neurotoxicity and spreading using lewy body extracts from parkinson disease brains: in vitro screening by cell-based assays

B. Dehay (Bordeaux)

Chronic stress contribution to physiopathological and neuroinflammatory process mechanisms in Parkinson's disease

F. DeKnuydt (Paris)

Scientific Programme

Imaging brain lesions in Alzheimer's disease: the power of camelid single-domain antibodies

B. Delatour (Paris)

Integrative neuroscience, sensory physiology

Role of 5HT neurons of the raphe nuclei in spinal nociceptive transmission

F. Aby (Bordeaux)

Nesfatinergic inhibition of swallowing reflex involves oxytocin signaling

A. Abysique (Marseille)

Error-related modulation of β -band oscillations in bimanual tasks

J. Alayrangues (Marseille)

How fast and slow intracellular dynamics interact in vivo in rat mitral cells

C. Amat (Lyon)

Boosting human cognition: entrainment of behaviorally relevant oscillatory activity with invasive and non-invasive brain stimulation

J.L. Amengual Roig (Paris)

Norepinephrine inhibits vagal activation of catecholamine neurons in the nucleus of the solitary tract through α_2 adrenergic receptors

S.M. Appleyard (Pullman)

A functional dichotomous input organization in the external globus pallidus

A. Aristieta (Bordeaux)

Auditory event related potentials in a mouse model of autism

D. Arnouil (Pessac)

Functional ultrasound imaging maps the visual system in rodents with high spatial and temporal precisions

K. Blaize (Paris)

BHLHA9 and temperature sensation

M. Bohic (Marseille)

Electrophysiological signatures of pro-social actions of oxytocin and vasopressin in the lateral septum

A. Borie (Montpellier)

Regulation of the GABA_B receptor by partner proteins in a rat model of neuropathic pain

R. Bouali-Benazzouz (Bordeaux)

Influence of 3D objects on place cells coding in mice navigating virtual linear mazes

R. Bourboulou (Marseille)

How does the primate oculomotor system synchronize with a moving visual object?

C. Bourrelly (Marseille)

State-dependent activity of cortical inhibitory neurons during the sleep-wake cycle

A. Brécier (Lyon)

Multisensory integration of visual and somatosensory motion cues in the associative parietal cortex (APC) of the rat

J. Caron-Guyon (Marseille)

Scientific Programme

Sequence processing in a songbird secondary auditory area

A. Cazala (Orsay)

Necessity and sufficiency of auditory cortex representations for sound perception

S. Ceballo (Gif sur Yvette)

Reuniens thalamic nucleus lesion affects hippocampal place cells representation

T. Cholvin (Marseille)

MRI assessment of NMDA-induced neurotoxic lesion in rat brain

F. Chaillan (Marseille)

Probing the functional impact of subretinal prosthesis in a rodent model of Retinitis Pigmentosa

F. Chavane (Marseille)

Reliability of surface-based cortical thickness and cortical surface area asymmetry evaluation

F. Crivello (Bordeaux)

The role of spinal cholinergic system in nociceptive information processing

D. Dhanasobhon (Strasbourg)

PharmaEEGTool: a software tool for processing EEG or LFP signals changes during pharmacological treatment

M. Doulazmi (Paris)

Perturbation of hippocampal theta sequences during exploration of a novel environment degrades replay during sleep

C. Drieu (Paris)

Alterations of blood brain barrier in mice during hypergravity exposure

D. Dubayle (Paris)

The neuronal basis and mechanisms underlying bistability in the zebrafish larva

A. Duchemin (Paris)

Fast confocal fluorescence imaging in freely-behaving mice

C. Dussaux (Paris)

Enhancement of slow waves with closed-loop auditory stimulations

K. El Kanbi (Paris)

Investigating the plasticity of sensory cortical circuits in the context of learning in the wild-type mouse and in a conditional mouse model of fragile X syndrome

M. Erlandson (Marseille)

In vivo characterization of synaptic connectivity between the Entorhinal cortex and CA3 neurons

M. Escande (Bordeaux)

Region-specific and state-dependent action of striatal GABAergic microcircuits

E. Fino (Grenoble)

Neuroendocrinology, neuroimmunology

Kisspeptin neurons differentiate prenatally in a sex-specific manner

C. Alfaia (Nouzilly)

Scientific Programme

Type 1 diabetes in juvenile rats, and vulnerability to depressive syndrome and memory impairment

N. Arvy (Bordeaux)

Lack of microglial serotonin 2B receptor sensitizes to inflammation and behavioral changes after a peripheral immune challenge

C. Béchade (Paris)

Does the intranasal administration of oxytocin influence its peripheric concentration and/or other hypophyseal hormones peripheric concentrations in dogs?

C. Bienboire-Frosini (Apt)

Le neuroépithélium olfactif, un modèle d'étude des interactions entre système nerveux et système immunitaire : rôle de l'IL-17C / the olfactory neuroepithelium as a model for the study of interactions between the nervous system and the immune system: role of IL-17C

B. Bryche (Jouy-en-Josas)

Developing new tools to unravel the genesis of neurohormone pulsatility

P. Campos (Montpellier)

In vitro study of glucocorticoid receptors involvement in hippocampal amyloid toxicity

G. Canet (Montpellier)

Dynamics of spinal cord axonal degeneration and innate immune cell phenotypes in multiple sclerosis: an in vivo two-photon imaging study combined to flow cytometry

C. Caravagna (Marseille)

Role of the bile acids - TGR5 receptor system in the hypothalamic regulation of energy balance

A. Castellanos Jankiewicz (Bordeaux)

Kisspeptin and RFRP3 neuropeptides: from reproduction to metabolism

F. Cazarez Marquez (Strasbourg)

Connexin 43-mediated tanycyte network regulates energy homeostasis

J. Clasadonte (Lille)

Behaviour, emotions, cognition, neuroethology

Copper induced modulation of anxiety state in rat: implication of serotonin and dopamin

A. Abbaoui (Marrakech)

Functional connectivity within the voice perception network predicts voice recognition abilities

V. Aglieri (Marseille)

Circuit mechanisms for encoding safety learning in the dorsal prefrontal cortex of behaving mice

M. Aime (Bordeaux)

Motor determinants of autism spectrum disorders

T. Al Sagheer (Poitiers)

Rostro-caudal functional organization of the human cingulate motor areas: evidence from task-related and resting-state fMRI

C. Amiez (Bron)

Scientific Programme

Topography of c-Fos expression in the brain of ewes exposed to ram anteorbital gland secretion

P. Asproni (Apt)

Effects of subthalamic nucleus high frequency stimulation and Levodopa treatment on decision-making processes in parkinsonian patients

C. Atkinson-Clement (Aix-en-Provence)

Apomorphine pump in advanced Parkinson's disease: effects on motor and nonmotor symptoms with brain metabolism correlations

M. Auffret (Rennes)

Frontal β -amyloid burden and sleep duration in aging

M. Baillet (Bordeaux)

Pheromones modulate associative learning and memory via biogenic amines in an insect

D. Baracchi (Paris)

Characterization of a premammillary region in the lateral hypothalamus

M. Barbier (Besançon)

Study of mental rotation in weightlessness: apply for facial expression recognition

V. Bayet (Toulouse)

Triglycerides sensing in the mesolimbic system and the regulation of food reward

C. Berland (Paris)

Functional and Anatomical Organization of Amygdala Neural Populations Encoding Emotional Valence

A. Beyeler (Bordeaux)

Hippocampal activity related to social stimuli in the Shank3 mouse model of ASD

L. Bordes (Pessac)

Omega-3 enriched diet prevents anxiety-like behaviours and loss of synaptic plasticity following chronic social defeat stress in mice

C. Bosch Bouju (Bordeaux)

Preventing PTSD-like memory by pharmacological inhibition of H3K9 methylation within the hippocampus

C. Bouarab (Bordeaux)

Better, faster, stronger? Combining fibrils and over expression of alpha-synuclein to model Parkinson's disease

L.S. Breger (Lund)

CB1 receptors on hippocampal GABAergic neurons control associative learning between neutral sensory stimuli

A. Busquets Garcia (Bordeaux)

Entorhinal grid cells activity in a goal-directed spatial task

F. Capitano (Marseille)

Gamma oscillations organize top-down signaling to hypothalamus and enable food seeking

M. Carus-Cadavieco (Berlin)

Central role for NAPE-PLD in reward seeking behaviors

J. Castel (Paris)

Scientific Programme

The role of the orbitofrontal cortex in goal-directed action

J.-C. Cerpa (Bordeaux)

Exposure to glyphosate and glyphosate-based herbicides during the peripartum period affects maternal behavior and maternal brain plasticity

T.D. Charlier (Rennes)

Double dissociation between D1 and D2 receptors in ventral and dorsolateral striatum in the reinstatement of cocaine seeking behavior

R. Costa Campos (Bordeaux)

Seasonal female processing of social/sexual vocal signals is state dependent

H. Cousillas (Rennes)

Early deficits in one-trial memory tasks in a mouse model of Alzheimer's disease

D. Cupolillo (Bordeaux)

Long term impact of sucrose overconsumption at adolescence on adult dopamine and reward related behaviors

F. Darlot (Bordeaux)

Altered social signals processing in patients with Prader-Willi syndrome

J. Debladis (Toulouse)

Prefrontal neuronal assemblies temporally control fear behaviour

C. Dejean (Bordeaux)

Experience shapes learning capacities and synaptic architecture of the mushroom bodies of honey bees (*Apis mellifera*)

J.-M. Devaud (Toulouse)

Learning-dependent goal-related activity within dentate networks

V. Douchamps (Strasbourg)

Switching from normal to PTSD-like memory is associated with hippocampal-amygdalar dendritic reorganizations and neurogenesis alterations

E.-G. Ducourneau (Bordeaux)

Functional connectivity in the native space of the posterior cingulate cortex in elderly

M. Edde (Bordeaux)

AMPA receptor lateral diffusion is crucial for spatial memory consolidation

H. El Oussini (Bordeaux)

Declarative memory: behavioral paradigm common to mice and humans to dissociate normal and pathological aging

N. Etchamendy (Bordeaux)

Habits that contradict rewards on a two-bandit task in non-human primates: the role of the basal ganglia

B. Fabien C. Y. (Talence)

Rivalry and reward processing: An ERP study

A. Falco (Albi)

Scientific Programme

SYMPOSIUM
11:00 - 13:00

Amphi A

S01, Decision and learning: basal ganglia across species

Décision et apprentissage : les ganglions de la base d'une espèce à l'autre

Chaired by:

M. Khamassi (Paris)
M. Pessiglione (Paris)

Dopamine and reward maximization: computational insights from pharmacological studies in humans / Dopamine et maximisation des récompenses: modélisation à la lumière d'études pharmacologiques chez l'homme

M. Pessiglione (Paris)

Neuronal bases of anterior striatum contribution to value-based decision making: investigation in non-human primate / Bases neurales de la contribution du striatum antérieur à la prise de décision fondée sur les valeurs: analyses chez le primate non-humain

L. Tremblay (Bron)

The spatiotemporal organization of the striatum continuously maps action space

A. Klaus

A computational account of the role of dopamine in the basal ganglia in model-free learning and exploration modulation / Modélisation du rôle de la dopamine dans les ganglions de la base dans l'apprentissage sans modèle et la modulation de l'exploration

M. Khamassi (Paris)

Phasic optogenetic stimulation of mesolimbic dopaminergic terminals in the nucleus accumbens reinforces the value of a goal-directed action in operant conditioning

S. van der Veldt (Bordeaux)

SYMPOSIUM
11:00 - 13:00

Amphi B

S02, Cognitive architectures of the brain: linking perception, attention and consciousness

Architectures cognitives du cerveau : relations entre perception, attention et conscience

Chaired by:

J.-M. Edeline (Orsay)
P. Barone (Toulouse)

Probing conscious states and conscious contents from brain activity: from theory to bedside

L. Naccache (Paris)

Perception, consciousness and brain dynamics: why visceral organs matter / Perception, conscience et dynamique cérébrale: le surprenant rôle des viscères

C. Tallon-Baudry (Paris)

Scientific Programme

Distinct neural architectures for perceiving and orienting attention in time / Architectures cerebrales distincts pour la perception et l'orientation de l'attention dans le temps

J. Coull (Marseille)

Role of high-gamma activity [50-150 Hz] in attention: insights from intracranial EEG studies in humans / Rôle des activités hautes-fréquences [50-150 Hz] dans l'attention: études en EEG intracrânien chez l'homme

J.-P. Lachaux (Lyon)

Discrete and continuous mechanisms of temporal attention in rapid visual streams

S. Marti (Gif-sur-Yvette)

SYMPOSIUM
11:00 - 13:00

Amphi C

S03, Signaling in neuronal migration

Signalisation et migration neuronale

Chaired by:

C. Métin (Paris)

S. Humbert (La Tronche)

Huntingtin regulates cortical development: consequences for Huntington's disease / La huntingtine régule le développement cortical: conséquences pour la maladie de Huntington

S. Humbert (La Tronche)

Role sonic hedgehog signalling in the migration of cortical interneurons

C. Laclef (Paris)

Wnt signaling regulates neuronal migration and differentiation in the cerebral cortex / La voie de signalisation Wnt régule la migration et la différenciation neuronales dans le cortex cérébral

J.Z. Kiss (Genève)

The development of auditory cortex interneurons uses specifically two cadherin-related proteins

B. Libé-Philippot (Paris)

A novel role for CAMK2 β in the regulation of cortical neuron migration

E. Pacary (Bordeaux)

SYMPOSIUM
11:00 - 13:00

Salle D

S04, Kisspeptin - A molecule of many parts

La Kisspeptine dans tous ses états

Chaired by:

V. Prevot (Lille)

Scientific Programme

No sex without kiss, lordosis behavior depends on kisspeptin / Pas de sexe sans kiss: le comportement de lordose dépend des neurones Kiss

J. Bakker (Liège)

In utero development of kisspeptin/GnRH circuitry

U. Boehm (Homburg)

Rabconnectin-3 α : a protein involved in the maturation of GnRH neurons and their responsiveness to kisspeptin / La Rabconnectin-3 α : une protéine vésiculaire participant à la maturation des neurones GnRH et leur réponse aux kisspeptin

N. De Roux (Paris)

Developing new tools to unravel the genesis of neurohormone pulsatility

P. Campos (Montpellier)

MicroRNAs flip the switch for the production of hypothalamic GnRH before puberty

A. Messina (Lausanne)

SYMPOSIUM
11:00 - 13:00

Salle E

S05, Not just a tri-synaptic loop: revisiting hippocampal circuits in health and disease

Les circuits hippocampiques non-canoniques revisités dans le cerveau sain et pathologique

Chaired by:

A. Besnard (Boston)

Reciprocal interactions between the hippocampus and entorhinal cortex memory circuit / Interactions réciproques entre l'hippocampe et le réseau mnémonique du cortex entorhinal

J. Basu (New York)

The supramammillaro-dentate gyrus pathway: evidence for glutamatergic and GABAergic co-transmission and its reorganization in temporal lobe epilepsy / La voie supramammillaro-gyrus dentelé: co-transmission glutamatergique et GABAergique et sa réorganisation dans les épilepsies du lobe temporal

M. Esclapez (Marseille)

Contribution of area CA2 to the hippocampal network / Contribution de la région CA2 dans le réseau hippocampique

R.A. Piskorowski (Paris)

Dorsolateral septum broadcasts hippocampal signals to calibrate fear responses / L'hippocampe calibre les réponses de peur via le septum dorsolateral

A. Besnard (Boston)

Critical role of Pyk2 at hippocampal excitatory synapses and in Huntington's disease

A. Giralt (Paris)

Scientific Programme

SYMPOSIUM
11:00 - 13:00

Salle F

S06, Direct lineage reprogramming for brain repair

Reprogrammation cellulaire pour la réparation du cerveau

Chaired by:

C. Heinrich (Grenoble)

Reprogramming of glial cells into functional neurons: A new avenue towards brain repair / Reprogrammation des cellules gliales en neurones: Vers une régénération induite du cerveau

C. Heinrich (Grenoble)

Programming and reprogramming strategies to regenerate corticospinal motor neurons / Stratégies de programmation et reprogrammation des neurones moteurs corticospinaux

C. Rouaux (Strasbourg)

Another way to make new neurons: natural transdifferentiation and its underlying mechanisms / La transdifférenciation naturelle, une autre manière de produire de nouveaux neurones

S. Jarriault (Illkirch)

Reprogramming adult SVZ-derived neuroblasts into oligodendrocytes enhances remyelination in the adult brain

B. El Waly (Marseille)

Overcoming a metabolic roadblock in direct neuronal reprogramming

S. Gascón (Munich)

SYMPOSIUM
11:00 - 13:00

Salle H

S07, Suicidal behaviour: from circuits to cells

Conduites suicidaires : des circuits aux cellules

<p>Association Française de Psychiatrie Biologique et Neuropsychopharmacologie Symposium

Chaired by:

M. Tournier (Bordeaux)

P. Courtet (Montpellier)

Brain imaging studies in suicidal behaviour / Imagerie cérébrale dans les conduites suicidaires

K. Van Heeringen (Ghent)

Biomarkers of social exclusion in suicidal behaviour / Biomarqueurs de la sensibilité à l'exclusion sociale dans les conduites suicidaires

P. Courtet (Montpellier)

The mTOR pathway: a new target for treating psychiatric disorders? / mTOR: une nouvelle cible pour le traitement des troubles psychiatriques?

P. Marin (Montpellier)

Scientific Programme

Omega-3 enriched diet prevents anxiety-like behaviours and loss of synaptic plasticity following chronic social defeat stress in mice

C. Bosch Bouju (Bordeaux)

Role of the early central amygdala activation in long-term behavioural changes in murine model of sepsis

A. Mazeraud (Paris)

SPECIAL SYMPOSIUM / SYMPOSIUM SPÉCIALISÉ
13:00 - 15:00

Salle H

SP01, Conférences Duhem In partnership with / En partenariat avec la Société de Philosophie des Sciences

Chaired by:

T. Pradeu
S. Ruphy

What will/should a neuroscience of emotion look like? Dialogue between a philosopher and a neuroscientist

D. Andler (Paris)
R. Adolphs (Caltech)

POSTER SESSION / COMMUNICATIONS AFFICHÉES
13:00 - 17:00

Espace Pluriel

P1, Poster session

Poster sessions run from 10:00 to 11:00 and from 13:00 to 17:00 every day. However, a one hour time block is dedicated to discussion with the authors:

<p>

- from 10:00 to 11:00 for even-numbered posters

- from 14:00 to 15:00 for odd-numbered posters

Development, synaptic plasticity

Glutamatergic interneurons in the olfactory bulb: when genetics meets in vivo imaging

A. Angelova (Marseille)

Deletion of neurotrophin signaling through the glucocorticoid receptor pathway in mice

M. Arango-Lievano (Montpellier)

Regulation of hippocampal network and memory by synaptic plasticity in somatostatin interneurons

J. Artinian (Montréal)

Deciphering the role of the kinesin KIF21B during mouse cortical development

L. Asselin (Illkirch)

A global overview of Fidgetin-like 1-interactome-mediated motor circuit wiring

M. Atkins (Paris)

Scientific Programme

Conditional inactivation of the eif2b5 gene in radial glial cell or oligodendrocyte cell lineages in mice: models for studying the CACH/VWM syndrome

A. Bark (Paris)

Huntingtin regulates cortical development: from embryo to young adult

M. Barnat (La Tronche)

Presenilin/γ-secretase cleavage of APP controls synaptic vesicles processing by synaptotagmin 7 underlying short-term plasticity

G. Barthet (Bordeaux)

Mutation of Tuba1a leads to straighter microtubules, perturbing saltatory neuronal migration

R. Belvindrah (Paris)

GABAergic synapses onto oligodendrocyte precursors regulate their cellular self-maintenance

N. Benamer (Paris)

Transitory regression of the intrinsic activation properties of V1 interneurons during the early phase of spinal cord network development

J. Boeri (Paris)

A pipeline for processing whole brain distribution of fate mapped glutamatergic neurons

Y. Bollmann (Marseille)

Functional development of newborn neurons leading to the integration into mature circuits

J. Boulanger-Weill (Paris)

Role of kinesin 1 (KIF5) in synaptic function and plasticity

A. Brachet (Bordeaux)

Neonatal perturbations in the spinal motor networks of the SOD1 ALS mouse model

P. Branchereau (Pessac)

Unbalanced corticostriatal connectivity in a mouse model of neonatal dopamine dysfunction

B.Y. Braz (Buenos Aires)

Selection and characterization of new small affinity ligands for AMPA receptor subunits

C. Breillat (Bordeaux)

Regulation of neuronal migration in the postnatal olfactory bulb: insights from in vivo imaging

S. Bugeon (Marseille)

Long-term ketamine self-administration disrupts postsynaptic glutamate elements in rat medial prefrontal cortex and hippocampus

L. Caffino (Milano)

In vivo dynamics of AMPA receptors during experience-dependent cortical plasticity

T. Campelo (Bordeaux)

Characterization of early born pyramidal cells in the CA1 area of the adult hippocampus

D. Cavalieri (Marseille)

Consequences of conditional Tshz3 deletion in the corticostriatal circuitry: implication in autism spectrum disorder

D. Chabbert (Marseille)

Scientific Programme

Postsynaptic neurexin partners neuroligin1 and LRRTM2 exhibit distinct nanoscale organization at synapses

I. Chamma (Bordeaux)

Role of the primary cilium in the migration and differentiation of adult-born neurons

M. Chaulet (Paris)

Hippocampal LTP and contextual learning require surface diffusion of AMPA receptors

D. Choquet (Bordeaux)

Multicolor clonal analysis to study astrocyte network development in the mouse cerebral cortex

S. Clavreul (Paris)

Guided growth of neural networks on switchable polymer microtrails

F. Cohen (Paris)

Various long term depressions trigger different nanoscale reorganization of AMPA receptors

B. Compans (Bordeaux)

Calcium signals triggered by the microenvironment regulate neural stem cell proliferation and self-renewal in the brain subventricular zone

V. Coronas (Poitiers)

AMPK-related kinase NUA1 haploinsufficiency impairs cortical development and behavior in the mouse

J. Courchet (Villeurbanne)

Development of photoactivatable tools for the study of the dynamics of AMPA glutamate receptors

S. Crespillo Torreño (Bordeaux)

Cortex-related molecular, synaptic and behavioral deficits in mice deficient for the transcription factor NeuroD2

A. de Chevigny (Marseille)

Abnormal wiring of CCK+ basket cells disrupts theta oscillatory activity and spatial information coding

I. Del Pino (Bordeaux)

New P2X4mCherryIN knockin transgenic mice expressing non-internalized P2X4 receptors revealed alteration in hippocampal plasticity and memory

T. Deluc (Bordeaux)

Hierarchical input integration at glutamatergic synapses of the nucleus accumbens

M. Deroche (Marseille)

Vangl2 inhibits neuronal outgrowth on N-cadherin substrates by controlling the interface between actin dynamics and adhesion

S. Dos Santos Carvalho (Bordeaux)

Signalisation, cellular communications

The molecular mechanisms leading to alternative splicing of the NXNL1 gene: the origin of the RdCVF metabolic signaling

N. Ait Ali Maamri (Paris)

Scientific Programme

Astrocytes withdraw from synapses during long-term potentiation boosting glutamate spillover

L. Bard (London)

Functional characterization of afferents inputs received by prototypic and arkypallidal GPe neurons

M. Barresi (Bordeaux)

Insulin regulates P2X4 receptor function and promotes its rapid delivery to the cell surface

E. Bertin (Bordeaux)

Hippocampal gamma oscillations are modulated by acetylcholine via activation of the M1 receptor

R. Betterton (Bristol)

Early endosome aggregation in Down syndrome revealed by high-resolution microscopy

A. Botté (Paris)

Study of CRMP4 functions in MAP6 dependent axonal outgrowth induced by semaphorin 3E

B. Boulan (La Tronche)

Benchmarking various clarification protocols to characterize EAE inflammatory plaques in the whole spinal cord of triple fluorescent mice

C. Boutres (Marseille)

Molecular characterization of dopamine D1 receptors in the mouse amygdala

L. Castell (Montpellier)

Vesicular treadmilling in axons defines how synapses adapt to high neuronal activity

M. Cazorla (Grenoble)

A key role for amygdala astrocytes in regulation of negative affective processing by oxytocin

A. Charlet (Strasbourg)

Investigating the homodimer interface of Smoothed: structure-based discovery of novel Hedgehog antagonists

P. Chatterjee (Gif sur Yvette)

Hyperexcitability of GABAergic interneurons can trigger cortical spreading depression: a new pathological mechanism of migraine?

