

# NETWORK'S MAIN RESEARCH THEMES

| Computational Neurosciences<br>Neural theory   | Cognitive Neuro<br>Neuropsychology  | Neurophysiology<br>Systems neuroscience  | Neuropharma<br>Cell signaling   | Neurological and Psychiatric Diseases   | Neurogenetics<br>Neurodevelopmt   |   |
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| <p><b>BRETTE Romain</b><br/>Computational neuroscience of sensory systems</p> <p><b>DESTEXHE Alain</b><br/>Computational Neuroscience</p> <p><b>FREGNAC Yves</b><br/>Visual Cognitions</p> <p><b>GUTKIN Boris</b><br/><b>OSTOJIC Srdjan</b><br/>Dynamical Neural Theory Group</p> <p><b>HANSEL David</b><br/><b>LEVENES Carole</b><br/>Cerebral Dynamics, Plasticity, Learning</p> <p><b>NADAL Jean-Pierre</b><br/><b>HAKIM Vincent</b><br/>Complex networks and cognitive systems</p> | <p><b>ARLEO Angelo</b><br/>Aging in Vision and Action</p> <p><b>BACHOUED-LEVI Anne</b><br/>Catherine<br/>Interventional neuropsychology</p> <p><b>CHRISTOPHE Anne</b><br/>Language and its acquisition</p> <p><b>DEHAENE Stanislas</b><br/>Cognitive Neuroimaging Unit</p> <p><b>DUPOUX Emmanuel</b><br/>Computational mechanisms of cognitive development</p> <p><b>GEORGE Nathalie</b><br/><b>FOSSATI Philippe</b><br/>Social and Affective Neuroscience team</p> <p><b>GREZES Julie</b><br/>Social Neuroscience Group</p> <p><b>HOUDÉ Olivier</b><br/>Laboratory for the Psychology of Child Development and Education</p> <p><b>KOECHLIN Etienne</b><br/>Frontal lobe functions group</p> <p><b>KOUDER Sid</b><br/>Brain and Consciousness</p> <p><b>LEVY Richard</b><br/>FrontLab</p> <p><b>MAMASSIAN Pascal</b><br/>Vision Group</p> <p><b>NACCACHE Lionel</b><br/><b>COHEN Laurent</b><br/>BARTOLOMEO Paolo<br/>Physiological Investigations of Clinically Normal &amp; Impaired Cognition Lab</p> <p><b>PESSIGLIONE Mathias</b><br/><b>DAUNIZEAU Jean</b><br/><b>BOURET Sébastien</b><br/>Motivation, Brain and Behavior</p> <p><b>RAMUS Franck</b><br/>Cognitive development and pathology</p> <p><b>TALLON-BAUDRY Catherine</b><br/>Visual Cognition Group</p> <p><b>VAN WASSENHOVE Virginie</b><br/>Brain Dynamics</p> | <p><b>AGULHON Cendra</b><br/>Glia-Glia and Glia-Neuron Interactions Group</p> <p><b>ANGULO Maria Cecilia</b><br/>Physiology of NG2 cells</p> <p><b>AUDINAT Etienne</b><br/>Neuron-Glia Interactions</p> <p><b>BACCI Alberto</b><br/>Cellular Physiology of Cortical Microcircuits</p> <p><b>BAL Thierry</b><br/>Neurocybernetics of thalamic and cortical networks</p> <p><b>BARBOUR Boris</b><br/>Cerebellum group</p> <p><b>BATHELLIER Brice</b><br/>Cortical dynamics and multisensory processing</p> <p><b>BENCHENANE Karim</b><br/>Memory, Oscillations and Brain states</p> <p><b>BORMUTH Volker</b><br/>Neuronal circuits and behavior</p> <p><b>BOURDIEU Laurent</b><br/>Dynamics of cortical activity and coding mechanisms</p> <p><b>CHARPAK Serge</b><br/>From sensory processing to functional hyperemia</p> <p><b>CHEVALEYRE Vivien</b><br/><b>PISKORSKI Rebecca</b><br/>Synaptic Plasticity and Neuronal Circuits</p> <p><b>DEBREGEAS Georges</b><br/>Neuroimaging and behavior of the zebrafish</p> <p><b>DI GREGORIO David</b><br/>Dynamic Neuronal Imaging</p> <p><b> DIEUDONNE Stéphane</b><br/><b>SUPPLISON Stéphane</b><br/>Inhibitory Transmission</p> <p><b>EL MESTIKAWY Salah</b><br/>Normal and pathological Glutamatergic systems</p> <p><b>EMILIANI Valentina</b><br/>Wavefront-engineering microscopy</p> <p><b>FAURE Philippe</b><br/>Neurophysiology and Behavior</p> | <p><b>FLEISCHMANN Alexander</b><br/>Neural Circuits and Behaviors</p> <p><b>FORTIN Gilles</b><br/>Hindbrain Integrative Neurobiology</p> <p><b>LAROCHE Serge</b><br/>Cellular and Molecular Mechanisms of Plasticity and Memory</p> <p><b>LLEDO Pierre-Marie</b><br/>Perception and Memory</p> <p><b>LUQUET Serge</b><br/>Central Control of Feeding behaviour and Energy Expenditure</p> <p><b>MALLET Luc</b><br/>Behavior, Emotion and Basal Ganglia</p> <p><b>MAMELI Manuel</b><br/>Synapses in the pathophysiology of reward</p> <p><b>PICAUD Serge</b><br/>Retinal information processing : pharmacology and pathologies</p> <p><b>PREAT Thomas</b><br/>Genes and Dynamics of Memory Systems</p> <p><b>RONDÍ-REIG Laure</b><br/>Cerebellum, Navigation and Memory</p> <p><b>ROUACH Nathalie</b><br/>Neuroglial Interactions and Cerebral Physiopathology</p> <p><b>SHULZ Daniel</b><br/>Neural Processing, Neuromodulation and sensory plasticity</p> <p><b>SUMBRE German</b><br/>Zebrafish neuroethology</p> <p><b>VENANCE Laurent</b><br/>Dynamic and Pathophysiology of Neuronal Networks</p> <p><b>VIDAILHET MARIE</b><br/><b>LEHERICY Stéphane</b><br/>Normal and abnormal motor control</p> <p><b>ZUGARO Michael</b><br/>Spatial memory and navigation</p> <p><b>ZYTNICKI Daniel</b><br/>Spinal physiology and pathophysiology</p> | <p><b>BIRMAN Serge</b><br/>Genes Circuits Rhythms and