O. Chever (Valbonne)

Aquaporin-4 surface dynamics regulate astrocytic process motility in an isoform-dependent manner

S. Ciappelloni (Bordeaux)

Dynamics of GTP hydrolysis of dynamin, the last step of endocytosis, measured in living cells

L. Claverie (Bordeaux)

Characterization of dopamine D2 receptors in the cerebellum

L. Cutando Ruiz (Montpellier)

Role of Pyk2 in striatal function

B. De Pins (Paris)

Scientific Programme

G protein as key regulators of GPCR-regulating survival and migration of high-grade gliomas

K.P. Dembélé (Rouen)

Modulation of NMDA receptor mediated excitatory synaptic currents in dopamine neurons of the substantia nigra

G. Destreel (Liège)

ColQ binds to LRP4 at the neuromuscular junction

A. Dobbertin (Paris)

Ultrastructural, molecular and functional heterogeneities of cerebellar granule cell presynaptic terminals

F. Doussau (Strasbourg)

Improved biosensor technique to study the release of ATP by spinal cord glial cells

V. Eersapah (Strasbourg)

LG11 tunes intrinsic excitability by regulating the density of axonal Kv1 channels

O. El Far (Marseille)

Unsuspected role of glutamate NMDA receptors dynamics in the firing of midbrain dopamine neurons

L. Etchepare (Bordeaux)

Determinants of action potential threshold in rat layer 5 pyramidal neurons

A. Fekete (Marseille)

Co-agonists differentially tune GluN2B-NMDA receptor trafficking at hippocampal synapses

J.S. Ferreira (Bordeaux)

Synaptic changes and role of O-GlcNAcylation in the sensorimotor cortex after a chronic period of sensorimotor perturbation in adult rats

J. Fourneau (Loos)

Image analysis of synaptic alteration in the brain of a mouse model of Huntington's disease

M. Garret (Bordeaux)

Critical role of Pyk2 at hippocampal excitatory synapses and in Huntington's disease

A. Giralt (Paris)

A study of the contribution of alkaline phosphatase and ecto-5'-nucleotidase to the synthesis of adenosine in mouse piriform cortex

M. Gleizes (Toulouse)

Neurological and psychiatric diseases, experimental therapeutics

Impact of repeated administration of cocaine on the expression of genes involved in cholesterol metabolism in the brain

J. Alsebaaly (Poitiers)

Alterations of synaptic morphology and plasticity in a mouse model of Alzheimer's Disease

A. Androuin (Paris)

Plasticity of the glutamatergic synapse proteome in a mouse model of intellectual disability

M.F. Angelo (Bordeaux)

Scientific Programme

Identification of a novel neuroprotective antioxidant enzyme in Parkinson's disease

Y. Anouar (Mont saint Aignan)

Generation of Alzheimer's disease (AD) patients' induced pluripotent stem cells (iPSC) derived neurons for diagnostic and therapeutic research of AD

L. Auboyer (Montpellier)

Focal motor seizure induced by striatal pharmacological manipulations in the monkey

J. Aupy (Bordeaux)

Beneficial effects of inflammation in delayed cortical transplantation

N. Ballout (Poitiers)

The NFL-TBS.40-63 peptide enters in human fetal neural stem cells in vitro and boosts their differentiation

K. Barreau (Angers)

Functional duality of Fas (CD95) death signalling in spinal muscular atrophy and amyotrophic lateral sclerosis

S. Benlefi (Montpellier)

Electrophysiological investigation of cell therapy in a mouse model of Parkinson's disease

M. Benoitmarand (Poitiers)

Alcohol withdrawal induced excessive levels of corticosterone in the prefrontal cortex-hippocampus circuitry and prolonged alterations of working memory

D.J. Beracochea (Bordeaux)

Prevent the onset of cognitive deficits induced by cannabis abuse during adolescence: benefits of early blockade of 5-HT6-mTOR pathway

C. Berthoux (Montpellier)

Seizures can worsen the severity of epileptic and cognitive phenotypes in mouse models of epileptogenic Scn1a mutations

I. Bethus (Valbonne)

Effect of vitamin A supplementation in Alzheimer's disease prevention

E. Beyong (Bordeaux)

Inhaling xenon ameliorates L-DOPA-induced dyskinesia in Parkinson disease through normalizing maladaptive corticostriatal plasticity

E. Bezard (Bordeaux)

A new Drosophila lysosomal protein with functions in stress resistance and neuroprotection in Parkinson's disease models

S. Birman (Paris)

Understanding the impact of LRRK2 on mitochondrial function in Parkinson's disease

F. Bonello (Paris)

Epigenomic correction of defective plasticity in a tauopathy mouse model

A.-L. Boutillier (Strasbourg)

Lifelong effect of perinatal stress on basal ganglia motor function in rats

H. Bouwalerh (Villeneuve d'Ascq)

Scientific Programme

Spg11 knockout mouse, a model of slowly progressive Amyotrophic Lateral Sclerosis with juvenile onset

J. Branchu (Paris)

Differentiation, characterization and transplantation of dopaminergic neurons derived from mouse embryonic stem cells

S. Brisson (Poitiers)

Dopamine neurons derived from human induced pluripotent stem cell reprogrammed by mRNA

S. Brot (Poitiers)

Huntingtin-mediated axonal transport of APP determines synaptic A β accumulation and memory alterations in Alzheimer's disease

J. Bruyère (Grenoble)

Orexinergic dysregulation in Huntington's disease

M. Cabanas (Pessac)

Alcohol use disorder and dual-process model: a question of imbalance?

N. Cabé (Caen)

Role of TRANSIENT RECEPTOR POTENTIAL VANILLOID 1 in the control of both nicotine-related behaviors and nicotine-induced dopamine neuronal activity in mice

S. Caillé (Bordeaux)

Autism-related CNTNAP2 heterozygous missense variants impair cortical neuron axonal outgrowth in vitro

G. Canali (Paris)

European network on brain malformations neuro-MIG (COST action CA16118)

C. Cardoso (Marseille)

Involvement of the urotensin II peptide system on vascular remodeling in subarachnoid hemorrhage

H. Castel (Rouen)

The R67C intellectual disability mutation of the pak3 gene impairs adult hippocampal neurogenesis and cognitive functions

C. Castillon (Orsay)

Enriched housing rescues the decrease of parvalbumin expression of interneurons in the hippocampus of the Tg2576 mouse model of Alzheimer's disease, without reversing the loss of their perineuronal nets

V. Cattaud (Toulouse)

Dual role of endogenous neural stem cells in myelin repair?

M. Cayre (Marseille)

Role of VGLUT3 in the Amygdala: modulation of amygdalar network and acquired fear

N. Chabbah (Paris)

In vivo brain imaging in a tauopathy mouse model: a NMR longitudinal study at 11.7 tesla

D. Cheramy (Croissy sur Seine)

Evaluation of the therapeutic potential of Bornavirus X protein and X-derived peptide in amyotrophic lateral sclerosis

S. Chevallier (Bordeaux)

Scientific Programme

Rod-derived cone viability factor delivery through adeno-associated viral vector, the pass toward the clinic for treating retinitis pigmentosa

E. Clérin-Lachapelle (Paris)

Association between baseline pro-inflammatory cytokines and orbitofrontal activation during social exclusion in suicidal vulnerability

I. Conejero (Nîmes)

The role of mitochondrial CB1 receptors on motor control

S. Corinti (Bordeaux)

P42: Its action on BDNF pathway in Huntington's disease

S. Couly (Montpellier)

Investigating α -synuclein aggregation propagation with microfluidic culture chips for oriented neuronal networks reconstruction

J. Courte (Paris)

The LRRK2 G2019S mutation but not its dead kinase form increases the neurotoxicity of mutant A53T α -synuclein

N. Cresto (Fontenay aux Roses)

Effects of deep brain stimulation on speech in patients with primary generalized dystonia

M.-C. Cuartero (Aix-en-Provence)

Stimulation of endogenous striatal GDNF: a neuroprotective therapy for Parkinson's disease?

X. d'Anglemont de Tassigny (Sevilla)

Development of an inducible model of Tau oligomerization in mice by CNS gene transfer with AAV vectors

G. Das Dores (Croissy sur Seine)

β 4-nicotinic receptors mediate a bi-directional control of nicotine reward via functional regulation of the ventral tegmental area

V. David (Pessac)

Optogenetic dissection of circuit mechanism underlying beta-oscillation expression in Parkinsonism

B. de la Crompe (Bordeaux)

The role of the protein kinase Dclk3 in mechanisms of neurodegeneration in Huntington's disease

L. De Longprez (Fontenay aux Roses)

The subthalamic nucleus controls development and expression of cocaine-induced addiction-like behaviors in rats

M. Degoulet (Marseille)

α -synuclein neurotoxicity and spreading using lewy body extracts from parkinson disease brains: in vitro screening by cell-based assays

B. Dehay (Bordeaux)

Chronic stress contribution to physiopathological and neuroinflammatory process mechanisms in Parkinson's disease

F. DeKnuydt (Paris)

Scientific Programme

Imaging brain lesions in Alzheimer's disease: the power of camelid single-domain antibodies

B. Delatour (Paris)

Integrative neuroscience, sensory physiology

Role of 5HT neurons of the raphe nuclei in spinal nociceptive transmission

F. Aby (Bordeaux)

Nesfatinergic inhibition of swallowing reflex involves oxytocin signaling

A. Abysique (Marseille)

Error-related modulation of β -band oscillations in bimanual tasks

J. Alayrangues (Marseille)

How fast and slow intracellular dynamics interact in vivo in rat mitral cells

C. Amat (Lyon)

Boosting human cognition: entrainment of behaviorally relevant oscillatory activity with invasive and non-invasive brain stimulation

J.L. Amengual Roig (Paris)

Norepinephrine inhibits vagal activation of catecholamine neurons in the nucleus of the solitary tract through α_2 adrenergic receptors

S.M. Appleyard (Pullman)

A functional dichotomous input organization in the external globus pallidus

A. Aristieta (Bordeaux)

Auditory event related potentials in a mouse model of autism

D. Arnouil (Pessac)

Functional ultrasound imaging maps the visual system in rodents with high spatial and temporal precisions

K. Blaize (Paris)

BHLHA9 and temperature sensation

M. Bohic (Marseille)

Electrophysiological signatures of pro-social actions of oxytocin and vasopressin in the lateral septum

A. Borie (Montpellier)

Regulation of the GABA_B receptor by partner proteins in a rat model of neuropathic pain

R. Bouali-Benazzouz (Bordeaux)

Influence of 3D objects on place cells coding in mice navigating virtual linear mazes

R. Bourboulou (Marseille)

How does the primate oculomotor system synchronize with a moving visual object?

C. Bourrelly (Marseille)

State-dependent activity of cortical inhibitory neurons during the sleep-wake cycle

A. Brécier (Lyon)

Multisensory integration of visual and somatosensory motion cues in the associative parietal cortex (APC) of the rat

J. Caron-Guyon (Marseille)

Scientific Programme

Sequence processing in a songbird secondary auditory area

A. Cazala (Orsay)

Necessity and sufficiency of auditory cortex representations for sound perception

S. Ceballo (Gif sur Yvette)

Reuniens thalamic nucleus lesion affects hippocampal place cells representation

T. Cholvin (Marseille)

MRI assessment of NMDA-induced neurotoxic lesion in rat brain

F. Chaillan (Marseille)

Probing the functional impact of subretinal prosthesis in a rodent model of Retinitis Pigmentosa

F. Chavane (Marseille)

Reliability of surface-based cortical thickness and cortical surface area asymmetry evaluation

F. Crivello (Bordeaux)

The role of spinal cholinergic system in nociceptive information processing

D. Dhanasobhon (Strasbourg)

PharmaEEGTool: a software tool for processing EEG or LFP signals changes during pharmacological treatment

M. Doulazmi (Paris)

Perturbation of hippocampal theta sequences during exploration of a novel environment degrades replay during sleep

C. Drieu (Paris)

Alterations of blood brain barrier in mice during hypergravity exposure

D. Dubayle (Paris)

The neuronal basis and mechanisms underlying bistability in the zebrafish larva

A. Duchemin (Paris)

Fast confocal fluorescence imaging in freely-behaving mice

C. Dussaux (Paris)

Enhancement of slow waves with closed-loop auditory stimulations

K. El Kanbi (Paris)

Investigating the plasticity of sensory cortical circuits in the context of learning in the wild-type mouse and in a conditional mouse model of fragile X syndrome

M. Erlandson (Marseille)

In vivo characterization of synaptic connectivity between the Entorhinal cortex and CA3 neurons

M. Escande (Bordeaux)

Region-specific and state-dependent action of striatal GABAergic microcircuits

E. Fino (Grenoble)

Neuroendocrinology, neuroimmunology

Kisspeptin neurons differentiate prenatally in a sex-specific manner

C. Alfaïa (Nouzilly)

Scientific Programme

Type 1 diabetes in juvenile rats, and vulnerability to depressive syndrome and memory impairment

N. Arvy (Bordeaux)

Lack of microglial serotonin 2B receptor sensitizes to inflammation and behavioral changes after a peripheral immune challenge

C. Béchade (Paris)

Does the intranasal administration of oxytocin influence its peripheric concentration and/or other hypophyseal hormones peripheric concentrations in dogs?

C. Bienboire-Frosini (Apt)

Le neuroépithélium olfactif, un modèle d'étude des interactions entre système nerveux et système immunitaire : rôle de l'IL-17C / the olfactory neuroepithelium as a model for the study of interactions between the nervous system and the immune system: role of IL-17C

B. Bryche (Jouy-en-Josas)

Developing new tools to unravel the genesis of neurohormone pulsatility

P. Campos (Montpellier)

In vitro study of glucocorticoid receptors involvement in hippocampal amyloid toxicity

G. Canet (Montpellier)

Dynamics of spinal cord axonal degeneration and innate immune cell phenotypes in multiple sclerosis: an in vivo two-photon imaging study combined to flow cytometry

C. Caravagna (Marseille)

Role of the bile acids - TGR5 receptor system in the hypothalamic regulation of energy balance

A. Castellanos Jankiewicz (Bordeaux)

Kisspeptin and RFRP3 neuropeptides: from reproduction to metabolism

F. Cazarez Marquez (Strasbourg)

Connexin 43-mediated tanycyte network regulates energy homeostasis

J. Clasadonte (Lille)

Behaviour, emotions, cognition, neuroethology

Copper induced modulation of anxiety state in rat: implication of serotonin and dopamin

A. Abbaoui (Marrakech)

Functional connectivity within the voice perception network predicts voice recognition abilities

V. Aglieri (Marseille)

Circuit mechanisms for encoding safety learning in the dorsal prefrontal cortex of behaving mice

M. Aime (Bordeaux)

Motor determinants of autism spectrum disorders

T. Al Sagheer (Poitiers)

Rostro-caudal functional organization of the human cingulate motor areas: evidence from task-related and resting-state fMRI

C. Amiez (Bron)

Scientific Programme

Topography of c-Fos expression in the brain of ewes exposed to ram anteorbital gland secretion

P. Asproni (Apt)

Effects of subthalamic nucleus high frequency stimulation and Levodopa treatment on decision-making processes in parkinsonian patients

C. Atkinson-Clement (Aix-en-Provence)

Apomorphine pump in advanced Parkinson's disease: effects on motor and nonmotor symptoms with brain metabolism correlations

M. Auffret (Rennes)

Frontal β -amyloid burden and sleep duration in aging

M. Baillet (Bordeaux)

Pheromones modulate associative learning and memory via biogenic amines in an insect

D. Baracchi (Paris)

Characterization of a premammillary region in the lateral hypothalamus

M. Barbier (Besançon)

Study of mental rotation in weightlessness: apply for facial expression recognition

V. Bayet (Toulouse)

Triglycerides sensing in the mesolimbic system and the regulation of food reward

C. Berland (Paris)

Functional and Anatomical Organization of Amygdala Neural Populations Encoding Emotional Valence

A. Beyeler (Bordeaux)

Hippocampal activity related to social stimuli in the Shank3 mouse model of ASD

L. Bordes (Pessac)

Omega-3 enriched diet prevents anxiety-like behaviours and loss of synaptic plasticity following chronic social defeat stress in mice

C. Bosch Bouju (Bordeaux)

Preventing PTSD-like memory by pharmacological inhibition of H3K9 methylation within the hippocampus

C. Bouarab (Bordeaux)

Better, faster, stronger? Combining fibrils and over expression of alpha-synuclein to model Parkinson's disease

L.S. Breger (Lund)

CB1 receptors on hippocampal GABAergic neurons control associative learning between neutral sensory stimuli

A. Busquets Garcia (Bordeaux)

Entorhinal grid cells activity in a goal-directed spatial task

F. Capitano (Marseille)

Gamma oscillations organize top-down signaling to hypothalamus and enable food seeking

M. Carus-Cadavieco (Berlin)

Central role for NAPE-PLD in reward seeking behaviors

J. Castel (Paris)

Scientific Programme

The role of the orbitofrontal cortex in goal-directed action

J.-C. Cerpa (Bordeaux)

Exposure to glyphosate and glyphosate-based herbicides during the peripartum period affects maternal behavior and maternal brain plasticity

T.D. Charlier (Rennes)

Double dissociation between D1 and D2 receptors in ventral and dorsolateral striatum in the reinstatement of cocaine seeking behavior

R. Costa Campos (Bordeaux)

Seasonal female processing of social/sexual vocal signals is state dependent

H. Cousillas (Rennes)

Early deficits in one-trial memory tasks in a mouse model of Alzheimer's disease

D. Cupolillo (Bordeaux)

Long term impact of sucrose overconsumption at adolescence on adult dopamine and reward related behaviors

F. Darlot (Bordeaux)

Altered social signals processing in patients with Prader-Willi syndrome

J. Debladis (Toulouse)

Prefrontal neuronal assemblies temporally control fear behaviour

C. Dejean (Bordeaux)

Experience shapes learning capacities and synaptic architecture of the mushroom bodies of honey bees (*Apis mellifera*)

J.-M. Devaud (Toulouse)

Learning-dependent goal-related activity within dentate networks

V. Douchamps (Strasbourg)

Switching from normal to PTSD-like memory is associated with hippocampal-amygdalar dendritic reorganizations and neurogenesis alterations

E.-G. Ducourneau (Bordeaux)

Functional connectivity in the native space of the posterior cingulate cortex in elderly

M. Edde (Bordeaux)

AMPA receptor lateral diffusion is crucial for spatial memory consolidation

H. El Oussini (Bordeaux)

Declarative memory: behavioral paradigm common to mice and humans to dissociate normal and pathological aging

N. Etchamendy (Bordeaux)

Habits that contradict rewards on a two-bandit task in non-human primates: the role of the basal ganglia

B. Fabien C. Y. (Talence)

Rivalry and reward processing: An ERP study

A. Falco (Albi)

NeuroFrance 2017,
17 - 19 May 2017,
Bordeaux, France

Scientific Programme

YOUNG RESEARCHERS SESSION/ SESSION JEUNES CHERCHEURS
13:30 - 14:30

Salle E

RT01, Researcher in a French institute: entrance exams and careers.

Devenir chercheur dans un institut français : concours et métiers.

Speakers:

P. Barone (Toulouse)
V. Crépel
S. Layé (Bordeaux)
A. Brachet (Bordeaux)

YOUNG RESEARCHERS SESSION/ SESSION JEUNES CHERCHEURS
13:30 - 14:30

Salle F

RT02, Working in French public institutions after your PhD.

Travailler dans la fonction publique après votre thèse.

Speakers:

F. Burglen
S. Sanchez (Bordeaux)
J. Elric
A. Guerci (Paris)

SHORT INTERVIEWS & CV SCREENING/ MINI ENTRETIENS ET LECTURES CV
14:30 - 15:30

Mezzanine

SHORT INTERVIEWS & CV SCREENING/MINI ENTRETIENS ET LECTURES CV

SYMPOSIUM
15:00 - 17:00

Amphi A

S08, Neuronal intracellular trafficking in health and diseases

Trafic intracellulaire neuronal en conditions physiologiques et pathologiques

Chaired by:

G. Van Niel (Paris)
D. Carrel (Paris)

Biological and pathological relevance of γ -secretase heterogeneity in Alzheimer's disease / Pertinence biologique et pathologique de l'hétérogénéité des γ -sécrétases dans la maladie d'Alzheimer

W. Annaert (Leuven)

Vesicular trafficking pathways influencing synaptic protein composition and memory in hippocampus / Influence des voies de trafic vésiculaires sur la composition des protéines synaptiques et la mémoire dans l'hippocampe

L. Danglot (Paris)

Scientific Programme

Dynamic control of glutamate receptor trafficking by scaffolding proteins of the planar cell polarity pathway / Contrôle dynamique du trafic des récepteurs au glutamate par des protéines d'échafaudage de la voie de la polarité cellulaire planaire / Dynamic control of glutamate receptor trafficking by scaffolding proteins of the planar cell polarity signaling pathway

N. Sans (Bordeaux)

Lysosomes: a platform for mTOR-dependent signalling at the synapse

F. Darchen (Paris)

Huntingtin-mediated axonal transport of APP determines synaptic A β accumulation and memory alterations in Alzheimer's disease

J. Bruyère (Grenoble)

SYMPOSIUM
15:00 - 17:00

Amphi B

S09, GABAergic microcircuits in the brain: from anatomy to physiology

Les microcircuits GABAergiques du cerveau : de l'anatomie à la physiologie

Chaired by:

A. Baude (Marseille)

Characterization of hub neurons in the developing entorhinal cortex / Caractérisation des neurones hubs dans le neocortex en développement

L. Modol-Vidal (Marseille)

Non-associative modulation of cortical perisomatic inhibition / Modulation non-associative de l'inhibition perisomatique dans le cortex

J. Lourenço (Paris)

Role of prefrontal somatostatin interneurons in the control of fear behavior / Rôle des interneurons somatostatinerigiques du cortex préfrontal dans le contrôle des comportements de peur

F. Chaudun (Bordeaux)

Activity of fast-spiking interneurons related to planning and initiation of movement in primate striatum / Activité des interneurons «fast spiking» du striatum pendant la planification et l'initiation du mouvement chez le primate

K. Marche (Marseille)

Cortical interneurons and their ontogenetically related oligodendrocyte precursors derived from the embryonic preoptic area form postnatal functional clusters

D. Orduz (Paris)

Scientific Programme

SYMPOSIUM
15:00 - 17:00

Amphi C

S10, Sleep, memory, performance

Sommeil, mémoire et performances

Chaired by:

G. Rauchs (Caen)

Molecular and cellular cortical state during paradoxical (REM) sleep / Etat cortical moléculaire et cellulaire pendant le sommeil paradoxal (PS)

P.-H. Luppi (Lyon)

/ Sleep-dependent consolidation of intentions in prospective memory in young and older adults

G. Rauchs (Caen)

Cognitive processing and learning during sleep / Traitement cognitif et apprentissage pendant le sommeil

S. Kouider (Paris)

Frontal β -amyloid burden and sleep duration in aging

M. Baillet (Bordeaux)

Sleep replay of emotional memory in the hippocampus-amygdala system

G. Girardeau (New York)

SYMPOSIUM
15:00 - 17:00

Salle D

S11, Neuropsychology of prodromal stages of Alzheimer's disease

Neuropsychologie des stades prodromaux de la maladie d'Alzheimer

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Société de Neuropsychologie de Langue Française Symposium

Chaired by:

F. Collette (Liège)

H. Amieva (Bordeaux)

Neuropsychology of aging: from normal to pathological stage / Neuropsychologie du vieillissement: du normal au pathologique

B. Desgranges (Caen)

Cognitive markers of prodromal stage of Alzheimer's disease / Marqueurs cognitifs de la maladie d'Alzheimer au stade prodromal

E. Tramoní (Marseille)

Changes in cerebral imaging parameters in the years preceding the onset of Alzheimer's diseases: results from epidemiologic studies / Changement des paramètres d'imagerie cérébrale au cours des années précédant la maladie d'Alzheimer: résultats issus d'études épidémiologiques

G. Catheline (Bordeaux)

Scientific Programme

Multimodal cerebral imaging in Alzheimer's disease at prodromal stage / Imagerie cérébrale multimodale de la maladie d'Alzheimer au stade prodromal

J. Pariente (Toulouse)

SYMPOSIUM
15:00 - 17:00

Salle E

S12, Decoding decisions from multiple brain signals in monkeys

Décodage des décisions à partir des signaux neuronaux chez le singe

Chaired by:

E. Procyk (Bron)

Dynamic encoding of stimulus, attention and perceptual decisions in the prefrontal cortex / Encodage dynamique des stimuli, de l'attention et des décisions perceptives dans le cortex préfrontal

S. Ben Hamed (Bron)

Motor cortical involvement in visual cue decoding and selection processes

B. Kilavik (Marseille)

Decoding value-based decision making: from brainstem neuromodulators to ventral prefrontal cortex / Décoder la prise de décision basée sur les valeurs: des neuromodulateurs catecholaminergiques au cortex préfrontal ventral

S. Bouret (Paris)

Master & Servant: interaction between cortex and basal ganglia in learning and decision making processes / Maître et Serviteur: interaction cortex - ganglion de la base dans l'apprentissage et la prise de décision

T. Boraud (Bordeaux)

Single trial beta and gamma burst dynamics during cognitive control in primates

C. Wilson (Bron)

SYMPOSIUM
15:00 - 17:00

Salle F

S13, Cannabinoids and cannabis: both sides of a rising moon

Cannabinoïdes et cannabis : les deux faces d'une lune montante

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In partnership with / En partenariat avec le NIDA

<p>Avec le soutien de / Supported by Aelis Farma

Chaired by:

G.F. Koob (Bethesda)

P.V. Piazza (Bordeaux)

Mapping and characterizing endocannabinoid metabolic pathways

B.F. Cravatt (La Jolla)

Scientific Programme

Cannabinoid receptors: Past, present, and future

K. Mackie (Bloomington)

Cannabis and psychosis: what are the risks? What are the lessons learned? / Cannabis et psychose: quels risques? Quels enseignements?

M.-O. Krebs (Paris)

From a unified vision of addiction to the development of a new treatment / D'une vision unifiée de l'addiction au développement d'un nouveau traitement

P.V. Piazza (Bordeaux)

Prevent the onset of cognitive deficits induced by cannabis abuse during adolescence: benefits of early blockade of 5-HT6-mTOR pathway

C. Berthoux (Montpellier)

SYMPOSIUM
15:00 - 17:00

Salle H

S14, Pain control by peripheral and central circuits

Le contrôle de la douleur par les circuits périphériques et centraux

Chaired by:

A. Moqrich (Marseille)

M. Landry (Bordeaux)

Deciphering the functional specialization and the circuitry of C-LTMRs / Spécialisation fonctionnelle et circuiterie des fibres sensorielles C-LTMRs

A. Moqrich (Marseille)

Functional heterogeneity of calretinin-expressing neurons in spinal circuits - optogenetic studies

B. Graham A (Callaghan)

Independent peripheral and central mechanisms in antidepressant relief of neuropathic pain. / Des mécanismes périphériques et centraux indépendants contrôlent le soulagement de la douleur par les antidépresseurs

M. Barrot (Strasbourg)

Activation of spinal dorsal horn inhibitory networks by the CLTMR derived chemokine TFAA4

C. Kambrun (Bordeaux)

The spinal cord circuits for chronic pain

C. PEIRS (Pittsburgh)

NeuroFrance 2017,
17 - 19 May 2017,
Bordeaux, France

Scientific Programme

PLENARY LECTURE / CONFÉRENCE PLÉNIÈRE
17:00 - 17:30

Amphi A

PL02, Mithieux G. (Lyon)

Chaired by:
P. Giacobini (Lille)

**Gut-brain neural communications in the control of energy homeostasis /
Dialogues nerveux intestin-cerveau dans le contrôle de l'homéostasie
énergétique**

G. Mithieux (Lyon)

SPECIAL SYMPOSIUM / SYMPOSIUM SPÉCIALISÉ
17:30 - 19:00

Amphi A

SP02, Fondation IPSEN Special Lecture on Brain and Machine Learning and Memory

Conscious and unconscious AI

H. Bersini (Brussels)

The persistence and transience of memory

P. Frankland (Toronto)

Scientific Programme

Thursday, 18 May 2017

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

Amphi A

PL03, Dehaene-Lambertz G. (Gif sur Yvette)

Chaired by:

A. Brovelli (Marseille)

100% of adults have been infants: why studying infants is a necessary step to understand human cognition / 100% des adultes ont été des bébés! En quoi l'étude des nourrissons nous permet de comprendre l'émergence de la complexité cognitive d'homo sapiens

G. Dehaene-Lambertz (Gif sur Yvette)

09:30 - 09:35

Amphi A

SciLight Presentation

PLENARY LECTURE / CONFÉRENCE PLÉNIÈRE
09:35 - 10:05

Amphi A

PL04, Bessereau J.-L. (Lyon)

Chaired by:

C. Lena (Paris)

The synaptomatrix, a core organizer of the synapse / La synaptomatrice, un organisateur central de la synapse

J.-L. Bessereau (Lyon)

POSTER SESSION / COMMUNICATIONS AFFICHÉES
10:00 - 11:00

Espace Pluriel

P2, Poster session

Poster sessions run from 10:00 to 11:00 and from 13:00 to 17:00 every day. However, a one hour time block is dedicated to discussion with the authors:

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- from 10:00 to 11:00 for even-numbered posters

- from 14:00 to 15:00 for odd-numbered posters

Development, synaptic plasticity

Lack of response to chronic ethanol exposure in CA1 area of heat shock factor 2 Knockout mice

I. Drissi (Amiens)

Scientific Programme

A computational pipeline for the characterization of 3' untranslated regions of odorant receptor mRNAs expressed by olfactory sensory neurons in mice

C. Dubacq (Paris)

Regulation of GluA2-containing AMPA receptors and synaptopodin levels during homeostatic synaptic scaling

S. Dubes (Bordeaux)

Reprogramming adult SVZ-derived neuroblasts into oligodendrocytes enhances remyelination in the adult brain

B. El Waly (Marseille)

Selective neurodevelopmental and behavioural deficits in Scrib conditional knock-out mice

J. Ezan (Bordeaux)

The Kv1-associated cell adhesion molecules TAG-1 and Caspr2 are selectively targeted to the axon initial segment in hippocampal neurons

C. Faivre-Sarrailh (Marseille)

Neural stem cells as an in vitro model of cell differentiation disturbance after a pesticide exposure

J. Feat (Orléans)

Recurrent episodes of insulin-hypoglycemia alter the hypothalamic neuropeptide Y (NPY) network controlling food intake

X. Fioramonti (Bordeaux)

Effect of stress and novelty induced by context-switch on VTA dopaminergic neurons

G. Fois (Bordeaux)

Human iPSC-derived neurons for functional assessment of in vitro neurotoxicity and seizure liability

A. Fouassier (Köln)

Regulation of fasciculation/defasciculation of axons through the control of axon shaft zipping : a new role of axon tension in the development of neural networks

C. Fouquet (Paris)

EphrinA5 signaling is required for the distinctive targeting of raphe serotonin neurons in the forebrain

P. Gaspar (Paris)

Combinatorial induction of long term potentiation (LTP) at the granule cell (GC) to Purkinje cell (PC) synapses

F.A. Giuliani (Strasbourg)

Adenosine A2A receptors stabilizes inhibitory synapses during development

F. Gomez Castro (Paris)

Removing the developmental molecular brake on AMPA receptors synaptic accumulation leads to learning and memory deficits

I. Gonzalez-Calvo (Paris)

Structure and function of early born GABA neurons in the CA1 region of the hippocampus

C. Gouny (Marseille)

Microglia and prenatal inflammation in the development of cortical circuits

P. Grisel (Paris)

Scientific Programme

Effect of ion channel deletion on the electrical phenotype of substantia nigra pars compacta dopaminergic neurons

A. Haddjeri (Marseille)

Unraveling fundamental properties and regulation of AMPAR intracellular transport in synaptic plasticity

Rapid clustered synaptogenesis induced by a single cocaine administration: ERK dependent spine growth and MNK-1 dependent spine maturation

N. Heck (Paris)

Nanoscale colocalization of AMPA receptor nanodomains with neuroligin 1 regulates synaptic transmission efficiency

E. Hosy (Bordeaux)

Spike-Timing dependent plasticity rules with physiological extracellular calcium concentration: experiments and theory

Y. Inglebert (Marseille)

VEGF-C signaling in neural stem cells, within and beyond the central nervous system

L. Jacob (Paris)

The atypical RhoGTPase Rnd2 is critical for the survival and maturation of adult-born neurons in the hippocampus

T. Kerloch (Bordeaux)

Functional connectivity of interneurons in the input layer of the cerebellar cortex

F. Lanore (London)

Influence of topography on cortical interneuron migration: a study in microstructured environment

C. Leclech (Paris)

Assaying neuronal wiring from brain explants on multi-protein micropatterns

Y. Lecomte (Bordeaux)

Environmental enrichment in the form of nesting material partially rescues the neurobehavioral abnormalities of a genetic mouse model of Fragile X syndrome

V. Lemaire-Mayo (Bordeaux)

Reprogramming astroglia into functional GABAergic neurons within the epileptic hippocampus

C. Lentini (La Tronche)

A unique tyrosine residue in the intracellular domain of neuroligin-1 regulates excitatory versus inhibitory synapse differentiation

M. Letellier (Bordeaux)

The development of auditory cortex interneurons uses specifically two cadherin-related proteins

B. Libé-Philippot (Paris)

Dynamics of dentate gyrus-CA3 microcircuits in vivo

M. Malezieux (Bordeaux)

Altered cortical layering impacts synaptogenesis and spine formation

F. Martineau (Marseille)

Scientific Programme

Characterization of the P2X receptor family in *Xenopus laevis*

K. Masse (Bordeaux)

Study of tissue plasminogen activator during spinal cord neurogenesis and gliogenesis: a new function associated to oligodendrocyte migration

E. Maubert (Caen)

Defective *Gpsm2/Gai3* signaling disrupts stereocilia development in Chudley McCullough syndrome

S.A. Mauriac (Bordeaux)

Pathophysiology and interplay of the cortico/thalamo-striatal synaptic plasticity

A. Mendes (Paris)

Signalisation, cellular communications

Dynamic modulation of inflammatory pain-related affective and sensory symptoms by optical control of amygdala metabotropic glutamate receptor 4

C. Goudet (Montpellier)

Hetero-oligomerization of dopamine D1 and glutamate mGlu5 receptors modulates cellular signaling

E. Goyet (Montpellier)

Control of the cortical distribution of interneurons by Sonic Hedgehog in mouse embryos

V. Grampa (Paris)

New evidence for astrocytes role in energy homeostasis : influence of connexin 43 hemichannels

F. Guillebaud (Marseille)

Effect of increased neuronal activity on remyelination in freely moving mice

C. Habermacher (Paris)

Activity dependent remodeling of glutamatergic postsynaptic receptosome in neurons from ASD mouse models

A.-L. Hemonnot (Montpellier)

GluD1 and GluD2 form heteromers and associate with group I metabotropic glutamate receptors in HEK cells

R. Hepp (Paris)

Defective *Gpsm2/Gai3* signaling disrupts growth cone actin dynamics in Chudley McCullough syndrome

Y.E. Hien (Bordeaux)

Involvement of the purinergic P2X4 receptors in Alzheimer disease

J. Hua (Montpellier)

Short term plasticity combines with synaptic weights to expand cerebellar Purkinje cell dynamic range

P. Isope (Strasbourg)

AAV2/DJ-miR30E-shMCT2: Promising tool to specifically knockdown MCT2 expression in neurons and investigate its role in neuroenergetics

C. Jollé (Lausanne)

Scientific Programme

Synergistic interaction of L-lactate and glycine to potentiate NMDA receptor activity: a new form of meta-potential?

P. Jourdain (Lausanne)

Monitoring glial cell activity in wildtype and MCT8 mutant zebrafish larvae

A. Kulkarni (Paris)

Regulation of the membrane potential in the medial prefrontal cortex (mPFC) pyramidal neurons by muscarinic receptors

P. Kurowski (Warsaw)

Cellular and synaptic basis of dopamine modulation of the primary motor cortex

L. Lescouzères (Bordeaux)

Use of Zif::CreERT2 transgenic mice for long-lasting tagging of neurons activated by epileptic seizures or cocaine injection

S. Longueville (Paris)

Presenilin 1 mutation alters the contraction of cerebral arteries

N. Macrez (Talence)

The p21-activated kinase 3 gene is highly expressed in 1p/19q oligodendrogliomas and associated with a differentiated proneural phenotype in glioblastoma cells

N. Magne (Orsay)

Deciphering molecular complexes of ion channels involved in functional networks in substantia nigra pars compacta dopaminergic neurons

B. Marquèze-Pouey (Marseille)

Characterizing synaptic vesicle exocytosis-endocytosis with new pH-sensitive red fluorescent dyes

M. Martineau (Bordeaux)

Astrocytes detect and upregulate transmission at inhibitory synapses of somatostatin interneurons onto pyramidal cells

M. Matos (Montréal)

Investigating lysosome dynamic in models of neurodegenerative disease

R. Matusiak (Paris)

An advanced platform for receptor biology and pharmacology investigation

D. Maurel (Montpellier)

Neurofibromin promotes constitutive activity of native 5-HT₆ receptors expressed in mouse prefrontal cortex

S. Morisset-Lopez (Orleans)

Biosensor imaging reveals a functional role of PDE1 in response to NMDA receptor activation: effect on cGMP and cAMP in the striatum, prefrontal cortex and hippocampus

E. Mota (Paris)

Deciphering the role of dendritic sodium channels on action potential dynamics in substantia nigra dopaminergic neurons

E. Moubarak (Marseille)

Serotonin 5-HT_{2A} receptor-dependent phosphorylation of glutamate mGlu₂ receptor at Ser843 promotes mGlu₂-operated Gi/o signaling

S. Murat (Montpellier)

Scientific Programme

Control of membrane GPCR signaling by Filamin A: implication in high-grade glioma development

A. Mutel (Mont-Saint-Aignan)

Neurological and psychiatric diseases, experimental therapeutics

Asenapine modulates mood-related behaviors and 5-HT_{1A/7} receptor-mediated neurotransmission

S. Delcourte (Bron)

Plasma cholesterol level determines in vivo prion propagation

C. Desrumaux (Montpellier)

Gene transfer to the brain of a lemurian primate for neurodegenerative disease studies

G. Devau (Montpellier)

Oligodendrocyte generation dynamics is altered in neurodegenerating human brain

M. Djelloul (Stockholm)

Functional genomics of Alzheimer risk loci in Drosophila identifies PTK2B as an in vivo modulator and early marker of Tau pathology

P. Dourlen (Lille)

Effect of PI3K inhibitor cancer targeted therapy on emotional reactivity and cognitive functions in mice

M. Dubois (Rouen)

Abnormal interneuron development in a new humanized mouse model of Arx dup24 which recapitulates the patients' behavioural and fine motor alterations

A. Dubos (Illkirch)

Impact of brain lipid composition on reward processing and mesolimbic dopamine transmission: a role in schizophrenia endophenotypes?

F. Ducrocq (Bordeaux)

Dopamine synthesis: a focus on tetrahydrobiopterin

H. Fanet (Bordeaux)

How does the brain dynamically respond to Huntington's disease? Systems modelling and the biology of neuronal compensation

F. Farina (Paris)

Implication of $\alpha 7$ nicotinic receptors in the cognitive impairments induced by repeated intra-hippocampus amyloid-A β (1-42) peptide in mice

P. Faucher (Bordeaux)

Glucocerebrosidase deficiency in dopaminergic neurons induces microglial activation without neurodegeneration

P.-O. Fernagut (Bordeaux)

Deciphering the genetics of dementias with Lewy bodies

M.-J. Fontenille (Paris)

Study of Gpr88 as a therapeutic target for the non-motor symptoms of Parkinson's disease

B. Galet (Paris)

Scientific Programme

Pharmacological and non-pharmacological factors in nicotine self-administration: a case for individual differences

V. Garcia-Rivas (Bordeaux)

Overcoming a metabolic roadblock in direct neuronal reprogramming

S. Gascón (Munich)

Validation of optogenetic vision restoration in retinal ganglion cells of non-human primates with AAV2.7m8-ChrimsonR-tdTomato

G. Gauvain (Paris)

Multiple modes of action of etifoxine in models of inflammatory sensitization

G. Gazzo (Strasbourg)

Temporal regulation of BDNF level in the nucleus accumbens core during morphine withdrawal in rats

H. Geoffroy (Paris)

Nanoscale modification of AMPAR / NMDAR organization in phelan-McDermid syndrome model

J. Goncalves (Bordeaux)

Electro Convulsive Seizures (ECS) increases new-born neurons survival concomitantly with behavioral normalization in a mouse model for depression

S. Gory-Fauré (Grenoble)

AAV-mediated expression of alpha-synuclein in oligodendrocytes recapitulates key features of multiple system atrophy

P.-A. Guerin (Bordeaux)

Purkinje cell loss in autism spectrum disorders mouse models

O. Haïda (Poitiers)

Mechanisms of neuronal death in Parkinson's disease: impact of Parkin deficiency on the mitochondrial stress response

E. Hamon (Paris)

Interactions between microglia and pathologic neurons: insights from living zebrafish embryos

R. Hassan Abdi (Paris)

Vascular reactivity changes of the intracortical blood vessels after juvenile traumatic brain injury

A. Ichkova (Bordeaux)

In vivo imaging of neurovascular mural cells during seizure progression in an experimental mouse model

F. Jeanneteau (Montpellier)

Psychotomimetic uncompetitive NMDA receptor antagonists strongly alter receptor membrane dynamics and distribution

J. Jezequel (Bordeaux)

Psychosis-related retroviral protein induce specific alteration of NMDA receptor surface dynamics in neurons

E.M. Johansson (Bordeaux)

Scientific Programme

Changes in chromatin state reveal a central role for the HIF family member ARNT2, in the control of glioblastoma stem cell tumorigenicity

M.-P. Junier (Paris)

zQ175 knock-in mouse model helps to decipher the neuroprotective role of CYP46A1, the cholesterol degradation enzyme, in Huntington's disease

R. Kacher (Paris)

ADHD disorder among Moroccan teenagers of Sidi Yahia of Gharb city (Morocco)

H. Kesmat (Kénitra)

Tau isoforms accumulation in hippocampal astrocytes impacts on mitochondrial function and spatial memory

K. Richetin (Lausanne)

Combined high throughput screening and high content analysis approaches to neuronal physiology/pathology monitoring provide powerful tools for drug discovery

P. Kitchener (Pessac)

A dual mechanism for duloxetine relief of neuropathic allodynia

M. Kremer (Strasbourg)

A bio-pesticide analog acts as a modulator of prion aggregation

P.-A. Lafon (Montpellier)

How does sleep complaint is related to structural and diffusion magnetic resonance imaging as well as cognition in alcohol use disorder?

A. Laniepce (Caen)

Frontotemporal Lobar dementia and amyotrophic lateral sclerosis share common RNA metabolism defects

M. Latouche (Paris)

Perinatal exposure to the cyanotoxin BMAA results in abnormal coping strategy in the offspring - potential involvement of neural stem cells DNA damage and oxidative stress

A. Laugeray (Orléans La Source)

Imaging pathological activities of human brain tissue in organotypic culture

C. Le Duigou (Paris)

Effects of N-acetylcysteine on alcohol seeking and relapse in a rat model of binge drinking.

S. Lebourgeois (Amiens)

Molecular and cellular consequences of novel de novo KMT2A variants involved in Wiedemann-Steiner syndrome

N. Lebrun (Paris)

Arpe-19: the best cell to model retinal diseases in vitro?

A. Leguen (Poitiers)

A promising avenue to fight glioblastoma multiforme with a small neurofilament-derived peptide, the NFL-TBS.40-63

C. Lépinoux-Chambaud (Angers)

Brain insulin resistance in Parkinson's disease

M. Lopez Cuina (Bordeaux)

Scientific Programme

Procedural memory deficits in a transgenic mouse model of Huntington's disease

C. Lotz (Strasbourg)

Dopaminergic responses in the core part of the nucleus accumbens to dizocilpine administration at adulthood are increased following early functional blockade of the prefrontal cortex

A. Louilot (Strasbourg)

Protective role of Renshaw cells in ALS?

V. Marchand (Paris)

Role of the sumoylation process in intellectual disability

S. Martin (Valbonne)

Integrative neuroscience, sensory physiology

Spinal Cav3.2 channel deletion and pain sensibility

A. Fruquière (Montpellier)

Reaching for water: a novel cortex dependent forelimb task for mice

G.L. Galifianes (Genève)

Dynamic coding of fear and safety signals in the dorsal prefrontal cortex of behaving mice

F. Gambino (Bordeaux)

What do olfactory receptors do in the brain?

F. Gaudel (Marseille)

The multiple dopaminergic inputs to the bed nucleus of the stria terminalis

F. Georges (Bordeaux)

Sleep replay of emotional memory in the hippocampus-amygdala system

G. Girardeau (New York)

Does respiratory rhythm pace brain activity?

B. Girin (Lyon)

Adaptive plasticity upon chronic KCC2 extinction in rat dentate gyrus granule cells

M. Goutierre (Paris)

The unexpected level of plasticity of the oxytocinergic system

S. Goyon (Strasbourg)

Position- and ATP-dependent signaling activity in mouse developing inner hair cells

A.-G. Harrus (Montpellier)

A common neural substrate for the processing of word perception, production and reading: an fMRI study of 144 right-handers of the BIL&GIN

I. Hesling (Bordeaux)

Evaluation of the activity of sensory cortical-sub-cortical networks

S. Hssain (Paris)

Projection-specific properties of presubicular neurons targeting the lateral mammillary nucleus, thalamus or medial entorhinal Cortex

L.-W. Huang (Edinburgh)

Scientific Programme

Investigation of connectivity and defects of synaptic physiology in spinal circuits of a neuromuscular disease model

J.M. Hubbard (Paris)

Short-term impact of a western diet on the physiology of the peripheral olfactory system

D. Jarriault (Dijon)

Competitive disinhibition in early sensory processing mediates behavioral choice and sequences in *Drosophila*

T. Jovanic (Ashburn)

Activation of spinal dorsal horn inhibitory networks by the CLTMR derived chemokine TAF4A

C. Kambrun (Bordeaux)

How does the aging brain feel hand movements from two sensory sources: touch and muscle proprioception?