Neuropathology</p> <p><b>CABOCHE Jocelyne</b><br/><b>VANHOUTTE Peter</b><br/>Neuronal signaling and gene regulation</p> <p><b>DECLEVES Xavier</b><br/>Pathophysiology and therapeutic targets of the blood-brain barrier</p> <p><b>GASNIER Bruno</b><br/>Membrane Transport</p> <p><b> GIAUME Christian</b><br/>Junctional communication and neuro-glio-vascular interactions</p> <p><b>GIRAULT Jean-Antoine</b><br/><b>HERVE Denis</b><br/>Neurotransmission and signaling</p> <p><b>LENKEI Zsolt</b><br/>Neuronal structure and dynamics</p> <p><b>MAROTEUX Luc</b><br/>Serotonin signaling in plasticity and disease</p> <p><b>MARTY Alain</b><br/>Gabaergic synapses in the cerebellum</p> <p><b>MASKOS Uwe</b><br/>Integrative Neurobiology of Cholinergic Systems</p> <p><b>PONCER Jean Christophe</b><br/><b>LEVI Sabine</b><br/>Plasticity in Cortical Networks and Epilepsy</p> <p><b>TRONCHE Francois</b><br/>Gene Regulation and Adaptive Behaviors</p> <p><b>VINCENT Pierre</b><br/>Cellular Integration of Neuromodulatory Processes</p> | <p><b>BELLIVIER Frank</b><br/>Biomarkers of relapse and therapeutic response in addictions and mood disorders</p> <p><b>BOILLEE Séverine</b><br/>ALS causes and mechanisms of motor neuron degeneration</p> <p><b>BONVENTO Gilles</b><br/>Cell-cell interactions in neurodegenerative diseases</p> <p><b>BRICE Alexis</b><br/>Molecular basis, physiopathology and treatment of neurodegenerative diseases</p> <p><b>CHNEIWEISS Hervé</b><br/><b>JUNIER Marie-Pierre</b><br/>Glia Plasticity</p> <p><b>DHENAIN Marc</b><br/>Alzheimer's Disease and brain aging: Multimodal imaging and therapy</p> <p><b>FONTAINE Bertrand</b><br/><b>NICOLE Sophie</b><br/>NeuroGenetics and Physiology</p> <p><b>GROSZER Matthias</b><br/>Neurodevelopmental disorders</p> <p><b>HAÏK Stéphane</b><br/><b>POTIER Marie-Claude</b><br/>Alzheimer and Prion Diseases</p> <p><b>HIRSCH Etienne</b><br/><b>HUNOT Stéphane</b><br/>Experimental therapeutics of Parkinson Disease</p> <p><b>KREBS Marie-Odile</b><br/><b>JAY Thérèse</b><br/>Pathophysiology of Psychiatric disorders</p> <p><b>LAFUMET Laurence</b><br/>Pathophysiology of Mood Disorders and Addiction</p> <p><b>LEBOYER Marion</b><br/><b>JAMAIN Stéphane</b><br/>Psychiatry Genetic</p> <p><b>LE GUERN Eric</b><br/><b>BAULAC Stéphanie</b><br/>Genetics and physiology of inherited epilepsies</p> <p><b>LEHERICY Stéphane</b><br/>Centre for Neuroimaging Research IRM</p> <p><b>LÉVEILLARD Thierry</b><br/>Rod-derived Cone Viability Signaling for the Treatment of Inherited Retinal Degenerations</p> <p><b>MARTINOT Jean-Luc</b><br/>Imaging &amp; Psychiatry</p> <p><b>NAIT OUIMESMAR Brahim</b><br/><b>BARON VAN EVERCOOREN Anne</b><br/>Cellular and Molecular Approaches for Myelin Repair</p> <p><b>SIMONNEAU Michel</b><br/>Vulnerability of Psychiatric and Addictive Disorders</p> | <p><b>BALLY CUIF Laure</b><br/>Zebrafish Neurogenetics (ZEN)</p> <p><b>BILLUART Pierre</b><br/>Genetics and physiopathology of neurodevelopmental disorders</p> <p><b>CHELOTAL Alain</b><br/>Role of axon guidance molecules</p> <p><b>DEL BENE Filippo</b><br/>Neuronal circuit Development Group</p> <p><b>FRANCIS Fiona</b><br/><b>GOUTEBROUE Laurence</b><br/>Cortical development and pathology</p> <p><b>GALLI Thierry</b><br/>Membrane Traffic in Health and Pathology</p> <p><b>GAREL Sonia</b><br/>Brain development and Plasticity</p> <p><b>GASPAR Patricia</b><br/><b>METIN Christine</b><br/>Developmental mechanisms of brain disorders</p> <p><b>JANKE Carsten</b><br/>Regulation of microtubule dynamics and function</p> <p><b>LEGENDRE Pascal</b><br/><b>MANGIN Jean Marie</b><br/>Development of the Spinal Cord Organization</p> <p><b>LIVET Jean</b><br/>Development of neuronal circuits</p> <p><b>NICOL Xavier</b><br/>Codes of intracellular signals for axon guidance</p> <p><b>PERRON Muriel</b><br/>Stem cells and Neurogenesis in the Retina</p> <p><b>PETIT Christine</b><br/>Genetics and physiology of Hearing</p> <p><b>PIERANI Alessandra</b><br/>Genetics and Development of the Cerebral Cortex</p> <p><b>PROCHIANTZ Alain</b><br/>Development and Neuropharmacology</p> <p><b>RETAUX Sylvie</b><br/>Development and evolution of the forebrain (DECA)</p> <p><b>ROUYER François</b><br/>Molecular genetics of circadian rhythms</p> <p><b>SCHNEIDER-MAOUNOURY Sylvie</b><br/>Morphogenesis of the vertebrate brain</p> <p><b>SELIMI Fekri</b><br/>Mice, Molecules and Synapse formation</p> <p><b>SHERRARD Rachel</b><br/><b>MARIANI Jean</b><br/>Brain development, Repair and Aging</p> <p><b>THOMAS Jean-Léon</b><br/><b>ZALC Bernard</b><br/>Development of oligodendrocytes and Neurovascular Interactions</p> <p><b>VERNIER Philippe</b><br/>Development and evolution of neurotransmission</p> <p><b>WYART Claire</b><br/>Lights-on Locomotion: optogenetic dissection of spinal circuits underlying locomotion in Vertebrates</p> |