C. Landelle (Marseille)

Mechanisms of pain hypersensitivity in a pharmacological mouse model of attention-deficit / hyperactivity disorder

M. Landry (Bordeaux)

Synaptic correlates of the binding between form and motion in V1

B. Le Bec (Unic)

A minimal neural network for the generation of behavioral variability

A. Leblois (Paris)

Primary auditory cortex plasticity of neuronal ensembles in auditory learning and memory

X. Liu (Paris)

Role of miR-204 and PlexinA2 in oxaliplatin-induced neuropathy

M.-J. López González (Bordeaux)

Non-invasive real-time access to spatial attention information from 3T fMRI BOLD signals

C. Lorient (Bron)

Non invasive intracranial pressure monitoring using cochlear microphonics

B. Lourenço (Clermont-Ferrand)

From hand to hand: a novel pattern of remote plasticity following training-independent tactile learning

S. Macchione (Lyon)

Role of antennal lobe inhibition in gain modulation and odor generalization across concentration

E. Marachlian (Buenos Aires)

Contribution of the cholinergic TAN system of the primate striatum to the encoding of time

A.-C. Martel (Marseille)

Optogenetic identification of the subcircuits involved in the transfer of thalamic information through the basal ganglia

N. Maurice (Marseille)

Global multi-whisker information is preferentially represented in secondary somatosensory cortex

E.R. Harrell (Gif sur Yvette)

Scientific Programme

A radial map of selectivity to multi-whisker correlation in the rat barrel cortex

J.-F. Léger (Paris)

Whiskers and barrel cortex are used for bilateral discrimination of tactile patterns in the rat

P. Kerekes (Gif sur Yvette)

Towards a fast brain-machine interface integrating sensory feedback

D. Shulz (Gif sur Yvette)

Neuroendocrinology, neuroimmunology

Investigation of tachyphylaxis of LH response following repeated injections of the kisspeptin analog C6

C. Decourt (Nouzilly)

Kisspeptin neurons from the arcuate nucleus express somatostatin receptor SSTR1 more frequently than SSTR2A in male rats

L. Dufourny (Nouzilly)

Understanding the role of perivascular macrophages in PD pathophysiology

J. Fuentealba (Paris)

Production of FGF21 by tanycytes is modulated under fasting conditions and would involve palmitate via p38 MAPK signaling pathway

S. Geller (Lausanne)

Modulators of glucocorticoid receptors reverse the prefrontal cortex Alzheimer's disease pathology in rat

L. Givalois (Montpellier)

Role of inflammation in depressive symptoms in obese subjects

L. Huet (Bordeaux)

Molecular mechanism of insulin resistance in NLRP3 knockout mice

Y. Komleva (Krasnoyarsk)

Hedgehog and androgen signaling pathways in myelination and remyelination

Y. Laouarem (Paris)

Glial endopeptides act as endogenous leptin sensitizers

B. Lebrun (Marseille)

Early-life PUFAs modulate shaping of neuronal circuits by microglia

Q. Leyrolle (Paris)

Selenoprotein T is a novel glycosyltransferase subunit essential to maintain ER homeostasis and neuroendocrine secretion

I. Lihmann-Bisson (Mont-Saint-Aignan)

Behaviour, emotions, cognition, neuroethology

Transcriptional co-repressor Sin3A enhances long-term memory by modeling neuronal synaptic plasticity markers

C. Florian (Toulouse)

Frontal neurobiology of decisions to check

V. Fontanier (Bron)

Scientific Programme

Noradrenaline differentially affects attention-related evidence accumulation and decision thresholds

M. Froesel (Bron)

The role of infralimbic prefrontal cortex during behaviors guided by reward and punishment avoidance

R.N. Gentry (College Park)

Neural mechanisms of vocal imitation: a theoretical model for a role of sleep replay in shaping mirror neurons

N. Giret (Orsay)

Synaptic organization of microglomerular clusters in the lateral and medial bulbs of the honeybee brain

M. Giurfa (Toulouse)

The interference control in children with an attention deficit/hyperactivity disorder

A. Grandjean (Marseille)

Functional roles of the subthalamic nucleus in reward and movement

A. Guillaumin (Uppsala)

Unpredictable chronic mild stress in adult C57BL/6 mice has long term consequences on aging cognition and emotionality

J.-L. Guillou (Bordeaux)

Effect of anisomycin in the prefrontal cortex on fear memory consolidation with different levels of reinforcement

M. Hernandez Avila (Querétaro)

The role of arousal in the facilitation effect of distracting sounds: a pupillometry study

R. Hoyer (Bron)

EEG Beta-band modulations in implicit and explicit motor adaption processes

A. Jahani (Marseille)

Prefrontal control of fear avoidance

D. Jercog (Bordeaux)

Neural antecedent of spontaneous behavior in zebrafish larva

A. Jouary (Paris)

Behavioral strategies underlying phototaxis in zebrafish

S. Karpenko (Paris)

Prefrontal neuronal circuits of passive and active fear behaviours

S. Khoder (Bordeaux)

Prenatal stress and programming of stress-induced emotional memory states

M. Koehl (Bordeaux)

Physical exercise and HFD: what's up with adolescent mice?

P. Lafenetre (Bordeaux)

Rodent behavior exploration: discover the platform

C. Laloux (Lille)

Scientific Programme

Opiate withdrawal conditioning alters oscillatory states in the nucleus accumbens

C. Le Moine (Bordeaux)

The functional role of the olfactory bulb in the fear-related oscillations of the prefrontal cortex

J. Lefort (Paris)

The role of adult hippocampal neurogenesis in spatial memory reconsolidation

M. Lods (Bordeaux)

Cognitive control of vocal and orofacial responses in the human broca-MCC brain network

K.K. Loh (Bron)

Oxytocin is neuroprotective against physiological and behavioral consequences of social stress

O. Lopatina (Krasnoyarsk)

Longitudinal study of motor and cognitive behavior in 3, 6 and 9 month-old P301S tau mice

C. Louis (Croissy-sur-Seine)

Neurobehavioral determinants of individual differences in appetitive learning

A.R. Marchand (Bordeaux)

Estradiol normalizes CA1 NMDA receptors surface distribution and declarative memory in aged mice

A. Marighetto (Bordeaux)

Discrete and continuous mechanisms of temporal attention in rapid visual streams

S. Marti (Gif-sur-Yvette)

Age-related corticostriatal decline underlies temporal constraints in action execution

M. Matamales (Brisbane)

Forgetting, sleep and synaptic plasticity: an in vivo electrophysiological study in the rat during working memory tasks

M. Missaire (Lyon)

Role of the matricellular protein Hevin in drug response

R. Mongrédien (Paris)

Examining the effects of hypergravity exposure on the organization of recent and remote memory in rats

J.-L. Morel (Bordeaux)

Hippocampal-dependent memory impairment induced by high-fat diet consumption during adolescence is mediated by an enhanced amygdala activity

F. Naneix (Bordeaux)

Alarm pheromone regulates honeybee aggression through dopamine and serotonin brain levels

M. Nouvian (Toulouse)

Extradimensional attentional set-shifting related changes in prefrontal and striatal neuronal activity

V. Oberto (Paris)

Deletion of CB1 receptors in D1-positive cells impairs object recognition memory

J.F. Oliveira da Cruz (Bordeaux)

Scientific Programme

Tissue plasminogen activator/plasminogen activator inhibitor type-1 axis plays a critical role in the control of anxiety disorders

H. Party (Caen)

Theoretical and computational neuroscience

Predictive coding through the lens of the pupil

A. Alamia (Bruxelles)

Investigation of the superior temporal sulcus plus de passage

C. Bodin (Marseille)

Dynamic reconfiguration of visuomotor-related functional connectivity networks

A. Brovelli (Marseille)

Extracting the human pyramidal tract with multimodal imaging and new diffusion weighted tractography tools: a study in 411 healthy subjects of the BIL&GIN cohort

Q. Chenot (Bordeaux)

Modeling gamma oscillations in networks of adaptive exponential integrate-and-fire neurons

E. Demori Susin (Paris)

Decoding multiplexed attention, temporal expectation, temporal decay and response preparation information from the prefrontal cortex

C. Gaillard (Bron)

How many streamlines are needed to reliably compute volume or spatial extent of the white matter bundles in diffusion-weighted tractography?

A. Gauvin (Bordeaux)

The virtual mouse brain: a computational platform to study whole mouse brain dynamics

F. Melozzi (Marseille)

Variational bayes applied to the simple and full drift diffusion models

V. Moens (Bruxelles)

Efficient learning of sparse image representations using homeostatic regulation

L. Perrinet (Marseille)

Diffusion MRI: assessment of the impact of acquisition and preprocessing methods using Brainvisa-Diffuse toolbox

A. Pron (Marseille)

Understanding how thought and motor function can emerge from a neuronal network

J. Rousseau (Dieppe)

Identification of new genes in autosomal dominant forms of Parkinson's disease

C. Tesson (Paris)

Scientific Programme

SYMPOSIUM
11:00 - 13:00

Amphi A

S15, Subcortical determinants of learning and memory: Looking beyond the hippocampus

Bases sous-corticales de l'apprentissage et de la mémoire : regard au-delà de l'hippocampe

Chaired by:

L. Lecourtier (Strasbourg)
M. Wolff (Bordeaux)

Role of the limbic thalamus in adaptive behaviours / Rôle du thalamus limbique dans les comportements adaptatifs

M. Wolff (Bordeaux)

The lateral habenula as a relay of cortical information to process memory / L'habénula latérale comme relai d'informations corticales pour forger notre mémoire

L. Lecourtier (Strasbourg)

Impaired cerebellar Purkinje cell potentiation generates spatial disorientation / Un déficit de potentialisation des cellules de Purkinje du cervelet affecte les capacités d'orientation spatiale

C. Rochefort (Paris)

Midbrain and memory: the importance of Gudden's ventral tegmental nucleus / Mésencéphale et mémoire: importance du noyau tegmental de Gudden

S. Vann (Cardiff)

Dynamic coding of fear and safety signals in the dorsal prefrontal cortex of behaving mice

F. Gambino (Bordeaux)

SYMPOSIUM
11:00 - 13:00

Amphi B

S16, Multiple facets of microglia in health and disease

Multiplés fonctions de la microglie en conditions normales et pathologiques

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Sponsored by the French Club of Glial Cells

Soutenu par le Club des Cellules Gliales

Chaired by:

B. Nait Oumesmar (Paris)
O. Pascual (Bron)

Microglial motility during various vigilance states

O. Pascual (Bron)

Scientific Programme

Adaptive immunity drives remyelination failure or success in a humanized model of multiple sclerosis lesion / L'immunité adaptative dirige la remyélinisation vers le succès ou l'échec dans un modèle humanisé de lésion de sclérose en plaques

V. Zujovic (Paris)

Role of microglia in the encephalopathy of prematurity

P. Gressens (Paris)

Role of microglia in the modulation of neuronal activity

E. Avignone (Bordeaux)

SYMPOSIUM
11:00 - 13:00

Amphi C

S17, Molecular players of postsynaptic elements in psychiatric disorders

Acteurs moléculaires post-synaptiques dans les maladies psychiatriques

Chaired by:

E. Moutin (Montpellier)

Dendritic spine plasticity and palmitoylation in DiGeorge syndrome / Plasticité des épines dendritiques et palmitoylation dans le syndrome de DiGeorge

E. Moutin (Montpellier)

Neuronal dysfunctions underlying Phelan-McDermid syndrome: rescue by modulation of mGlu5 signaling / Signalisation de mGlu5 dans les dysfonctionnements neuronaux associés au syndrome Phelan- McDermid

C. Verpelli (Milan)

Pathological remodelling of NMDAR surface dynamics in neuropsychiatric disease / Altération du trafic moléculaire des récepteurs NMDA dans les maladies psychiatriques

J. Dupuis (Bordeaux)

Dysregulated microbiome in people and mice with autism-associated genetic mutations

L. Tabouy (Safed)

SYMPOSIUM
11:00 - 13:00

Salle D

S18, Alteration in top-down prefrontal-subcortical control during the transition to addiction

Altération du contrôle hiérarchique préfrontal-souscortical au cours de la transition vers l'addiction

Chaired by:

S. Ahmed (Bordeaux)

K. Guillem (Bordeaux)

Scientific Programme

Corticolimbic circuits of compulsive substance use / Circuit corticolimbique impliqué dans l'usage compulsif de drogues

L. Vanderschuren (Utrecht)

Prefrontal cortex plasticity in mouse models of addiction / Plasticité préfrontale dans les modèles murins d'addiction

V. Pascoli (Geneva)

Orbitofrontal neuronal activity explains drug choices and preferences in addicted rats / L'activité neuronale du cortex orbitofrontal explique les choix et les préférences pour la drogue chez les rats dépendants

K. Guillem (Bordeaux)

Long-term ketamine self-administration disrupts postsynaptic glutamate elements in rat medial prefrontal cortex and hippocampus

L. Caffino (Milano)

The subthalamic nucleus controls development and expression of cocaine-induced addiction-like behaviors in rats

M. Degoulet (Marseille)

SYMPOSIUM
11:00 - 13:00

Salle E

S19, Control of neural circuits formation by membrane trafficking

Contrôle de la formation des circuits neuronaux par le trafic membranaire

Chaired by:

S. Chauvet (Marseille)

J. De Wit (Leuven)

Molecular mechanisms of membrane traffic in neuronal development / role of the non-fusogenic Sec22b/Stx1 SNARE complex and extended synaptotagmins / Mécanismes moléculaires du trafic membranaire dans le développement neuronal / rôle du complexe SNARE non fusogénique Sec22b/Stx1 et des extended synaptotagmins

T. Galli (Paris)

The coupling of guidance receptor trafficking to signal transduction regulates axonal development / Le couplage du trafic des récepteurs de guidage à la transduction du signal régule le développement axonal

S. Chauvet (Marseille)

The sorting receptor SorCS1 controls axonal targeting of neurexin

J. De Wit (Leuven)

Imaging of single endocytosis and recycling events in neuronal dendrites during synaptic plasticity / Imagerie d'événements individuels d'endocytose et de recyclage dans les dendrites neuronales pendant la plasticité synaptique

D. Perrais (Bordeaux)

Huntington's disease on chip: reconstituting neuronal network in microfluidics reveals the importance of presynaptic alterations in disease

A. Virlogeux (Grenoble)

Scientific Programme

SYMPOSIUM
11:00 - 13:00

Salle F

S20, Investigating and controlling whole brain dynamics

Etudier et contrôler la dynamique cérébrale

Chaired by:

C. Bernard (Marseille)
V.K. Jirsa (Marseille)

Personalised whole brain simulations / Simulations de cerveau entier personnalisées

P. Ritter (Berlin)

Functional brain tractography / Tractographie cérébrale fonctionnelle

O. David (La Tronche)

The routing of information by coupled alpha and gamma oscillations / L'acheminement de l'information via les oscillations alpha et gamma couplées

O. Jensen (Birmingham)

The virtual mouse brain: a computational platform to study whole mouse brain dynamics

F. Melozzi (Marseille)

A minimal neural network for the generation of behavioral variability

A. Leblois (Paris)

SYMPOSIUM
11:00 - 13:00

Salle H

S21, Imaging the living brain: Focus on neurogenesis in the olfactory bulb

Observer le cerveau chez l'animal vivant : gros plan sur le bulbe olfactif

Chaired by:

H. Cremer (Marseille)

Mechanisms underlying in vivo differentiation of adult born neurons in the mammalian olfactory bulb / Differentiation neuronale pendant la neurogenèse olfactive adulte

O. Garaschuk (Tübingen)

Plasticity in the mouse olfactory bulb following motherhood / Imagerie in vivo de la plasticité neuronale dans le système olfactif

A. Mizrahi (Jerusalem)

Neuronal integration in the postnatal olfactory bulb / Intégration neuronale dans le bulbe olfactif postnatal

H. Cremer (Marseille)

Role of the primary cilium in the migration and differentiation of adult-born neurons

M. Chaulet (Paris)

Scientific Programme

In vivo imaging of neurovascular mural cells during seizure progression in an experimental mouse model

F. Jeanneteau (Montpellier)

POSTER SESSION / COMMUNICATIONS AFFICHÉES
13:00 - 17:00

Espace Pluriel

P2, Poster session

Poster sessions run from 10:00 to 11:00 and from 13:00 to 17:00 every day. However, a one hour time block is dedicated to discussion with the authors:

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- from 10:00 to 11:00 for even-numbered posters

- from 14:00 to 15:00 for odd-numbered posters

Development, synaptic plasticity

Lack of response to chronic ethanol exposure in CA1 area of heat shock factor 2 Knockout mice

I. Drissi (Amiens)

A computational pipeline for the characterization of 3' untranslated regions of odorant receptor mRNAs expressed by olfactory sensory neurons in mice

C. Dubacq (Paris)

Regulation of GluA2-containing AMPA receptors and synaptopodin levels during homeostatic synaptic scaling

S. Dubes (Bordeaux)

Reprogramming adult SVZ-derived neuroblasts into oligodendrocytes enhances remyelination in the adult brain

B. El Waly (Marseille)

Selective neurodevelopmental and behavioural deficits in Scrib conditional knock-out mice

J. Ezan (Bordeaux)

The Kv1-associated cell adhesion molecules TAG-1 and Caspr2 are selectively targeted to the axon initial segment in hippocampal neurons

C. Faivre-Sarrailh (Marseille)

Neural stem cells as an in vitro model of cell differentiation disturbance after a pesticide exposure

J. Feat (Orléans)

Recurrent episodes of insulin-hypoglycemia alter the hypothalamic neuropeptide Y (NPY) network controlling food intake

X. Fioramonti (Bordeaux)

Effect of stress and novelty induced by context-switch on VTA dopaminergic neurons

G. Fois (Bordeaux)

Human iPSC-derived neurons for functional assessment of in vitro neurotoxicity and seizure liability

A. Fouassier (Köln)

Scientific Programme

Regulation of fasciculation/defasciculation of axons through the control of axon shaft zippering : a new role of axon tension in the development of neural networks

C. Fouquet (Paris)

EphrinA5 signaling is required for the distinctive targeting of raphe serotonin neurons in the forebrain

P. Gaspar (Paris)

Combinatorial induction of long term potentiation (LTP) at the granule cell (GC) to Purkinje cell (PC) synapses

F.A. Giuliani (Strasbourg)

Adenosine A2A receptors stabilizes inhibitory synapses during development

F. Gomez Castro (Paris)

Removing the developmental molecular brake on AMPA receptors synaptic accumulation leads to learning and memory deficits

I. Gonzalez-Calvo (Paris)

Structure and function of early born GABA neurons in the CA1 region of the hippocampus

C. Gouny (Marseille)

Microglia and prenatal inflammation in the development of cortical circuits

P. Grisel (Paris)

Effect of ion channel deletion on the electrical phenotype of substantia nigra pars compacta dopaminergic neurons

A. Haddjeri (Marseille)

Unraveling fundamental properties and regulation of AMPAR intracellular transport in synaptic plasticity

Rapid clustered synaptogenesis induced by a single cocaine administration: ERK dependent spine growth and MNK-1 dependent spine maturation

N. Heck (Paris)

Nanoscale colocalization of AMPA receptor nanodomains with neuroligin 1 regulates synaptic transmission efficiency

E. Hosy (Bordeaux)

Spike-Timing dependent plasticity rules with physiological extracellular calcium concentration: experiments and theory

Y. Inglebert (Marseille)

VEGF-C signaling in neural stem cells, within and beyond the central nervous system

L. Jacob (Paris)

The atypical RhoGTPase Rnd2 is critical for the survival and maturation of adult-born neurons in the hippocampus

T. Kerloch (Bordeaux)

Functional connectivity of interneurons in the input layer of the cerebellar cortex

F. Lanore (London)

Influence of topography on cortical interneuron migration: a study in microstructured environment

C. Leclech (Paris)

Scientific Programme

Assaying neuronal wiring from brain explants on multi-protein micropatterns

Y. Lecomte (Bordeaux)

Environmental enrichment in the form of nesting material partially rescues the neurobehavioral abnormalities of a genetic mouse model of Fragile X syndrome

V. Lemaire-Mayo (Bordeaux)

Reprogramming astroglia into functional GABAergic neurons within the epileptic hippocampus

C. Lentini (La Tronche)

A unique tyrosine residue in the intracellular domain of neuroligin-1 regulates excitatory versus inhibitory synapse differentiation

M. Letellier (Bordeaux)

The development of auditory cortex interneurons uses specifically two cadherin-related proteins

B. Libé-Philippot (Paris)

Dynamics of dentate gyrus-CA3 microcircuits in vivo

M. Malezieux (Bordeaux)

Altered cortical layering impacts synaptogenesis and spine formation

F. Martineau (Marseille)

Characterization of the P2X receptor family in *Xenopus laevis*

K. Masse (Bordeaux)

Study of tissue plasminogen activator during spinal cord neurogenesis and gliogenesis: a new function associated to oligodendrocyte migration

E. Maubert (Caen)

Defective Gpsm2/Gai3 signaling disrupts stereocilia development in Chudley McCullough syndrome

S.A. Mauriac (Bordeaux)

Pathophysiology and interplay of the cortico/thalamo-striatal synaptic plasticity

A. Mendes (Paris)

Signalisation, cellular communications

Dynamic modulation of inflammatory pain-related affective and sensory symptoms by optical control of amygdala metabotropic glutamate receptor 4

C. Goudet (Montpellier)

Hetero-oligomerization of dopamine D1 and glutamate mGlu5 receptors modulates cellular signaling

E. Goyet (Montpellier)

Control of the cortical distribution of interneurons by Sonic Hedgehog in mouse embryos

V. Grampa (Paris)

New evidence for astrocytes role in energy homeostasis : influence of connexin 43 hemichannels

F. Guillebaud (Marseille)

Effect of increased neuronal activity on remyelination in freely moving mice

C. Habermacher (Paris)

Scientific Programme

Activity dependent remodeling of glutamatergic postsynaptic receptosome in neurons from ASD mouse models

A.-L. Hemonnot (Montpellier)

GluD1 and GluD2 form heteromers and associate with group I metabotropic glutamate receptors in HEK cells

R. Hepp (Paris)

Defective Gpsm2/Gai3 signaling disrupts growth cone actin dynamics in Chudley McCullough syndrome

Y.E. Hien (Bordeaux)

Involvement of the purinergic P2X4 receptors in Alzheimer disease

J. Hua (Montpellier)

Short term plasticity combines with synaptic weights to expand cerebellar Purkinje cell dynamic range

P. Isope (Strasbourg)

AAV2/DJ-miR30E-shMCT2: Promising tool to specifically knockdown MCT2 expression in neurons and investigate its role in neuroenergetics

C. Jollé (Lausanne)

Synergistic interaction of L-lactate and glycine to potentiate NMDA receptor activity: a new form of meta-potential?

P. Jourdain (Lausanne)

Monitoring glial cell activity in wildtype and MCT8 mutant zebrafish larvae

A. Kulkarni (Paris)

Regulation of the membrane potential in the medial prefrontal cortex (mPFC) pyramidal neurons by muscarinic receptors

P. Kurowski (Warsaw)

Cellular and synaptic basis of dopamine modulation of the primary motor cortex

L. Lescouzères (Bordeaux)

Use of Zif::CreERT2 transgenic mice for long-lasting tagging of neurons activated by epileptic seizures or cocaine injection

S. Longueville (Paris)

Presenilin 1 mutation alters the contraction of cerebral arteries

N. Macrez (Talence)

The p21-activated kinase 3 gene is highly expressed in 1p/19q oligodendrogliomas and associated with a differentiated proneural phenotype in glioblastoma cells

N. Magne (Orsay)

Deciphering molecular complexes of ion channels involved in functional networks in substantia nigra pars compacta dopaminergic neurons

B. Marquèze-Pouey (Marseille)

Characterizing synaptic vesicle exocytosis-endocytosis with new pH-sensitive red fluorescent dyes

M. Martineau (Bordeaux)

Scientific Programme

Astrocytes detect and upregulate transmission at inhibitory synapses of somatostatin interneurons onto pyramidal cells

M. Matos (Montréal)

Investigating lysosome dynamic in models of neurodegenerative disease

R. Matusiak (Paris)

An advanced platform for receptor biology and pharmacology investigation

D. Maurel (Montpellier)

Neurofibromin promotes constitutive activity of native 5-HT₆ receptors expressed in mouse prefrontal cortex

S. Morisset-Lopez (Orleans)

Biosensor imaging reveals a functional role of PDE1 in response to NMDA receptor activation: effect on cGMP and cAMP in the striatum, prefrontal cortex and hippocampus

E. Mota (Paris)

Deciphering the role of dendritic sodium channels on action potential dynamics in substantia nigra dopaminergic neurons

E. Moubarak (Marseille)

Serotonin 5-HT_{2A} receptor-dependent phosphorylation of glutamate mGlu₂ receptor at Ser843 promotes mGlu₂-operated Gi/o signaling

S. Murat (Montpellier)

Control of membrane GPCR signaling by Filamin A: implication in high-grade glioma development

A. Mutel (Mont-Saint-Aignan)

Neurological and psychiatric diseases, experimental therapeutics

Asenapine modulates mood-related behaviors and 5-HT_{1A/7} receptor-mediated neurotransmission

S. Delcourte (Bron)

Plasma cholesterol level determines in vivo prion propagation

C. Desrumaux (Montpellier)

Gene transfer to the brain of a lemurian primate for neurodegenerative disease studies

G. Devau (Montpellier)

Oligodendrocyte generation dynamics is altered in neurodegenerating human brain

M. Djelloul (Stockholm)

Functional genomics of Alzheimer risk loci in Drosophila identifies PTK2B as an in vivo modulator and early marker of Tau pathology

P. Dourlen (Lille)

Effect of PI3K inhibitor cancer targeted therapy on emotional reactivity and cognitive functions in mice

M. Dubois (Rouen)

Abnormal interneuron development in a new humanized mouse model of Arx dup24 which recapitulates the patients' behavioural and fine motor alterations

A. Dubos (Illkirch)

Scientific Programme

Impact of brain lipid composition on reward processing and mesolimbic dopamine transmission: a role in schizophrenia endophenotypes?

F. Ducrocq (Bordeaux)

Dopamine synthesis: a focus on tetrahydrobiopterin

H. Fanet (Bordeaux)

How does the brain dynamically respond to Huntington's disease? Systems modelling and the biology of neuronal compensation

F. Farina (Paris)

Implication of $\alpha 7$ nicotinic receptors in the cognitive impairments induced by repeated intra-hippocampus amyloid-A β (1-42) peptide in mice

P. Faucher (Bordeaux)

Glucocerebrosidase deficiency in dopaminergic neurons induces microglial activation without neurodegeneration

P.-O. Fernagut (Bordeaux)

Deciphering the genetics of dementias with Lewy bodies

M.-J. Fontenille (Paris)

Study of Gpr88 as a therapeutic target for the non-motor symptoms of Parkinson's disease

B. Galet (Paris)

Pharmacological and non-pharmacological factors in nicotine self-administration: a case for individual differences

V. Garcia-Rivas (Bordeaux)

Overcoming a metabolic roadblock in direct neuronal reprogramming

S. Gascón (Munich)

Validation of optogenetic vision restoration in retinal ganglion cells of non-human primates with AAV2.7m8-ChrimsonR-tdTomato

G. Gouvain (Paris)

Multiple modes of action of etifoxine in models of inflammatory sensitization

G. Gazzo (Strasbourg)

Temporal regulation of BDNF level in the nucleus accumbens core during morphine withdrawal in rats

H. Geoffroy (Paris)

Nanoscale modification of AMPAR / NMDAR organization in phelan-McDermid syndrome model

J. Goncalves (Bordeaux)

Electro Convulsive Seizures (ECS) increases new-born neurons survival concomitantly with behavioral normalization in a mouse model for depression

S. Gory-Fauré (Grenoble)

AAV-mediated expression of alpha-synuclein in oligodendrocytes recapitulates key features of multiple system atrophy

P.-A. Guerin (Bordeaux)

Purkinje cell loss in autism spectrum disorders mouse models

O. Haïda (Poitiers)

Scientific Programme

Mechanisms of neuronal death in Parkinson's disease: impact of Parkin deficiency on the mitochondrial stress response

E. Hamon (Paris)

Interactions between microglia and pathologic neurons: insights from living zebrafish embryos

R. Hassan Abdi (Paris)

Vascular reactivity changes of the intracortical blood vessels after juvenile traumatic brain injury

A. Ichkova (Bordeaux)

In vivo imaging of neurovascular mural cells during seizure progression in an experimental mouse model

F. Jeanneteau (Montpellier)

Psychotomimetic uncompetitive NMDA receptor antagonists strongly alter receptor membrane dynamics and distribution

J. Jezequel (Bordeaux)

Psychosis-related retroviral protein induce specific alteration of NMDA receptor surface dynamics in neurons

E.M. Johansson (Bordeaux)

Changes in chromatin state reveal a central role for the HIF family member ARNT2, in the control of glioblastoma stem cell tumorigenicity

M.-P. Junier (Paris)

zQ175 knock-in mouse model helps to decipher the neuroprotective role of CYP46A1, the cholesterol degradation enzyme, in Huntington's disease

R. Kacher (Paris)

ADHD disorder among Moroccan teenagers of Sidi Yahia of Gharb city (Morocco)

H. Kesmat (Kénitra)

Tau isoforms accumulation in hippocampal astrocytes impacts on mitochondrial function and spatial memory

K. Richetin (Lausanne)

Combined high throughput screening and high content analysis approaches to neuronal physiology/pathology monitoring provide powerful tools for drug discovery

P. Kitchener (Pessac)

A dual mechanism for duloxetine relief of neuropathic allodynia

M. Kremer (Strasbourg)

A bio-pesticide analog acts as a modulator of prion aggregation

P.-A. Lafon (Montpellier)

How does sleep complaint is related to structural and diffusion magnetic resonance imaging as well as cognition in alcohol use disorder?

A. Laniepce (Caen)

Frontotemporal Lobar dementia and amyotrophic lateral sclerosis share common RNA metabolism defects

M. Latouche (Paris)

Scientific Programme

Perinatal exposure to the cyanotoxin BMAA results in abnormal coping strategy in the offspring - potential involvement of neural stem cells DNA damage and oxidative stress

A. Laugeray (Orléans La Source)

Imaging pathological activities of human brain tissue in organotypic culture

C. Le Duigou (Paris)

Effects of N-acetylcysteine on alcohol seeking and relapse in a rat model of binge drinking.

S. Lebourgeois (Amiens)

Molecular and cellular consequences of novel de novo KMT2A variants involved in Wiedemann-Steiner syndrome

N. Lebrun (Paris)

Arpe-19: the best cell to model retinal diseases in vitro?

A. Leguen (Poitiers)

A promising avenue to fight glioblastoma multiforme with a small neurofilament-derived peptide, the NFL-TBS.40-63

C. Lépinoux-Chambaud (Angers)

Brain insulin resistance in Parkinson's disease

M. Lopez Cuina (Bordeaux)

Procedural memory deficits in a transgenic mouse model of Huntington's disease

C. Lotz (Strasbourg)

Dopaminergic responses in the core part of the nucleus accumbens to dizocilpine administration at adulthood are increased following early functional blockade of the prefrontal cortex

A. Louilot (Strasbourg)

Protective role of Renshaw cells in ALS?

V. Marchand (Paris)

Role of the sumoylation process in intellectual disability

S. Martin (Valbonne)

Integrative neuroscience, sensory physiology

Spinal Cav3.2 channel deletion and pain sensibility

A. Fruquière (Montpellier)

Reaching for water: a novel cortex dependent forelimb task for mice

G.L. Galíñanes (Genève)

Dynamic coding of fear and safety signals in the dorsal prefrontal cortex of behaving mice

F. Gambino (Bordeaux)

What do olfactory receptors do in the brain?

F. Gaudel (Marseille)

The multiple dopaminergic inputs to the bed nucleus of the stria terminalis

F. Georges (Bordeaux)

Sleep replay of emotional memory in the hippocampus-amygdala system

G. Girardeau (New York)

Scientific Programme

Does respiratory rhythm pace brain activity?

B. Girin (Lyon)

Adaptive plasticity upon chronic KCC2 extinction in rat dentate gyrus granule cells

M. Goutierre (Paris)

The unexpected level of plasticity of the oxytocinergic system

S. Goyon (Strasbourg)

Position- and ATP-dependent signaling activity in mouse developing inner hair cells

A.-G. Harrus (Montpellier)

A common neural substrate for the processing of word perception, production and reading: an fMRI study of 144 right-handers of the BIL&GIN

I. Hesling (Bordeaux)

Evaluation of the activity of sensory cortical-sub-cortical networks

S. Hssain (Paris)

Projection-specific properties of presubicular neurons targeting the lateral mammillary nucleus, thalamus or medial entorhinal Cortex

L.-W. Huang (Edinburgh)

Investigation of connectivity and defects of synaptic physiology in spinal circuits of a neuromuscular disease model

J.M. Hubbard (Paris)

Short-term impact of a western diet on the physiology of the peripheral olfactory system

D. Jarriault (Dijon)

Competitive disinhibition in early sensory processing mediates behavioral choice and sequences in *Drosophila*

T. Jovanic (Ashburn)

Activation of spinal dorsal horn inhibitory networks by the CLTMR derived chemokine TFAF4

C. Kambrun (Bordeaux)

How does the aging brain feel hand movements from two sensory sources: touch and muscle proprioception?

C. Landelle (Marseille)

Mechanisms of pain hypersensitivity in a pharmacological mouse model of attention-deficit / hyperactivity disorder

M. Landry (Bordeaux)

Synaptic correlates of the binding between form and motion in V1

B. Le Bec (Unic)

A minimal neural network for the generation of behavioral variability

A. Leblois (Paris)

Primary auditory cortex plasticity of neuronal ensembles in auditory learning and memory

X. Liu (Paris)

Role of miR-204 and PlexinA2 in oxaliplatin-induced neuropathy

M.-J. López González (Bordeaux)

Scientific Programme

Non-invasive real-time access to spatial attention information from 3T fMRI BOLD signals

C. Lorient (Bron)

Non invasive intracranial pressure monitoring using cochlear microphonics

B. Lourenço (Clermont-Ferrand)

From hand to hand: a novel pattern of remote plasticity following training-independent tactile learning

S. Macchione (Lyon)

Role of antennal lobe inhibition in gain modulation and odor generalization across concentration

E. Marachlian (Buenos Aires)

Contribution of the cholinergic TAN system of the primate striatum to the encoding of time

A.-C. Martel (Marseille)

Optogenetic identification of the subcircuits involved in the transfer of thalamic information through the basal ganglia

N. Maurice (Marseille)

Global multi-whisker information is preferentially represented in secondary somatosensory cortex

E.R. Harrell (Gif sur Yvette)

A radial map of selectivity to multi-whisker correlation in the rat barrel cortex

J.-F. Léger (Paris)

Whiskers and barrel cortex are used for bilateral discrimination of tactile patterns in the rat

P. Kerekes (Gif sur Yvette)

Towards a fast brain-machine interface integrating sensory feedback

D. Shulz (Gif sur Yvette)

Neuroendocrinology, neuroimmunology

Investigation of tachyphylaxis of LH response following repeated injections of the kisspeptin analog C6

C. Decourt (Nouzilly)

Kisspeptin neurons from the arcuate nucleus express somatostatin receptor SSTR1 more frequently than SSTR2A in male rats

L. Dufourny (Nouzilly)

Understanding the role of perivascular macrophages in PD pathophysiology

J. Fuentealba (Paris)

Production of FGF21 by tanycytes is modulated under fasting conditions and would involve palmitate via p38 MAPK signaling pathway

S. Geller (Lausanne)

Modulators of glucocorticoid receptors reverse the prefrontal cortex Alzheimer's disease pathology in rat

L. Givalois (Montpellier)

Role of inflammation in depressive symptoms in obese subjects

L. Huet (Bordeaux)

Scientific Programme

Molecular mechanism of insulin resistance in NLRP3 knockout mice

Y. Komleva (Krasnoyarsk)

Hedgehog and androgen signaling pathways in myelination and remyelination

Y. Laouarem (Paris)

Glial endozepines act as endogenous leptin sensitizers

B. Lebrun (Marseille)

Early-life PUFAs modulate shaping of neuronal circuits by microglia

Q. Leyrolle (Paris)

Selenoprotein T is a novel glycosyltransferase subunit essential to maintain ER homeostasis and neuroendocrine secretion

I. Lihmann-Bisson (Mont-Saint-Aignan)

Behaviour, emotions, cognition, neuroethology

Transcriptional co-repressor Sin3A enhances long-term memory by modeling neuronal synaptic plasticity markers

C. Florian (Toulouse)

Frontal neurobiology of decisions to check

V. Fontanier (Bron)

Noradrenaline differentially affects attention-related evidence accumulation and decision thresholds

M. Froesel (Bron)

The role of infralimbic prefrontal cortex during behaviors guided by reward and punishment avoidance

R.N. Gentry (College Park)

Neural mechanisms of vocal imitation: a theoretical model for a role of sleep replay in shaping mirror neurons

N. Giret (Orsay)

Synaptic organization of microglomerular clusters in the lateral and medial bulbs of the honeybee brain

M. Giurfa (Toulouse)

The interference control in children with an attention deficit/hyperactivity disorder

A. Grandjean (Marseille)

Functional roles of the subthalamic nucleus in reward and movement

A. Guillaumin (Uppsala)

Unpredictable chronic mild stress in adult C57BL/6 mice has long term consequences on aging cognition and emotionality

J.-L. Guillou (Bordeaux)

Effect of anisomycin in the prefrontal cortex on fear memory consolidation with different levels of reinforcement

M. Hernandez Avila (Querétaro)

The role of arousal in the facilitation effect of distracting sounds: a pupillometry study

R. Hoyer (Bron)

Scientific Programme

EEG Beta-band modulations in implicit and explicit motor adaption processes

A. Jahani (Marseille)

Prefrontal control of fear avoidance

D. Jercog (Bordeaux)

Neural antecedent of spontaneous behavior in zebrafish larva

A. Jouary (Paris)

Behavioral strategies underlying phototaxis in zebrafish

S. Karpenko (Paris)

Prefrontal neuronal circuits of passive and active fear behaviours

S. Khoder (Bordeaux)

Prenatal stress and programming of stress-induced emotional memory states

M. Koehl (Bordeaux)

Physical exercise and HFD: what's up with adolescent mice?

P. Lafenetre (Bordeaux)

Rodent behavior exploration: discover the platform

C. Laloux (Lille)

Opiate withdrawal conditioning alters oscillatory states in the nucleus accumbens

C. Le Moine (Bordeaux)

The functional role of the olfactory bulb in the fear-related oscillations of the prefrontal cortex

J. Lefort (Paris)

The role of adult hippocampal neurogenesis in spatial memory reconsolidation

M. Lods (Bordeaux)

Cognitive control of vocal and orofacial responses in the human broca-MCC brain network

K.K. Loh (Bron)

Oxytocin is neuroprotective against physiological and behavioral consequences of social stress

O. Lopatina (Krasnoyarsk)

Longitudinal study of motor and cognitive behavior in 3, 6 and 9 month-old P301S tau mice

C. Louis (Croissy-sur-Seine)

Neurobehavioral determinants of individual differences in appetitive learning

A.R. Marchand (Bordeaux)

Estradiol normalizes CA1 NMDA receptors surface distribution and declarative memory in aged mice

A. Marighetto (Bordeaux)

Discrete and continuous mechanisms of temporal attention in rapid visual streams

S. Marti (Gif-sur-Yvette)

Age-related corticostriatal decline underlies temporal constraints in action execution

M. Matamales (Brisbane)

Scientific Programme

Forgetting, sleep and synaptic plasticity: an in vivo electrophysiological study in the rat during working memory tasks

M. Missaire (Lyon)

Role of the matricellular protein Hevin in drug response

R. Mongrédien (Paris)

Examining the effects of hypergravity exposure on the organization of recent and remote memory in rats

J.-L. Morel (Bordeaux)

Hippocampal-dependent memory impairment induced by high-fat diet consumption during adolescence is mediated by an enhanced amygdala activity

F. Naneix (Bordeaux)

Alarm pheromone regulates honeybee aggression through dopamine and serotonin brain levels

M. Nouvian (Toulouse)

Extradimensional attentional set-shifting related changes in prefrontal and striatal neuronal activity

V. Oberto (Paris)

Deletion of CB1 receptors in D1-positive cells impairs object recognition memory

J.F. Oliveira da Cruz (Bordeaux)

Tissue plasminogen activator/plasminogen activator inhibitor type-1 axis plays a critical role in the control of anxiety disorders

H. Party (Caen)

Theoretical and computational neuroscience

Predictive coding through the lens of the pupil

A. Alamia (Bruxelles)

Investigation of the superior temporal sulcus plus de passage

C. Bodin (Marseille)

Dynamic reconfiguration of visuomotor-related functional connectivity networks

A. Brovelli (Marseille)

Extracting the human pyramidal tract with multimodal imaging and new diffusion weighted tractography tools: a study in 411 healthy subjects of the BIL&GIN cohort

Q. Chenot (Bordeaux)

Modeling gamma oscillations in networks of adaptive exponential integrate-and-fire neurons

E. Demori Susin (Paris)

Decoding multiplexed attention, temporal expectation, temporal decay and response preparation information from the prefrontal cortex

C. Gaillard (Bron)

How many streamlines are needed to reliably compute volume or spatial extent of the white matter bundles in diffusion-weighted tractography?

A. Gauvin (Bordeaux)

Scientific Programme

The virtual mouse brain: a computational platform to study whole mouse brain dynamics

F. Melozzi (Marseille)

Variational bayes applied to the simple and full drift diffusion models

V. Moens (Bruxelles)

Efficient learning of sparse image representations using homeostatic regulation

L. Perrinet (Marseille)

Diffusion MRI: assessment of the impact of acquisition and preprocessing methods using Brainvisa-Diffuse toolbox

A. Pron (Marseille)

Understanding how thought and motor function can emerge from a neuronal network

J. Rousseau (Dieppe)

Identification of new genes in autosomal dominant forms of Parkinson's disease

C. Tesson (Paris)

SPECIAL SYMPOSIUM / SYMPOSIUM SPÉCIALISÉ
13:15 - 14:45

Amphi B

SP03, Mind your brain: From philosophy of neuroscience to neurophilosophy

L'esprit du cerveau : de la philosophie des neurosciences à la neurophilosophie

Chaired by:

I. Dusart (Paris)

Philosophy of consciousness: two classical problems / Philosophie de la conscience: deux problèmes classiques

P.A. Miquel (Toulouse)

Emotions, rationality, neurosciences / Emotions, rationalité, neurosciences

P. Livet (Aix-en-Provence)

Principles of emergence of complexity in living organisms / Principes de l'émergence de la complexité dans le vivant

G. Chapouthier (Paris)

A throw of the dice never will abolish chance

H. Chneiweiss (Paris)

YOUNG RESEARCHERS SESSION/ SESSION JEUNES CHERCHEURS
13:30 - 14:30

Salle E

RT03, Assistant professor in a French university: entrance exams and careers.

Devenir enseignant chercheur à l'université : concours et métiers.

Scientific Programme

Speakers:

A. Trembleau
G. Gangarossa (Paris)
J.-M. Devaud (Toulouse)

YOUNG RESEARCHERS SESSION/ SESSION JEUNES CHERCHEURS
13:30 - 14:30

Salle F

RT04, Working in industry after your PhD (except R&D).

Travailler dans l'industrie après sa thèse (hors R&D).

Speakers:

S. Gaillard
J. Vinatier (Paris)
N. Bonneau (Pessac)
B. Buisson

SHORT INTERVIEWS & CV SCREENING/ MINI ENTRETIENS ET LECTURES CV
14:30 - 15:30

Mezzanine

SHORT INTERVIEWS & CV SCREENING/MINI ENTRETIENS ET LECTURES CV

SYMPOSIUM
15:00 - 17:00

Amphi A

S22, Autism, schizophrenia and anxiety-related disorders: the dopamine connection

La dopamine : au carrefour entre l'autisme, la schizophrénie et les troubles de l'anxiété

Chaired by:

F. Georges (Bordeaux)

Modulation of dopamine signaling by brain lipid composition: relevance for schizophrenia? / Modulation de la signalisation dopaminergique par la composition en lipides du cerveau: implication pour la schizophrénie?

P. Trifilieff (Bordeaux)

Parsing the role of reward system in autism spectrum disorders / Décoder le rôle du système de récompense dans les syndromes autistiques

S. Bariselli

Role of dopamine signaling in the central extended amygdala / Rôle de la signalisation dopaminergique dans l'amygdale étendue centrale

E. Valjent (Montpellier)

Effect of stress and novelty induced by context-switch on VTA dopaminergic neurons

G. Fois (Bordeaux)

Scientific Programme

Effect of genetic and pharmacogenetic manipulation of accumbens dopamine D2 receptor-expressing neurons on reward processing, motivation and feeding behavior

R. Walle (Bordeaux)

SYMPOSIUM
15:00 - 17:00

Amphi B

S23, Pluripotent stem cells in neuroscience

Les cellules souches pluripotentes en neurosciences

Chaired by:

M. Groszer (Paris)
S. Nedelec (Paris)

Human motor neuron subtype specification and differential sensitivity in disease / Spécification des sous-types de motoneurones humains et atteinte différentielle dans les maladies

S. Nedelec (Paris)

When neurodevelopment meets neurodegeneration - using patient iPSC derived neurons to study a rare disorder

M. Groszer (Paris)

Human induced pluripotent stem cells as an innovative strategy to study cellular and molecular determinants in Alzheimer's disease pathogenesis / Les cellules souches pluripotentes induites comme une stratégie innovante pour étudier la maladie d'Alzheimer

E. Nivet (Marseille)

Using iPSC derived neurons to study synaptic structure and function in autism spectrum disorder

L. Andreae (London)

Spreading of neurodegenerative hallmarks in human iPSC-derived neuronal networks

S. Gribaudo (Corbeil-Essonnes)

SYMPOSIUM
15:00 - 17:00

Amphi C

S24, Dendritic local properties and their impacts on neuronal function

Propriétés locales des dendrites et leurs effets sur l'activité neuronale

Chaired by:

N. Gervasi (Paris)

Atypical secretory processing and N-glycosylation of dendritic ion channels / Processus de sécrétion atypique et N-glycosylation des canaux ioniques dendritiques

C. Hanus (Paris)

Scientific Programme

Signaling pathways dynamics in dendrites / Dynamique des voies de signalisation dans les dendrites

N. Gervasi (Paris)

Synaptic interactions in pyramidal cell dendrites / Interactions synaptiques dans les dendrites des cellules pyramidales

J.K. Makara (Budapest)

Various long term depressions trigger different nanoscale reorganization of AMPA receptors

B. Compans (Bordeaux)

3D skeleton scanning: a novel method for imaging entire dendritic trees at high speed

A. Valera (London)

SYMPOSIUM
15:00 - 17:00

Salle D

S25, Evolution of the neuroendocrine systems

Évolution des systèmes neuroendocriniens

Chaired by:

J.-L. Nahon (Valbonne)

P. Vernier (Gif sur Yvette)

Neuroendocrine regulation of energy homeostasis in a marine bristle worm / Régulation neuroendocrine de l'homéostasie énergétique chez un ver Polychète

F. Raible (Vienna)

Transcription factor networks and epigenetic landscapes for cell specification in the vertebrate pituitary / Réseaux de facteurs de transcription et épigénome dans la spécification des types cellulaires de l'hypophyse chez les vertébrés

J. Drouin (Montréal)

A new perspective on the organization of the hypothalamus in vertebrates / Une nouvelle perspective sur l'organisation de l'hypothalamus chez les vertébrés

K. Yamamoto (Gif sur Yvette)

How primate-specific genes shape human neuroendocrine networks involved in energy homeostasis / Comment des gènes spécifiques des primates ont modifié les réseaux neuroendocriniens qui contrôlent l'homéostasie énergétique

J.-L. Nahon (Valbonne)

Kisspeptin neurons differentiate prenatally in a sex-specific manner

C. Alfaïa (Nouzilly)

Scientific Programme

SYMPOSIUM
15:00 - 17:00

Salle E

S26, Knowing where and getting there: neural substrate of spatial navigation

Substrats neuronaux de la navigation spatiale

Chaired by:

F. Sargolini (Marseille)
M. Zugaro (Paris)

**Neural mechanisms of path integration: focus on the entorhinal cortex /
Mécanismes neuronaux de l'intégration du trajet: rôle du cortex
entorhinal**

E. Save (Marseille)

**Moving from the Engram: an account on the hippocampal circuit
dynamics underpinning the behavioural expression of a memory trace /
Bouger à partir d'un engram: un regard sur les dynamiques du circuit
hippocampique qui sous-tendent l'expression comportementale d'une
trace mnésique**

D. Dupret (Oxford)

**Role of neural network oscillations within different hippocampal
subregions in spatial memory and navigation / Rôle des oscillations dans
différentes régions de l'hippocampe dans la mémoire spatiale et la
navigation**

R. Goutagny (Strasbourg)

**Influence of 3D objects on place cells coding in mice navigating virtual
linear mazes**

R. Bourboulou (Marseille)

**Perturbation of hippocampal theta sequences during exploration of a
novel environment degrades replay during sleep**

C. Drieu (Paris)

SYMPOSIUM
15:00 - 17:00

Salle F

S27, Cholinergic signal dynamics in physiopathological conditions

Dynamique des signaux cholinergiques en conditions physiopathologiques

Chaired by:

J. Barik (Valbonne)
C. Beurrier (Marseille)

**The thalamostriatal - cholinergic pathway and goal-directed learning:
how are new and old memories interlaced during the adaptation of
action? / Projections thalamiques sur les neurones cholinergiques
striataux & apprentissage : cohabitation des mémoires anciennes &
nouvelles lors d'une action?**

J. Bertran Gonzalez (Sydney)

**Cholinergic signals shape cellular and behavioural dopamine-dependent
adaptations to social stress**

J. Barik (Valbonne)

Scientific Programme

Striatal cholinergic interneurons control motor function and basal ganglia outflow in the parkinsonian condition / Les interneurons cholinergiques striataux contrôlent la motricité et la sortie des ganglions de la base en situation parkinsonienne

C. Beurrier (Marseille)

Striatal cholinergic interneurons: gatekeepers to dopamine transmission? / Interneurones cholinergiques striataux: maestro de la transmission dopaminergique?