Research Centers



Teams

CENTRE DE PSYCHIATRIE ET NEUROSCIENCES SAINTE ANNE, COLLÈGE DE FRANCE, ECOLE NORMALE SUPÉRIEURE, ESPCI PARIS TECH, FACULTÉ DE PHARMACIE DE PARIS, FÉDÉRATION DE RECHERCHE EN NEUROSCIENCES, IMAGEN ORSAY SERVICE HOSPITALIER FRÉDÉRIC JOLIOT, INSTITUT CURIE, INSTITUT DE BIOLOGIE PARIS SEINE, INSTITUT DE LA VISION, INSTITUT DE PSYCHOLOGIE UNIVERSITÉ PARIS DESCARTES, INSTITUT DE RECHERCHE BIOMÉDICALE COCHIN, INSTITUT DU CERVEAU ET DE LA MOELLE ÉPINIÈRE, INSTITUT DU FER À MOULIN, INSTITUT JACQUES MONOD, INSTITUT MONDOR DE RECHERCHE BIOMÉDICALE, INSTITUT PASTEUR, LABORATOIRE JEAN PERRIN, MIRCEN, NEUROSCIENCE PARIS-SACLAY INSTITUT NEUROPSI, NEUROSPIN, UNITÉ DE BIOLOGIE Fonctionnelle et Adaptive, UNITÉ DE NEUROSCIENCE, INFORMATION ET COMPLEXITÉ