S.J. Cragg (Oxford)

Contribution of the cholinergic TAN system of the primate striatum to the encoding of time

A.-C. Martel (Marseille)

SYMPOSIUM
15:00 - 17:00

Salle H

S28, Alcohol use disorders across the life span: Effects on brain and behavior with attention to gender differences

Troubles de l'usage d'alcool au cours de la vie : Effets sur le cerveau et le comportement en fonction des deux sexes
<p>

In partnership with / En partenariat avec le NIAAA

Chaired by:

M. Naassila (Amiens)

M. Murray (Rockville)

Rapid but long lasting effects of few binges on adolescent rat Memory / Effets rapides et persistants de quelques binges sur la mémoire chez le rat adolescent

O. Pierrefiche (Amiens)

What we know and still not know about the effects of binge drinking behavior on young adults' brain / Que savons-nous et que nous reste-t-il encore à découvrir des effets du comportement de binge drinking sur le cerveau des jeunes adultes

F. Gierski (Reims)

Residual abnormalities in brain and behavior of abstinent alcoholic men and women / Anomalies résiduelles cérébrales et comportementales chez l'homme et la femme alcooliques et abstinents

M. Oscar Berman (Boston)

Brain structural and functional changes with alcoholic drinking over the lifespan / Changements structuraux et fonctionnels du cerveau induits par la consommation d'alcool tout au long de la vie

E.V. Sullivan (Stanford)

Alcohol use disorder and dual-process model: a question of imbalance?

N. Cabé (Caen)

NeuroFrance 2017,
17 - 19 May 2017,
Bordeaux, France

Scientific Programme

GENERAL ASSEMBLY / ASSEMBLÉE GENERALE
17:00 - 17:45

Amphi A

General Assembly

Assemblée Générale

17:45 - 18:00

Amphi A

Awards ceremony / Remise de prix

ALFRED FESSARD LECTURE/ LECTURE ALFRED FESSARD
18:00 - 19:00

Amphi A

PL05, Alfred Fessard Lecture

Lecture Alfred Fessard

Chaired by:

J.-A. Girault (Paris)

Molecular mechanisms of vertebrate hindbrain patterning / Mécanismes moléculaires de la régionalisation du cerveau postérieur des vertébrés

P. Charnay (Paris)

Scientific Programme

Friday, 19 May 2017

PLENARY LECTURE / CONFÉRENCE PLÉNIÈRE
09:00 - 10:00

Amphi A

PL06, Lüscher C. (Geneva)

Chaired by:

L. Kerkerian Le Goff (Marseille)

A circuit model for addiction: synaptic mechanisms & therapeutic implications / Un circuit modèle pour l'addiction : mécanismes synaptiques et implications thérapeutiques

C. Lüscher (Geneva)

POSTER SESSION / COMMUNICATIONS AFFICHÉES
10:00 - 11:00

Espace Pluriel

P3, Poster session

Poster sessions run from 10:00 to 11:00 and from 13:00 to 17:00 every day. However, a one hour time block is dedicated to discussion with the authors:

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- from 10:00 to 11:00 for even-numbered posters

- from 14:00 to 15:00 for odd-numbered posters

Development, synaptic plasticity

Regional specificity of gene expression in dopaminergic neurons

E. Montalban (Paris)

Rad51, a gene associated with congenital mirror movements, is involved in the development of the mouse neocortex

M.-P. Morel (Paris)

Floor plate-derived Netrin-1 is dispensable for commissural axon guidance

J.A. Moreno-Bravo (Paris)

Microglial cells regulate the functional maturation of synapses in the somatosensory cortex during postnatal development

C.-A. Mosser (Paris)

Extrinsic control of human motor neuron diversification

V. Mouilleau (Corbeil-Essonnes)

Acute exposure to zinc oxide nanoparticles critically disrupts the operation of respiratory neural network in the neonatal rat

A. Nicolosi (Bordeaux)

The extracellular enzyme Sulf 2 controls production of a yet uncharacterized Olig2-expressing glial cell sub-type in the developing spinal cord

D. Ohayon (Toulouse)

Scientific Programme

Development of the prefrontal cortex serotonin transporter (SERT) expressing neurons

J. Olusakin (Paris)

Cortical interneurons and their ontogenetically related oligodendrocyte precursors derived from the embryonic preoptic area form postnatal functional clusters

D. Orduz (Paris)

Serotonergic modulation of locomotor outputs induced by sacral dorsal root stimulation in the isolated neonatal rat spinal cord preparation

Z. Oueghlani (Bordeaux)

A novel role for CAMK2 β in the regulation of cortical neuron migration

E. Pacary (Bordeaux)

Maternal "Western Diet" feeding of rat dams leads to profound plasticity and GABAergic phenotype changes within reward pathway from birth to sexual maturity in the offspring

V. Paillé (Nantes)

Haploinsufficiency of Nr2f1 results in abnormal brain development

C. Palminha (Marseille)

Using human induced pluripotent stem cells to model hereditary spastic paraplegia type 11

J. Pernelle (Paris)

Cell type-specific profiling of mRNAs translated in hippocampal CA1 pyramidal neurons identifies genes potentially involved in synaptic plasticity

J. Perroy (Montpellier)

Metabolism changes in mice brain microvessel from neonate to adult: a proteomic and transcriptomic study

B. Porte (Paris)

Estradiol decreases neuronal excitability at CA3-CA1 synapses through type 1 cannabinoid (CB1) receptor

M. Potier (Bordeaux)

Role of Netrin-1 in the development of the corticospinal tract and in the lateralization of motor control

O. Pourchet (Paris)

The amyloid precursor protein intracellular domain physiologically regulates synaptic GluN2B-NMDA receptors function

P. Pousinha (Valbonne)

Adenosine signalling regulates hippocampal synaptogenesis in vivo

J.C. Pressey (Paris)

Plexin-A1 and Semaphorin-6D are involved in retinal axon targeting

D.S. Prieur (Paris)

Transition to compulsive-like feeding behavior is associated with changes in pacemaker properties of an identified neuron in Aplysia

L. Puygrenier (Bordeaux)

Planar Cell Polarity signaling shapes hippocampal connectivity and cognitive function

A. Quedeville (Bordeaux)

Scientific Programme

Functional analysis of human polymorphisms of nicotinic receptors genes in vivo using iPS cells

C. Raïs (Paris)

Opposed modulations of synaptic transmission between structures of the limbic system during the wake-sleep cycle in the rat - impact of local field potential oscillations

M. Rampon (Lyon)

A Chemical biology approach to investigate endogenous synaptic proteins

C. Rimbault (Bordeaux)

Unique migratory behavior of inferior olivary neurons in Robo3 knockouts

S. Roig Puiggros (Paris)

Synapse Identity in cerebellar purkinje cells: Role of the C1QL1/BAI3 complex

S.M. Sigoillot (Paris)

COUP-TFI activity-dependent control of layer IV stellate cell maturation in the developing somatosensory cortex

A. Simi (Nice)

The serotonin transporter cell-autonomously controls synaptic wiring of subcortical prefrontal circuits

M. Soiza-Reilly (Paris)

Heparan 3-O sulfation interferes with heparan-mediated synapse formation and stability

O. Stettler (Créteil)

Mitochondrial abnormalities in Doublecortin knockout mice, a neurodevelopmental epilepsy model

M. Stouffer (Paris)

Assembly and maturation of intra-neural vascularisation (INV)

S. Taïb (Paris)

Ptchd1 deficiency induces excitatory synaptic and cognitive dysfunctions in mouse

D.C. Ung (Tours)

Radial glial cell anomalies contributing to ectopic progenitors in Eml1 mouse mutants

A. Uzquiano-Lopez (Paris)

The lack of Mab21l2 causes major developmental defects of the zebrafish central nervous system

A. Vitrac (Paris)

Input strength determine presynaptic spike amplitude and subsequent synaptic transmission in cortical circuits

M. Zbili (Marseille)

Signalisation, cellular communications

Super-resolution imaging of the interstitial fluid to reveal the nano-anatomical organization of live brain tissue

U.V. Nägerl (Bordeaux)

The microtubule-associated protein 1B, MAP1B, is required to overcome myelin inhibition of axon regeneration in the adult CNS

F. Nothias (Paris)

Scientific Programme

Development of ATP biosensors to study purinergic signaling

M. Ollivier (Montpellier)

Novel glycinergic circuitry in the basal ganglia

R.A. Perez (El Paso)

Functional characterization of arypallido-striatal GABAergic pathway

M. Persillet (Bordeaux)

Astrocytic regulation of excitatory transmission depends on the number of neighboring activated synapses

D. Pommier (Bordeaux)

Striatal and accumbal D2R cellular diversity unveiled by high-throughput transcriptome analysis

E. Puighermanal (Montpellier)

CIPP scaffold protein: a new interactor of c-terminal 5-HT_{2B} receptor promoting signaling activity in excitatory synapses

E. Quentin (Paris)

Playing the piano on the neuronal network in the dish: Activation and silencing of specific neurons via light and temperature using the multielectrode array technology

G. Rascher-Eggstein (Munich)

Nuclear partner proteins of the GPR88 in the cerebral cortex

F. Rebeillard (Paris)

IL-33 receptor ST2 protects against the cognitive defects after plasmodium berghei Anka-infection

F. Reverchon Assadi (Orléans La Source)

Stem cell quiescence is under the control of the transcriptional regulator Id4

B. Rocamonde-Esteve (Paris)

Visualization of lncRNAs, ion channels, and GPCR expression, within morphological context in the central and peripheral nervous systems

M. Rouault (Newark)

Activation of cell surface Grp78 decreases endoplasmic reticulum stress and neuronal death

B. Roussel (Caen)

Leptin controls glutamatergic synaptogenesis by regulating the expression of Kruppel-Like Factor 4 (KLF4) and STAT3 signaling

G. Sahin (Pullman)

Regulation of the SUMOylation balance at the neuronal synapse

S. Lenka (Sophia Antipolis)

Altered zinc sensitivity of NMDA receptors harboring clinically-relevant mutations

B. Serraz (Paris)

miRNAs contained into extracellular vesicles could be implicated in the regulation of neuronal plasticity

A. Soula (Bordeaux)

CaCC Ano6: a newly identified regulator of motoneuron excitability

C. Soulard (Montpellier)

Scientific Programme

Beyond cell identity: unraveling the structure of cell variability

M. Tapia Pacheco (Marseille)

Characterization of dopamine D2 receptors in the mouse spinal cord

P. Tarot (Montpellier)

Properties of motor cortico-subthalamic neurons and synapses

A. Taupignon (Bordeaux)

Modulation of olfactory processes via the endocannabinoid system

G. Terral (Bordeaux)

Role of fatty acids on neuronal and dopaminergic differentiation

A.M. Toscani (La Plata)

GluD1 plays a key role in slow glutamatergic transmission in midbrain dopamine neurons

L. Tricoire (Paris)

Phosphorylation of β -arrestin 2 at Thr383 by MEK underlies β -arrestin-dependent activation of Erk1/2 by GPCRs

F. Vandermoere (Montpellier)

Huntington's disease on chip: reconstituting neuronal network in microfluidics reveals the importance of presynaptic alterations in disease

A. Virlogeux (Grenoble)

Dual post-synaptic sensing of transient dopamine changes by D2 striatal medium spiny neurons

C. Yapo (Paris)

Inhibition of cortical spreading depression (CSD) by cholinergic activation in mouse brain slices

S. Zerimech (Valbonne)

Axonal homeostasis of VGLUT1 synaptic vesicles in mice

X.-M. Zhang (Bordeaux)

Neurological and psychiatric diseases, experimental therapeutics

TDP43 protein aggregation and post-translational modifications: role in amyotrophic lateral sclerosis (ALS) pathophysiology

C. Maurel (Tours)

cAMP & cGMP pathways as promising targets for pharmacological treatment of the Fragile X syndrome

T. Maurin (Valbonne)

Role of the early central amygdala activation in long-term behavioural changes in murine model of sepsis

A. Mazeraud (Paris)

Altered epigenetic regulation in Huntington's disease striatum

K. Merienne (Strasbourg)

Cytokines and reactive oxygen species released by astrocytes in response to A β Os modify the nucleus/cytoplasm distribution and function of neuronal pSer727Stat3

Y. Munoz (Santiago)

Scientific Programme

Proof of concept - CRISPR-Cas9 lipid nanoparticles as an efficient delivery tool in primary neural cultures

T. Nadia (Vancouver)

Paraquat oral exposure modulates alpha synuclein expression in the enteric nervous system of transgenic mice

N. Naudet (Lyon)

Depression, anhedonia and apathy disorders in a bilateral rat model of Parkinson's disease

F. Naudet (Bordeaux)

Intermittent cocaine self-administration induces strong potentiation of incubation of cocaine craving in female rats

C.L. Nicolas (Baltimore)

Characterisation of the effects of 50 Hz magnetic fields on cognitive functions and cerebral markers of Alzheimer's disease in aged mice

O. Nicole (Bordeaux)

Role of Trans ϵ -viniferin in the autophagy of microglia from APP^{swe}PS1^{dE9} mice

G. Page (Poitiers)

Ciliary receptors modulate neuronal autophagy: impact of amyloid beta

O. Pampliega (Bordeaux)

Sertraline (Zoloft®), serotonin, and hippocampal plasticity in the pregnant female

J. Pawluski (Rennes)

The antidepressant-like effect of tDCS in naïve and "depressed" mice is dependent of stimulation parameters and is associated with specific pattern of neuronal activation

T. Peanlikhit (Besançon)

Context-induced relapse to cocaine seeking after punishment-imposed abstinence in a rat model

Y. Pelloux (Baltimore)

Heterozygous Gnal mice are a new animal model to study the pathophysiology of primary dystonia

A. Pelosi (Paris)

Upper limb rehabilitation guided by auditory feedback

I. Peyre (Paris)

Orexinergic dysfunction in a mouse model of Huntington's disease

C. Pistono (Pavia)

Specific alterations of subthalamic regions in alcohol use disorder with and without Korsakoff's syndrome: a diffusion tensor imaging (DTI) investigation

A.-L. Pitel (Caen)

Axon guidance molecule expression after cell therapy in a mouse model of Parkinson's disease

L. Prestoz (Poitiers)

DNA methylation levels in Anorexia nervosa patients, remitters and controls: biomarkers of diagnostic and prognostic

N. Ramoz (Paris)

Scientific Programme

Social memory impairments are associated with disrupted perineuronal nets around parvalbumin interneurons in area CA2 of the Tg2576 mouse model of Alzheimer's disease

C. Rey (Toulouse)

Role of the striatal cholinergic system in the pathophysiology of dystonia: an experimental model in the monkey

B. Ribot (Bordeaux)

Sex differences in behavior and gut microbiota in mice exposed to early-life stress

M. Rincel (Bordeaux)

Early gliovascular unit changes phenotype in white matter tracts in a new juvenile Closed Head Injury with Long-term Disorders (CHILD) mouse model

B. Rodriguez-Grande (Bordeaux)

MOCOS, an enzyme downregulated in patients with autism spectrum disorders

P. Rontani (Marseille)

Role of tissue plasminogen activator (tPA) in Alzheimer's disease-like Tau pathology

A. Rose (Caen)

Psychiatric symptoms track confidence but not performance in perceptual decision-making

M. Rouault (London)

Effect of maternal supplementation with resveratrol and/or ethanol on neonatal hypoxic ischemic encephalopathy in rat neonates

H. Roumes (Bordeaux)

An in vivo two photon approach to assess receptor mediated transport across blood brain barrier

S. Roux (Marseille)

Knockdown of oligophrenin1 (OPHN1), implicated in human intellectual disability associated with cerebellar hypoplasia, results in a defect of radial migration in mouse cortex

Y. Saillour (Paris)

Interoception and relapse to cocaine addiction: long-term disruption of the basolateral amygdala-insular pathway

A. Salin (Poitiers)

Adeno-associated virus vector-mediated overexpression of beta-synuclein has noxious effects on the M83 mice synucleinopathy

D. Sargent (Lyon)

In vivo study of BIN1 impact on Late Onset Alzheimer Disease in mammalian models

M. Sartori (Illkirch Graffenstaden)

Longitudinal changes in brain metabolic activity after withdrawal from escalation of cocaine self-administration

M. Solinas (Poitiers)

Nanoscale imaging of the brain extracellular space in Lewy body-injected mice

F.N. Soria (Bordeaux)

Role of Rabphilin 3A/NMDA receptor interaction in a rat model of L-DOPA-induced dyskinesia

J. Stanic (Bordeaux)

Scientific Programme

Metabolic reprogramming of Amyotrophic Lateral Sclerosis motor neurons and ALS patients skin fibroblasts

M. Szelechowski (Bordeaux)

Dysregulated microbiome in people and mice with autism-associated genetic mutations

L. Tabouy (Safed)

Role of glucocorticoids in the anti-craving effects of environmental enrichment after methamphetamine self-administration

N. Thiriet (Poitiers)

Characterization of spastic paraplegia SPG56 murine model

P. Thomas (Paris)

Non-motor symptoms of Parkinson's disease in a cohort of 100 patients

H. Tibar (Rabat)

Simvastatin, but not atorvastatin, has anti-inflammatory and neuroprotective effects in an in vivo rat model of Huntington disease

C. Tronel (Tours)

RNA-Seq analysis to predict treatment response in first episode schizophrenia

R. Troudet (Créteil)

Perinatal stress causes cognitive dysfunction during ageing in rats

G. Van Camp (Villeneuve d'Ascq)

Olfactory stem cells transplanted in a rat model of transient global cerebral ischemia restored learning and memory abilities

A.D. Veron (Apt)

Potential therapeutic effect of a combination of nicotinic $\alpha 7$ and sigma-1 receptors agonists in a Parkinson's disease rat model

S. Vetel (Tours)

Exploration of the concept of 5-HT_{1A} receptor biased agonism: a PET-fMRI study

B. Vidal (Lyon)

Measuring the electrophysiological effects of direct electrical stimulation of the brain during wide awake surgery

M. Vincent (Montpellier)

Analysis of neuronal dysfunctions in a murine model of hereditary spastic paraplegia

B. Wilmet (Paris)

Involvement of striatal cholinergic interneurons in the pathophysiology of Parkinson's disease: optogenetics, pharmacological and behavioral approaches

S. Ztaou (Marseille)

Integrative neuroscience, sensory physiology

Sniffing and hippocampal theta rhythms: two distinct networks which evolve during olfactory learning

N. Fourcaud-Trocmé (Lyon)

Paraventricular thalamic nucleus inputs to the nucleus accumbens: a link between hunger and motivation ?

J. Meffre (Marseille)

Scientific Programme

Involvement of neuroinflammation process in nociceptive defects of Fmr1 KO mice, model of Fragile X syndrome

A. Menuet (Orléans)

Impact of a high fat high sucrose maternal diet on the progeny's olfactory system

L. Merle (Dijon)

Whole brain imaging during vestibular stimulation in zebrafish

G. Migault (Paris)

GABAergic input integration in NG2 cells

V. Nicolas (Bonn)

Impact of the temporal statistic of natural movies on the reliability of dynamics in cat primary visual cortex

Y. Passarelli (Gif sur Yvette)

The spinal cord circuits for chronic pain

C. PEIRS (Pittsburgh)

Rac-1 dependent structural plasticity of the anterior cingulate cortex regulates the emotional aspect of chronic pain

S. Pezet (Paris)

Cerebellar circuits and function in vocal learning: a new player?

L. Pidoux (Paris)

Disruption of corticothalamic systems in a rodent model of first-episode psychosis

D. Pinault (Strasbourg)

Group I mGluRs switch control spinal nociceptive transmission after peripheral inflammation in the rat

H. Radwani (Bordeaux)

Functional neuroimaging of trigeminal ganglion hyperhaemia using ultrafast ultrasound imaging after corneal injury

L. Rahal (Paris)

Memory of occasional events in rats: oscillatory activities in the hippocampal-prefrontal network differ according to individual episodic memory profile and age of memory

N. Ravel (Lyon)

Memory building blocks - how sensory inputs tunes internally-generated co-activity to shape hippocampal assemblies

S. Reichinnek (Marseille)

Loss of MYO protein facilitates the transition from acute to chronic pain through a selective alteration of spinal ionotropic GABAergic neurotransmission

A. Reynders (Marseille)

Two-photon lifetime imaging of oxygen consumption in glomerular network

M. Roche (Paris)

On the role of the PeriNeuronal Net (PNN) enveloping Fast Spiking (FS) neocortical interneurons in long-term memory

J. Rossier (Paris)

Scientific Programme

Effect of stimulus temporal frequency on the receptive fields in primate V1 neurons

F. Roumier (Toulouse)

Optogenetic inhibition of pyramidal cells during awake SPW-Rs induces place field remapping

L. Roux (New York)

BRET imaging with a fiberscope

S. Sakkaki (Montpellier)

A cholinergic activated thoracic spinal network for coordinating locomotor and sympathetic activities

M. Sourieux (Bordeaux)

Cortical horizontal connections as key players of paroxysmal oscillations generation in absence epilepsy

F. Studer (La Tronche)

Investigating the role of noradrenaline in olfactory discrimination during aging

C. Terrier (Lyon)

Functional ultrasound imaging of the functional connectivity in the rat submitted to short lasting inflammatory pain

M. Thibaut (Paris)

Theta and beta oscillatory correlates of movement-execution error processing and sensorimotor adaptation

F. Torrecillos (Oxford)

Electrophysiological evidence for cerebello-hippocampal interactions

A. Torres Herraiez (Paris)

3D skeleton scanning: a novel method for imaging entire dendritic trees at high speed

A. Valera (London)

SOM neurons of the ventro-lateral periaqueductal grey modulate WDR neurons response to nociceptive inputs in the spinal cord

S. Valerio (Bordeaux)

Inhibition of ASIC channels in a rat model of migraine results in potent analgesic effects

C. Verkest (Valbonne Sophia Antipolis)

A unique logical, goal-centered representation of space for different mazes in the monkey hippocampus

S. Wirth (Bron)

Parallel neuronal circuits of the mouse central extended amygdala

J. Ye (Strasbourg)

Neuroendocrinology, neuroimmunology

AMH is mutated in patients with congenital hypogonadotropic hypogonadism and it regulates development and function of GnRH neurons

S. Malone (Lille)

Effect of GH and IGF-1 treatments after hypoxic-ischemic injury in chicken cerebellar cell cultures

B.L. María Del Rosario (Querétaro)

Scientific Programme

Bimodal control of food intake by hypothalamic POMC neurons

W. Mazier (Bordeaux)

The oxytocinergic descending control of pain in the rat and its alteration by neonatal maternal separation

M. Melchior (Strasbourg)

MicroRNAs flip the switch for the production of hypothalamic GnRH before puberty

A. Messina (Lausanne)

Glucocorticoid signaling in obese patients before and after bariatric surgery: relationship with depressive symptoms

M.-P. Moisan (Bordeaux)

Parkin in innate immunity: crosstalk between mitochondrial dysfunction and NLRP3 inflammasome signaling

F. Mouton-Liger (Paris)

Transcript signature of immuno-guided laser microdissected white matter astrocytes in chronic autoimmune neuroinflammation

A.B. Nicot (Nantes)

How nutritional n-3 LC-PUFAs supplementation influences lipids and inflammation in the brain

C. Rey (Bordeaux)

Localization and physiological characterization of neurons expressing the Gonadotropin Releasing Hormone (GnRH) receptor in the mouse brain

S. Shruti (Lille)

The neuroinflammatory components in C9-FTD/ALS

J. Smeyers (Paris)

Behaviour, emotions, cognition, neuroethology

Functional cerebral reorganization of visual scene processing in age-related macular degeneration patients

C. Peyrin (Grenoble)

Social behavior and stress reactivity of opiate-withdrawn mice

A. Piccin (Bordeaux)

Pathophysiology and imaging of early memory impairment in multiple sclerosis

V. Planche (Bordeaux)

Unraveling the role of astroglial connexins in depression

B. Portal (Toulouse)

Behavioral and molecular changes engaged during chronic stress exposure leading to depressive-like phenotype

T.D. Prévot (Toronto)

Automatic online movement control needs exact prediction reafferences

A.-E. Priot (Bron)

Neuronal and motor responses to acoustic stimuli in zebrafish larva

M. Privat (Paris)

Scientific Programme

Learning from uncertain feedback in macaque monkeys

E. Procyk (Bron)

Activation of nociceptin/orphanin FQ receptors inhibits contextual fear memory reconsolidation

K. Rekik (Toulouse)

The role of noradrenaline in spatial attention

A. Reynaud (Bron)

The claustrum is a target for projections from the supramamillary nucleus

P.-Y. Risold (Besançon)

The planar cell polarity pathway regulates the balance between pattern completion and pattern separation

B. Robert (Bordeaux)

Hypothalamic control of area CA2 network activity

V. Robert (Paris)

Astroglial CB1 receptors control object recognition memory via D-serine

L.M. Robin (Bordeaux)

How interindividual differences in brain anatomy shape reading accuracy

M. Roell (Paris)

Neural network involved in the perception of abstract palaeolithic engravings

M. Salagnon (Bordeaux)

Electromagnetic fields and recent vs. remote spatial memory in young and adult rats

A. Salvadori (Strasbourg)

Adolescent high-fat diet intake impairs object recognition memory consolidation through hippocampal endocannabinoid system

M. Santoyo-Zedillo (Bordeaux)

Gender and social isolation effects in Glucocorticoid Receptor-impaired (GR-i) mice

M. Schverer (Paris)

Reconsolidation-induced rescue of a remote fear memory blocked by an early cortical inhibition: involvement of the anterior cingulate cortex and the mediation by the thalamic nucleus reuniens

R.A. Sierra Ordonez (Porto Alegre)

The cost of cognitive activity in a predictive coding framework

O. Solopchuk (Brussels)

Double dissociation of executive functions in the prefrontal cortex: lesional and optogenetic approaches in a mouse model

A.D. Surget (Tours)

Control of food motivation in rats by targeting the subthalamic nucleus with optogenetics

A. Tiran Cappello (Marseille)

Measuring and understanding mouse personality in SourisCity, a semi-ethologic environment

N. Torquet (Paris)

Scientific Programme

Nutritional vitamin A status modulates contextual fear memory in rats: involvement of the 11 β -hydroxysteroid dehydrogenase type 1?

K. Touyarot (Bordeaux)

Phasic optogenetic stimulation of mesolimbic dopaminergic terminals in the nucleus accumbens reinforces the value of a goal-directed action in operant conditioning

S. van der Veldt (Bordeaux)

Role of cerebello-thalamo-cortical network in motor skill learning in mice

A.P. Varani (Paris)

MCH-expressing neurons control slow-wave sleep dynamics through inputs to the ventrolateral preoptic nucleus

C. Varin (Lyon)

Modulation of feedback-related negativity and EEG oscillations in Parkinson's disease patients

L. Viñales (Bron)

Drug rewards differentially modulate synaptic plasticity in striatum and hippocampus

R.-M. Vouimba (Pessac)

Cognitive efforts worsen addiction-related behavior in rats: evidence for self-control depletion

M. Wahab (Poitiers)

Effect of genetic and pharmacogenetic manipulation of accumbens dopamine D2 receptor-expressing neurons on reward processing, motivation and feeding behavior

R. Walle (Bordeaux)

Learning by seeing or doing? Behavioral and neural dissociation between cognitive processes underlying observational and instrumental inference

A. Weiss (Paris)

Single trial beta and gamma burst dynamics during cognitive control in primates

C. Wilson (Bron)

Neural correlates of fear conditioned analgesia

N. Winke (Bordeaux)

Predicting hemispheric dominance for language production in healthy individuals using support vector machine

L. Zago (Bordeaux)

Nucleosome remodeler and behavior: function of Brahma-related gene 1 in dopaminergic neurons

A. Zayed (Paris)

Ventral tegmental area glutamate neurons co-release GABA in a target-dependent manner to drive positive reinforcement

V. Zell (San Diego)

Scientific Programme

SYMPOSIUM
11:00 - 13:00

Amphi A

S29, Neural population dynamics underlying information processing in brain networks

Dynamiques des populations neuronales orchestrant le traitement de l'information dans les réseaux cérébraux

Chaired by:

G. Sumbre (Paris)
B. Bathellier (Gif sur Yvette)

Visuomotor interactions in optic-flow sensitive neurons create a faithful representation of self-movement / Des interactions visuomotrices dans les neurones sensibles de flux optique créent une représentation fidèle du "self-movement"

E. Chiappe (Lisbon)

Whole-brain views of spontaneous and trained behavior / Activité spontanée et apprise dans le cerveau entier

M.B. Ahrens (Ashburn)

Cortical bases of temporal asymmetries in auditory perception

B. Bathellier (Gif sur Yvette)

Modelling discrete representations in mouse auditory cortex and their stability under synaptic turnover / Modélisation des représentations discrètes du cortex auditif de la souris et de leur stabilité pendant le renouvellement synaptique

M. Kaschube (Frankfurt am Main)

Memory building blocks - how sensory inputs tunes internally-generated co-activity to shape hippocampal assemblies

S. Reichinnek (Marseille)

Neural antecedent of spontaneous behavior in zebrafish larva

A. Jouary (Paris)

SYMPOSIUM
11:00 - 13:00

Amphi B

S30, The many faces of striatal contribution to motor control

Les multiples facettes du rôle du striatum dans le contrôle moteur

Chaired by:

D. Robbe (Marseille)

Basal ganglia contributions to a time-based decision

J.J. Paton (Lisbon)

The striatal neuron as a coincidence detector of sensory and motor cortical information

S.G. Charpier (Paris)

Scientific Programme

**Roles of Neuronal populations and genes in striatal related behaviours /
Rôles des populations neuronales et des gènes dans les comportements
dépendants du striatum**

A. De Kerchove D'Exaerde (Brussels)

**Action monitoring and control by the dorsal striatum / La surveillance et
le contrôle des actions par le striatum dorsal**

D. Robbe (Marseille)

**Age-related corticostriatal decline underlies temporal constraints in
action execution**

M. Matamalas (Brisbane)

SYMPOSIUM
11:00 - 13:00

Amphi C

S31, Protein misfolding in neurodegenerative diseases

Mépliment des protéines dans les maladies neurodégénératives
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Avec le soutien de / Supported by Motac Neuroscience Ltd.

Chaired by:

B. Dehay (Bordeaux)

**Multiple ways of tau intercellular transfer: consequences for spreading
and therapeutic approaches / Multiples possibilités pour le transfert
intercellulaire de tau : conséquences pour la propagation et approches
thérapeutiques**

L. Buée (Lille)

Prion-like propagation of α -synuclein in synucleinopathies

R. Melki (Gif sur Yvette)

**Alpha-synuclein pathology triggered by protein over-expression /
Pathologie liée à l'alpha-synucléine déclenchée par sa surexpression**

D. Di Monte (Bonn)

**Better, faster, stronger? Combining fibrils and over expression of alpha-
synuclein to model Parkinson's disease**

L.S. Breger (Lund)

**zQ175 knock-in mouse model helps to decipher the neuroprotective role
of CYP46A1, the cholesterol degradation enzyme, in Huntington's disease**

R. Kacher (Paris)

SYMPOSIUM
11:00 - 13:00

Salle D

S32, Neurovascular imaging and signaling

Imagerie et signalisation neurovasculaire

Chaired by:

J.L. Thomas (Paris)

Scientific Programme

**Live-imaging of neurovascular interactions in the murine cortex /
Imagerie dynamique des interactions neurovasculaires dans le cortex**

J. Grutzendler (New Haven)

**Axon guidance signaling in vascular patterning / Voies de signalisation
des facteurs de guidage axonal dans la croissance vasculaire**

A.C. Eichmann (New Haven)

**Regulation of embryonic neurogenesis by germinal zone vasculature /
Signaux vasculaires contrôlant la neurogenèse embryonnaire**

C. Ruhrberg (London)

**Translational implications of the brain-draining meningeal lymphatic
vessel system**

J.L. Thomas (Paris)

**Dynamics of spinal cord axonal degeneration and innate immune cell
phenotypes in multiple sclerosis: an in vivo two-photon imaging study
combined to flow cytometry**

C. Caravagna (Marseille)

SYMPOSIUM
11:00 - 13:00

Salle E

S33, When obesity gets to the brain: Neural decoding of nutrient sensing and caloric overload

Quand l'obésité arrive au cerveau : décodage neural des nutriments et de la surcharge calorique
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Supported by / Avec le soutien de TSE Systems GmbH

Chaired by:

D. Cota (Bordeaux)

**Neurodevelopmental substrates of obesity / Bases
neurodéveloppementales de l'obésité**

S. Bouret (Los Angeles)

**How hypothalamic mitochondria translate the energy status of the body /
Comment les mitochondries hypothalamiques traduisent l'état
énergétique de l'organisme**

C. Leloup (Dijon)

**Brain triglyceride sensing and the regulation of food-reward / Détection
centrale des triglycérides et régulation de l'aspect hédonique de la prise
alimentaire**

S. Luquet (Paris)

**Astrocytes in nutrient sensing and metabolic control / Rôle des
astrocytes dans la détection des nutriments et dans la régulation du
métabolisme**

C. Garcia Caceres (München)

**Gamma oscillations organize top-down signaling to hypothalamus and
enable food seeking**

M. Carus-Cadavieco (Berlin)

Scientific Programme

SYMPOSIUM
11:00 - 13:00

Salle F

S34, Mitochondria and brain functions: from neuronal physiology to pathology

Mitochondries et fonctions cérébrales : de la physiologie neuronale à la pathologie

Chaired by:

A. Busquets Garcia (Bordeaux)
M.-C. Miquel (Toulouse)

The role of mitochondrial function on the effects of stress and anxiety in social behaviors / Rôle de la fonction mitochondriale sur les effets du stress et de l'anxiété dans les comportements sociaux

C. Sandi (Lausanne)

A cannabinoid link between mitochondria and memory / Cannabinoïdes: une liaison entre la mitochondrie et la mémoire

G. Marsicano (Bordeaux)

Amplifying mitochondrial biogenesis rescues connectivity of new hippocampal neurons in a mouse model of Alzheimer's disease / Améliorer la biogenèse mitochondriale restaure la connectivité de nouveaux neurones de l'hippocampe dans un modèle murin de la maladie d'Alzheimer

M.-C. Miquel (Toulouse)

Parkin-dependent mitochondrial quality control and consequence of its dysfunction in Parkinson's disease / Contrôle de la qualité mitochondriale par la Parkine et conséquences de sa dysfonction dans la maladie de Parkinson

O. Corti (Paris)

Tau isoforms accumulation in hippocampal astrocytes impacts on mitochondrial function and spatial memory

K. Richetin (Lausanne)

SYMPOSIUM
11:00 - 13:00

Salle H

S35, Control of neural stem cell divisions in development

Contrôle des divisions des cellules souches neurales dans le développement

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Avec le soutien de / Supported by International Society for Developmental Neuroscience

Chaired by:

F. Mann (Marseille)
I. Caillé (Paris)

Molecular control of mammalian neurogenesis / Contrôle moléculaire de la neurogénèse chez les mammifères

F. Calegari (Dresden)

Scientific Programme

From development to tumorigenesis: RNA-binding proteins and the control of neural stem cell self-renewing potential / Du développement au cancer: les protéines de liaison aux ARN et le contrôle du potentiel d'auto-renouvellement des cellules souches neurales

C. Maurange (Marseille)

Asymmetric cell division, Notch signaling and neurogenesis in the embryonic spinal cord / Division cellulaire asymétrique, signalisation Notch et neurogenèse dans la moelle épinière embryonnaire

X. Morin (Paris)

Controlling neural progenitor divisions in the embryo by cerebrospinal fluid-derived axon guidance cues

V. Castellani (Villeurbanne)

Radial glial cell anomalies contributing to ectopic progenitors in Eml1 mouse mutants

A. Uzquiano-Lopez (Paris)

POSTER SESSION / COMMUNICATIONS AFFICHÉES
13:00 - 17:00

Espace Pluriel

P3, Poster session

Poster sessions run from 10:00 to 11:00 and from 13:00 to 17:00 every day. However, a one hour time block is dedicated to discussion with the authors:

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- from 10:00 to 11:00 for even-numbered posters

- from 14:00 to 15:00 for odd-numbered posters

Development, synaptic plasticity

Regional specificity of gene expression in dopaminergic neurons

E. Montalban (Paris)

Rad51, a gene associated with congenital mirror movements, is involved in the development of the mouse neocortex

M.-P. Morel (Paris)

Floor plate-derived Netrin-1 is dispensable for commissural axon guidance

J.A. Moreno-Bravo (Paris)

Microglial cells regulate the functional maturation of synapses in the somatosensory cortex during postnatal development

C.-A. Mosser (Paris)

Extrinsic control of human motor neuron diversification

V. Mouilleau (Corbeil-Essonnes)

Acute exposure to zinc oxide nanoparticles critically disrupts the operation of respiratory neural network in the neonatal rat

A. Nicolosi (Bordeaux)

The extracellular enzyme Sulf 2 controls production of a yet uncharacterized Olig2-expressing glial cell sub-type in the developing spinal cord

D. Ohayon (Toulouse)

Scientific Programme

Development of the prefrontal cortex serotonin transporter (SERT) expressing neurons

J. Olusakin (Paris)

Cortical interneurons and their ontogenetically related oligodendrocyte precursors derived from the embryonic preoptic area form postnatal functional clusters

D. Orduz (Paris)

Serotonergic modulation of locomotor outputs induced by sacral dorsal root stimulation in the isolated neonatal rat spinal cord preparation

Z. Oueghlani (Bordeaux)

A novel role for CAMK2 β in the regulation of cortical neuron migration

E. Pacary (Bordeaux)

Maternal "Western Diet" feeding of rat dams leads to profound plasticity and GABAergic phenotype changes within reward pathway from birth to sexual maturity in the offspring

V. Paillé (Nantes)

Haploinsufficiency of Nr2f1 results in abnormal brain development

C. Palminha (Marseille)

Using human induced pluripotent stem cells to model hereditary spastic paraplegia type 11

J. Pernelle (Paris)

Cell type-specific profiling of mRNAs translated in hippocampal CA1 pyramidal neurons identifies genes potentially involved in synaptic plasticity

J. Perroy (Montpellier)

Metabolism changes in mice brain microvessel from neonate to adult: a proteomic and transcriptomic study

B. Porte (Paris)

Estradiol decreases neuronal excitability at CA3-CA1 synapses through type 1 cannabinoid (CB1) receptor

M. Potier (Bordeaux)

Role of Netrin-1 in the development of the corticospinal tract and in the lateralization of motor control

O. Pourchet (Paris)

The amyloid precursor protein intracellular domain physiologically regulates synaptic GluN2B-NMDA receptors function

P. Pousinha (Valbonne)

Adenosine signalling regulates hippocampal synaptogenesis in vivo

J.C. Pressey (Paris)

Plexin-A1 and Semaphorin-6D are involved in retinal axon targeting

D.S. Prieur (Paris)

Transition to compulsive-like feeding behavior is associated with changes in pacemaker properties of an identified neuron in Aplysia

L. Puygrenier (Bordeaux)

Planar Cell Polarity signaling shapes hippocampal connectivity and cognitive function

A. Quedeville (Bordeaux)

Scientific Programme

Functional analysis of human polymorphisms of nicotinic receptors genes in vivo using iPS cells

C. Raïs (Paris)

Opposed modulations of synaptic transmission between structures of the limbic system during the wake-sleep cycle in the rat - impact of local field potential oscillations

M. Rampon (Lyon)

A Chemical biology approach to investigate endogenous synaptic proteins

C. Rimbault (Bordeaux)

Unique migratory behavior of inferior olivary neurons in Robo3 knockouts

S. Roig Puiggros (Paris)

Synapse Identity in cerebellar purkinje cells: Role of the C1QL1/BAI3 complex

S.M. Sigoillot (Paris)

COUP-TFI activity-dependent control of layer IV stellate cell maturation in the developing somatosensory cortex

A. Simi (Nice)

The serotonin transporter cell-autonomously controls synaptic wiring of subcortical prefrontal circuits

M. Soiza-Reilly (Paris)

Heparan 3-O sulfation interferes with heparan-mediated synapse formation and stability

O. Stettler (Créteil)

Mitochondrial abnormalities in Doublecortin knockout mice, a neurodevelopmental epilepsy model

M. Stouffer (Paris)

Assembly and maturation of intra-neural vascularisation (INV)

S. Taïb (Paris)

Ptchd1 deficiency induces excitatory synaptic and cognitive dysfunctions in mouse

D.C. Ung (Tours)

Radial glial cell anomalies contributing to ectopic progenitors in Eml1 mouse mutants

A. Uzquiano-Lopez (Paris)

The lack of Mab21l2 causes major developmental defects of the zebrafish central nervous system

A. Vitrac (Paris)

Input strength determine presynaptic spike amplitude and subsequent synaptic transmission in cortical circuits

M. Zbili (Marseille)

Signalisation, cellular communications

Super-resolution imaging of the interstitial fluid to reveal the nano-anatomical organization of live brain tissue

U.V. Nägerl (Bordeaux)

The microtubule-associated protein 1B, MAP1B, is required to overcome myelin inhibition of axon regeneration in the adult CNS

F. Nothias (Paris)

Scientific Programme

Development of ATP biosensors to study purinergic signaling

M. Ollivier (Montpellier)

Novel glycinergic circuitry in the basal ganglia

R.A. Perez (El Paso)

Functional characterization of arypallido-striatal GABAergic pathway

M. Persillet (Bordeaux)

Astrocytic regulation of excitatory transmission depends on the number of neighboring activated synapses

D. Pommier (Bordeaux)

Striatal and accumbal D2R cellular diversity unveiled by high-throughput transcriptome analysis

E. Puighermanal (Montpellier)

CIPP scaffold protein: a new interactor of c-terminal 5-HT_{2B} receptor promoting signaling activity in excitatory synapses

E. Quentin (Paris)

Playing the piano on the neuronal network in the dish: Activation and silencing of specific neurons via light and temperature using the multielectrode array technology

G. Rascher-Eggstein (Munich)

Nuclear partner proteins of the GPR88 in the cerebral cortex

F. Rebeillard (Paris)

IL-33 receptor ST2 protects against the cognitive defects after plasmodium berghei Anka-infection

F. Reverchon Assadi (Orléans La Source)

Stem cell quiescence is under the control of the transcriptional regulator Id4

B. Rocamonde-Esteve (Paris)

Visualization of lncRNAs, ion channels, and GPCR expression, within morphological context in the central and peripheral nervous systems

M. Rouault (Newark)

Activation of cell surface Grp78 decreases endoplasmic reticulum stress and neuronal death

B. Roussel (Caen)

Leptin controls glutamatergic synaptogenesis by regulating the expression of Kruppel-Like Factor 4 (KLF4) and STAT3 signaling

G. Sahin (Pullman)

Regulation of the SUMOylation balance at the neuronal synapse

S. Lenka (Sophia Antipolis)

Altered zinc sensitivity of NMDA receptors harboring clinically-relevant mutations

B. Serraz (Paris)

miRNAs contained into extracellular vesicles could be implicated in the regulation of neuronal plasticity

A. Soula (Bordeaux)

CaCC Ano6: a newly identified regulator of motoneuron excitability

C. Soulard (Montpellier)

Scientific Programme

Beyond cell identity: unraveling the structure of cell variability

M. Tapia Pacheco (Marseille)

Characterization of dopamine D2 receptors in the mouse spinal cord

P. Tarot (Montpellier)

Properties of motor cortico-subthalamic neurons and synapses

A. Taupignon (Bordeaux)

Modulation of olfactory processes via the endocannabinoid system

G. Terral (Bordeaux)

Role of fatty acids on neuronal and dopaminergic differentiation

A.M. Toscani (La Plata)

GluD1 plays a key role in slow glutamatergic transmission in midbrain dopamine neurons

L. Tricoire (Paris)

Phosphorylation of β -arrestin 2 at Thr383 by MEK underlies β -arrestin-dependent activation of Erk1/2 by GPCRs

F. Vandermoere (Montpellier)

Huntington's disease on chip: reconstituting neuronal network in microfluidics reveals the importance of presynaptic alterations in disease

A. Virlogeux (Grenoble)

Dual post-synaptic sensing of transient dopamine changes by D2 striatal medium spiny neurons

C. Yapo (Paris)

Inhibition of cortical spreading depression (CSD) by cholinergic activation in mouse brain slices

S. Zerimech (Valbonne)

Axonal homeostasis of VGLUT1 synaptic vesicles in mice

X.-M. Zhang (Bordeaux)

Neurological and psychiatric diseases, experimental therapeutics

TDP43 protein aggregation and post-translational modifications: role in amyotrophic lateral sclerosis (ALS) pathophysiology

C. Maurel (Tours)

cAMP & cGMP pathways as promising targets for pharmacological treatment of the Fragile X syndrome

T. Maurin (Valbonne)

Role of the early central amygdala activation in long-term behavioural changes in murine model of sepsis

A. Mazeraud (Paris)

Altered epigenetic regulation in Huntington's disease striatum

K. Merienne (Strasbourg)

Cytokines and reactive oxygen species released by astrocytes in response to A β Os modify the nucleus/cytoplasm distribution and function of neuronal pSer727Stat3

Y. Munoz (Santiago)

Scientific Programme

Proof of concept - CRISPR-Cas9 lipid nanoparticles as an efficient delivery tool in primary neural cultures

T. Nadia (Vancouver)

Paraquat oral exposure modulates alpha synuclein expression in the enteric nervous system of transgenic mice

N. Naudet (Lyon)

Depression, anhedonia and apathy disorders in a bilateral rat model of Parkinson's disease

F. Naudet (Bordeaux)

Intermittent cocaine self-administration induces strong potentiation of incubation of cocaine craving in female rats

C.L. Nicolas (Baltimore)

Characterisation of the effects of 50 Hz magnetic fields on cognitive functions and cerebral markers of Alzheimer's disease in aged mice

O. Nicole (Bordeaux)

Role of Trans ϵ -viniferin in the autophagy of microglia from APP^{swe}PS1^{dE9} mice

G. Page (Poitiers)

Ciliary receptors modulate neuronal autophagy: impact of amyloid beta

O. Pampliega (Bordeaux)

Sertraline (Zoloft®), serotonin, and hippocampal plasticity in the pregnant female

J. Pawluski (Rennes)

The antidepressant-like effect of tDCS in naïve and "depressed" mice is dependent of stimulation parameters and is associated with specific pattern of neuronal activation

T. Peanlikhit (Besançon)

Context-induced relapse to cocaine seeking after punishment-imposed abstinence in a rat model

Y. Pelloux (Baltimore)

Heterozygous Gnal mice are a new animal model to study the pathophysiology of primary dystonia

A. Pelosi (Paris)

Upper limb rehabilitation guided by auditory feedback

I. Peyre (Paris)

Orexinergic dysfunction in a mouse model of Huntington's disease

C. Pistono (Pavia)

Specific alterations of subthalamic regions in alcohol use disorder with and without Korsakoff's syndrome: a diffusion tensor imaging (DTI) investigation

A.-L. Pitel (Caen)

Axon guidance molecule expression after cell therapy in a mouse model of Parkinson's disease

L. Prestoz (Poitiers)

DNA methylation levels in Anorexia nervosa patients, remitters and controls: biomarkers of diagnostic and prognostic

N. Ramoz (Paris)

Scientific Programme

Social memory impairments are associated with disrupted perineuronal nets around parvalbumin interneurons in area CA2 of the Tg2576 mouse model of Alzheimer's disease

C. Rey (Toulouse)

Role of the striatal cholinergic system in the pathophysiology of dystonia: an experimental model in the monkey

B. Ribot (Bordeaux)

Sex differences in behavior and gut microbiota in mice exposed to early-life stress

M. Rincel (Bordeaux)

Early gliovascular unit changes phenotype in white matter tracts in a new juvenile Closed Head Injury with Long-term Disorders (CHILD) mouse model

B. Rodriguez-Grande (Bordeaux)

MOCOS, an enzyme downregulated in patients with autism spectrum disorders

P. Rontani (Marseille)

Role of tissue plasminogen activator (tPA) in Alzheimer's disease-like Tau pathology

A. Rose (Caen)

Psychiatric symptoms track confidence but not performance in perceptual decision-making

M. Rouault (London)

Effect of maternal supplementation with resveratrol and/or ethanol on neonatal hypoxic ischemic encephalopathy in rat neonates

H. Roumes (Bordeaux)

An in vivo two photon approach to assess receptor mediated transport across blood brain barrier

S. Roux (Marseille)

Knockdown of oligophrenin1 (OPHN1), implicated in human intellectual disability associated with cerebellar hypoplasia, results in a defect of radial migration in mouse cortex

Y. Saillour (Paris)

Interoception and relapse to cocaine addiction: long-term disruption of the basolateral amygdala-insular pathway

A. Salin (Poitiers)

Adeno-associated virus vector-mediated overexpression of beta-synuclein has noxious effects on the M83 mice synucleinopathy

D. Sargent (Lyon)

In vivo study of BIN1 impact on Late Onset Alzheimer Disease in mammalian models

M. Sartori (Illkirch Graffenstaden)

Longitudinal changes in brain metabolic activity after withdrawal from escalation of cocaine self-administration

M. Solinas (Poitiers)

Nanoscale imaging of the brain extracellular space in Lewy body-injected mice

F.N. Soria (Bordeaux)

Role of Rabphilin 3A/NMDA receptor interaction in a rat model of L-DOPA-induced dyskinesia

J. Stanic (Bordeaux)

Scientific Programme

Metabolic reprogramming of Amyotrophic Lateral Sclerosis motor neurons and ALS patients skin fibroblasts

M. Szelechowski (Bordeaux)

Dysregulated microbiome in people and mice with autism-associated genetic mutations

L. Tabouy (Safed)

Role of glucocorticoids in the anti-craving effects of environmental enrichment after methamphetamine self-administration

N. Thiriet (Poitiers)

Characterization of spastic paraplegia SPG56 murine model

P. Thomas (Paris)

Non-motor symptoms of Parkinson's disease in a cohort of 100 patients

H. Tibar (Rabat)

Simvastatin, but not atorvastatin, has anti-inflammatory and neuroprotective effects in an in vivo rat model of Huntington disease

C. Tronel (Tours)

RNA-Seq analysis to predict treatment response in first episode schizophrenia

R. Troudet (Créteil)

Perinatal stress causes cognitive dysfunction during ageing in rats

G. Van Camp (Villeneuve d'Ascq)

Olfactory stem cells transplanted in a rat model of transient global cerebral ischemia restored learning and memory abilities

A.D. Veron (Apt)

Potential therapeutic effect of a combination of nicotinic $\alpha 7$ and sigma-1 receptors agonists in a Parkinson's disease rat model

S. Vetel (Tours)

Exploration of the concept of 5-HT_{1A} receptor biased agonism: a PET-fMRI study

B. Vidal (Lyon)

Measuring the electrophysiological effects of direct electrical stimulation of the brain during wide awake surgery

M. Vincent (Montpellier)

Analysis of neuronal dysfunctions in a murine model of hereditary spastic paraplegia

B. Wilmet (Paris)

Involvement of striatal cholinergic interneurons in the pathophysiology of Parkinson's disease: optogenetics, pharmacological and behavioral approaches

S. Ztaou (Marseille)

Integrative neuroscience, sensory physiology

Sniffing and hippocampal theta rhythms: two distinct networks which evolve during olfactory learning

N. Fourcaud-Trocmé (Lyon)

Paraventricular thalamic nucleus inputs to the nucleus accumbens: a link between hunger and motivation ?

J. Meffre (Marseille)

Scientific Programme

Involvement of neuroinflammation process in nociceptive defects of Fmr1 KO mice, model of Fragile X syndrome

A. Menuet (Orléans)

Impact of a high fat high sucrose maternal diet on the progeny's olfactory system

L. Merle (Dijon)

Whole brain imaging during vestibular stimulation in zebrafish

G. Migault (Paris)

GABAergic input integration in NG2 cells

V. Nicolas (Bonn)

Impact of the temporal statistic of natural movies on the reliability of dynamics in cat primary visual cortex

Y. Passarelli (Gif sur Yvette)

The spinal cord circuits for chronic pain

C. PEIRS (Pittsburgh)

Rac-1 dependent structural plasticity of the anterior cingulate cortex regulates the emotional aspect of chronic pain

S. Pezet (Paris)

Cerebellar circuits and function in vocal learning: a new player?

L. Pidoux (Paris)

Disruption of corticothalamic systems in a rodent model of first-episode psychosis

D. Pinault (Strasbourg)

Group I mGluRs switch control spinal nociceptive transmission after peripheral inflammation in the rat

H. Radwani (Bordeaux)

Functional neuroimaging of trigeminal ganglion hyperhaemia using ultrafast ultrasound imaging after corneal injury

L. Rahal (Paris)

Memory of occasional events in rats: oscillatory activities in the hippocampal-prefrontal network differ according to individual episodic memory profile and age of memory

N. Ravel (Lyon)

Memory building blocks - how sensory inputs tunes internally-generated co-activity to shape hippocampal assemblies

S. Reichinnek (Marseille)

Loss of MYO protein facilitates the transition from acute to chronic pain through a selective alteration of spinal ionotropic GABAergic neurotransmission

A. Reynders (Marseille)

Two-photon lifetime imaging of oxygen consumption in glomerular network

M. Roche (Paris)

On the role of the PeriNeuronal Net (PNN) enveloping Fast Spiking (FS) neocortical interneurons in long-term memory

J. Rossier (Paris)

Scientific Programme

Effect of stimulus temporal frequency on the receptive fields in primate V1 neurons

F. Roumier (Toulouse)

Optogenetic inhibition of pyramidal cells during awake SPW-Rs induces place field remapping

L. Roux (New York)

BRET imaging with a fiberscope

S. Sakkaki (Montpellier)

A cholinergic activated thoracic spinal network for coordinating locomotor and sympathetic activities

M. Sourieux (Bordeaux)

Cortical horizontal connections as key players of paroxysmal oscillations generation in absence epilepsy

F. Studer (La Tronche)

Investigating the role of noradrenaline in olfactory discrimination during aging

C. Terrier (Lyon)

Functional ultrasound imaging of the functional connectivity in the rat submitted to short lasting inflammatory pain

M. Thibaut (Paris)

Theta and beta oscillatory correlates of movement-execution error processing and sensorimotor adaptation

F. Torrecillos (Oxford)

Electrophysiological evidence for cerebello-hippocampal interactions

A. Torres Herraiez (Paris)

3D skeleton scanning: a novel method for imaging entire dendritic trees at high speed

A. Valera (London)

SOM neurons of the ventro-lateral periaqueductal grey modulate WDR neurons response to nociceptive inputs in the spinal cord

S. Valerio (Bordeaux)

Inhibition of ASIC channels in a rat model of migraine results in potent analgesic effects

C. Verkest (Valbonne Sophia Antipolis)

A unique logical, goal-centered representation of space for different mazes in the monkey hippocampus

S. Wirth (Bron)

Parallel neuronal circuits of the mouse central extended amygdala

J. Ye (Strasbourg)

Neuroendocrinology, neuroimmunology

AMH is mutated in patients with congenital hypogonadotropic hypogonadism and it regulates development and function of GnRH neurons

S. Malone (Lille)

Effect of GH and IGF-1 treatments after hypoxic-ischemic injury in chicken cerebellar cell cultures

B.L. María Del Rosario (Querétaro)

Scientific Programme

Bimodal control of food intake by hypothalamic POMC neurons

W. Mazier (Bordeaux)

The oxytocinergic descending control of pain in the rat and its alteration by neonatal maternal separation

M. Melchior (Strasbourg)

MicroRNAs flip the switch for the production of hypothalamic GnRH before puberty

A. Messina (Lausanne)

Glucocorticoid signaling in obese patients before and after bariatric surgery: relationship with depressive symptoms

M.-P. Moisan (Bordeaux)

Parkin in innate immunity: crosstalk between mitochondrial dysfunction and NLRP3 inflammasome signaling

F. Mouton-Liger (Paris)

Transcript signature of immuno-guided laser microdissected white matter astrocytes in chronic autoimmune neuroinflammation

A.B. Nicot (Nantes)

How nutritional n-3 LC-PUFAs supplementation influences lipids and inflammation in the brain

C. Rey (Bordeaux)

Localization and physiological characterization of neurons expressing the Gonadotropin Releasing Hormone (GnRH) receptor in the mouse brain

S. Shruti (Lille)

The neuroinflammatory components in C9-FTD/ALS

J. Smeyers (Paris)

Behaviour, emotions, cognition, neuroethology

Functional cerebral reorganization of visual scene processing in age-related macular degeneration patients

C. Peyrin (Grenoble)

Social behavior and stress reactivity of opiate-withdrawn mice

A. Piccin (Bordeaux)

Pathophysiology and imaging of early memory impairment in multiple sclerosis

V. Planche (Bordeaux)

Unraveling the role of astroglial connexins in depression

B. Portal (Toulouse)

Behavioral and molecular changes engaged during chronic stress exposure leading to depressive-like phenotype

T.D. Prévot (Toronto)

Automatic online movement control needs exact prediction reafferences

A.-E. Priot (Bron)

Neuronal and motor responses to acoustic stimuli in zebrafish larva

M. Privat (Paris)

Scientific Programme

Learning from uncertain feedback in macaque monkeys

E. Procyk (Bron)

Activation of nociceptin/orphanin FQ receptors inhibits contextual fear memory reconsolidation

K. Rekik (Toulouse)

The role of noradrenaline in spatial attention

A. Reynaud (Bron)

The claustrum is a target for projections from the supramamillary nucleus

P.-Y. Risold (Besançon)

The planar cell polarity pathway regulates the balance between pattern completion and pattern separation

B. Robert (Bordeaux)

Hypothalamic control of area CA2 network activity

V. Robert (Paris)

Astroglial CB1 receptors control object recognition memory via D-serine

L.M. Robin (Bordeaux)

How interindividual differences in brain anatomy shape reading accuracy

M. Roell (Paris)

Neural network involved in the perception of abstract palaeolithic engravings

M. Salagnon (Bordeaux)

Electromagnetic fields and recent vs. remote spatial memory in young and adult rats

A. Salvadori (Strasbourg)

Adolescent high-fat diet intake impairs object recognition memory consolidation through hippocampal endocannabinoid system

M. Santoyo-Zedillo (Bordeaux)

Gender and social isolation effects in Glucocorticoid Receptor-impaired (GR-i) mice

M. Schverer (Paris)

Reconsolidation-induced rescue of a remote fear memory blocked by an early cortical inhibition: involvement of the anterior cingulate cortex and the mediation by the thalamic nucleus reuniens

R.A. Sierra Ordonez (Porto Alegre)

The cost of cognitive activity in a predictive coding framework

O. Solopchuk (Brussels)

Double dissociation of executive functions in the prefrontal cortex: lesional and optogenetic approaches in a mouse model

A.D. Surget (Tours)

Control of food motivation in rats by targeting the subthalamic nucleus with optogenetics

A. Tiran Cappello (Marseille)

Measuring and understanding mouse personality in SourisCity, a semi-ethologic environment

N. Torquet (Paris)

Scientific Programme

Nutritional vitamin A status modulates contextual fear memory in rats: involvement of the 11 β -hydroxysteroid dehydrogenase type 1?

K. Touyarot (Bordeaux)

Phasic optogenetic stimulation of mesolimbic dopaminergic terminals in the nucleus accumbens reinforces the value of a goal-directed action in operant conditioning

S. van der Veldt (Bordeaux)

Role of cerebello-thalamo-cortical network in motor skill learning in mice

A.P. Varani (Paris)

MCH-expressing neurons control slow-wave sleep dynamics through inputs to the ventrolateral preoptic nucleus

C. Varin (Lyon)

Modulation of feedback-related negativity and EEG oscillations in Parkinson's disease patients

L. Viñales (Bron)

Drug rewards differentially modulate synaptic plasticity in striatum and hippocampus

R.-M. Vouimba (Pessac)

Cognitive efforts worsen addiction-related behavior in rats: evidence for self-control depletion

M. Wahab (Poitiers)

Effect of genetic and pharmacogenetic manipulation of accumbens dopamine D2 receptor-expressing neurons on reward processing, motivation and feeding behavior

R. Walle (Bordeaux)

Learning by seeing or doing? Behavioral and neural dissociation between cognitive processes underlying observational and instrumental inference

A. Weiss (Paris)

Single trial beta and gamma burst dynamics during cognitive control in primates

C. Wilson (Bron)

Neural correlates of fear conditioned analgesia

N. Winke (Bordeaux)

Predicting hemispheric dominance for language production in healthy individuals using support vector machine

L. Zago (Bordeaux)

Nucleosome remodeler and behavior: function of Brahma-related gene 1 in dopaminergic neurons

A. Zayed (Paris)

Ventral tegmental area glutamate neurons co-release GABA in a target-dependent manner to drive positive reinforcement

V. Zell (San Diego)

Scientific Programme

SPECIAL SYMPOSIUM / SYMPOSIUM SPÉCIALISÉ
13:15 - 14:45

Amphi B

SP04, History of the Neurosciences

Histoire des Neurosciences

Chaired by:

J.G. Barbara (Paris)

History of knowledges concerning the brain and its diseases before brain imaging, from the XVIIth c. To the 20th c. / Histoire des connaissances du cerveau et de ses pathologies avant l'imagerie, du XVIIe siècle au XXe siècle

F. Clarac (Marseille)

Jules Soury, historian of the neurosciences / Jules Soury, historien des neurosciences

L. Bossi (Paris)

History of French neurosciences from the end of the 19th C. to the 1960s / Histoire des neurosciences en France, fin XIXe et XXe siècles

J.G. Barbara (Paris)

The synapse: history of an "artifact" / La synapse: histoire d'un "artefact"

G. Gangarossa (Paris)

YOUNG RESEARCHERS SESSION/ SESSION JEUNES CHERCHEURS
13:30 - 14:30

Salle E

RT05, Researcher in industry.

Devenir chercheur dans l'industrie.

Speakers:

V. Riban (Paris)

S. Ballet (Paris)

C. Bouquet (Basel)

A. Auclair (Castres)

V. André

YOUNG RESEARCHERS SESSION/ SESSION JEUNES CHERCHEURS
13:30 - 14:30

Salle F

RT06, Preparing your track after the PhD.

Préparer la transition après sa thèse.

Speakers:

A. Chédotal (Paris)

A. de Daruvar (Bordeaux)

A. Erdozain

L. Roux (New York)

K. Richetin (Lausanne)

Scientific Programme

SHORT INTERVIEWS & CV SCREENING/ MINI ENTRETIENS ET LECTURES CV
14:30 - 15:30

Mezzanine

SHORT INTERVIEWS & CV SCREENING/MINI ENTRETIENS ET LECTURES CV

SYMPOSIUM
15:00 - 17:00

Amphi A

S36, Evolution of animal modeling in neuroscience

L'évolution de l'expérimentation animale en Neurosciences
<p>

Cette session vise à susciter au sein de la Société des Neurosciences des discussions et des actions concertées autour de l'expérimentation animale en neurosciences. Elle commencera par une intervention de Kirk Leech, Directeur Exécutif de la European Animal Research Association sur la question de la communication et de la transparence sur la question. Son intervention sera suivie d'un temps d'échanges avec la communauté. Suivront ensuite trois interventions courtes proposant 1) un point sur les aspects quantitatifs de la recherche animale en France, en Europe et dans le monde, 2) une synthèse des actions relatives à la recherche animale au sein de la Société des Neurosciences et au-delà et 3) une intervention ciblée sur la rédaction des protocoles d'expérimentation animale encadrant cette pratique du point de vue éthique.

SYMPOSIUM
15:00 - 17:00

Amphi B

S37, Optically enlightening synaptic integration models

Éclairer les modèles de l'intégration synaptique avec les derniers outils optiques

Chaired by:
R. Cazé (Paris)
A.J. Foust (London)

Symposium welcome and introduction to holographic synaptic input patterning

A.J. Foust (London)

Imaging individual inhibitory synapses in action / Visualiser une seule synapse inhibitrice en action

F. Müllner (Basel)

Dendrites enable a robust mechanism for neuronal stimulus selectivity

R. Cazé (Paris)

New insights in axonal saltatory conduction and calcium signaling in cortical pyramidal neurons revealed by high sensitivity micrometer precise epifluorescence imaging / Nouvelles perspectives de la conduction axonale saltatoire et la signalisation du calcium dans les neurones pyramidaux corticaux révélés par une haute sensibilité l'imagerie de fluorescence précise à micromètre

M.A. Popovic (Amsterdam)

Scientific Programme

SYMPOSIUM
15:00 - 17:00

Amphi C

S38, Cellular mechanisms of spatial coding in the brain

Mécanismes cellulaires du codage de l'information spatiale dans le cerveau

Chaired by:

J. Epsztein (Marseille)
J. Koenig (Marseille)

**Single-cell microcircuits and cortical representations of space /
Microcircuits et représentations corticales de l'espace**

A. Burgalossi (Tübingen)

**Entorhinal circuit mechanisms for estimation of location / Réseaux du
cortex entorhinal: mécanismes pour estimer la position**

M. Nolan (Edinburgh)

**Cellular and dendritic mechanisms of grid cell firing / Mécanismes
cellulaires et dendritiques des cellules de grilles**

C. Schmidt-Hieber (Paris)

**Intra- and extracellular studies of hippocampal memory formation in
behaving animals**

A. Lee (Ashburn)

**Optogenetic inhibition of pyramidal cells during awake SPW-Rs induces
place field remapping**

L. Roux (New York)

SYMPOSIUM
15:00 - 17:00

Salle D

S39, Clinical Neuroscience Symposium of the French Society of Neurology

In partnership with / En partenariat avec la Société Française de Neurologie

Chaired by:

C. Lubetzki (Paris)

**From bench to bedside in clinical neurosciences: success, pitfalls and
new challenges / De la pailleasse au lit du malade en neurosciences
cliniques: succès, pièges et nouveaux défis**

J.-C. Corvol (Paris)

**Multiple sclerosis a degenerative and/or an inflammatory disease? From
the research in neurobiology / Sclérose en plaques: une pathologie
neurodégénérative et/ou inflammatoire?**

C. Lubetzki (Paris)

**Is multiple sclerosis a degenerative and/or an inflammatory disease?
From the research in neuro-imaging**

B. Stankoff (Paris)

**Pathophysiology and imaging of early memory impairment in multiple
sclerosis**

V. Planche (Bordeaux)

Scientific Programme

SYMPOSIUM
15:00 - 17:00

Salle E

S40, Deciphering brain dysfunction through proteomics

Caractérisation des dysfonctionnements cérébraux par des approches protéomiques

Chaired by:

C. Bécamel (Montpellier)
E. Herzog (Bordeaux)

Cell-type resolved mouse brain proteome / Vers une résolution du protéome du cerveau de souris

K. Sharma (Spring House)

Identification of new protein partners of the serotonin 5-HT6 receptor involved in its neurodevelopmental functions

S.C. Chaumont-Dubel (Montpellier)

Molecular analysis of dedicated central synapses in physiology and pathology in mice / Analyse moléculaire de synapses centrales dédiées en condition physiologique et pathologique chez la souris

E. Herzog (Bordeaux)

Serotonin 5-HT2A receptor-dependent phosphorylation of glutamate mGlu2 receptor at Ser843 promotes mGlu2-operated Gi/o signaling

S. Murat (Montpellier)

Metabolism changes in mice brain microvessel from neonate to adult: a proteomic and transcriptomic study

B. Porte (Paris)

SYMPOSIUM
15:00 - 17:00

Salle F

S41, Information processing and storage in the somatosensory cortex circuits

Le traitement et stockage de l'information dans les circuits du cortex somatosensoriel

Chaired by:

A. Frick (Bordeaux)
D. Shulz (Gif sur Yvette)

Neocortical dynamics during tactile discrimination behavior

F. Helmchen (Zürich)

In vivo monosynaptic transmission within cortical layer 2 / Transmission des signaux monosynaptiques dans la couche 2 du cortex in vivo

J.-S. Jouhanneau (Berlin)

Global tactile information processing in the mouse somatosensory cortex at the mesoscopic scale

I. Ferezou (Gif sur Yvette)

Inhibitory control of cortical microcircuits / Contrôle inhibiteur des microcircuits corticaux

A. Bacci (Paris)

Scientific Programme

Imaging activation of somatosensory and spatial navigation circuits in mobile rats / Imagerie de l'activation somato-sensorielle et des circuits de navigation spatiale du rat mobile

I. Cohen (Paris)

SYMPOSIUM
15:00 - 17:00

Salle H

S42, Concerted actions in the developing brain: Molecular control of neocortical histogenesis

Actions concertées dans le cerveau en développement : contrôle moléculaire de l'histogenèse néocorticale

Chaired by:

J.-B. Manent (Marseille)

L. Nguyen (Liège)

Phosphorylation-dependent regulation of brain development

N. Ip (Hong Kong)

Investigation of the mechanisms underlying development and diseases of the cerebral cortex using ferrets / Mécanismes sous-tendant le développement normal et pathologique du cortex cérébral du furet

H. Kawasaki (Kanazawa, Ishikawa)

A dynamic Unfolded Protein Response contributes to the control of cortical neurogenesis / La dynamique de la réponse aux protéines mal repliées contrôle la neurogenèse corticale

L. Nguyen (Liège)

Molecular mechanisms of neural stem cell lineage progression

S. Hippenmeyer (Klosterneuburg)

Altered cortical layering impacts synaptogenesis and spine formation

F. Martineau (Marseille)