

Understanding psychiatric disorders: from signalling molecules to circuit & behaviour

Responsable	Peter VANHOUTTE			
Co-responsable	Sandrine BETUING			
Descriptif	Niveau	Semestre d'enseignement	ECTS	Effectif maximal
	M2	S3	6	20
Modalités pédagogiques	Volume horaire Cours	Volume horaire TD	Volume horaire TP	Présentiel/Distanciel
	30h sur 2 semaines	8h	0	100% in class
Objectifs	The main goal of this course is to provide an overview of current approaches and methodologies to study the neurobiological bases of psychiatric diseases. Experts in this field will comprehensively present preclinical models used to identify cellular and molecular events underlying behavioral alterations that are reminiscent to psychiatric diseases in human. They will also describe a panel of up-to-date strategies to design brain-region- and cell-type-specific tools to progress in the understanding of psychiatric disorders and eventually overcome disease-related dysfunctions.			
Thèmes abordés	<ul style="list-style-type: none">• Animal models to study deficits in motivation, goal-directed behavior, decision making and cognition in psychiatric disorders, including major depression, schizophrenia, attention-deficit-disorders, autism and drug addiction.• Current methodologies to study, from molecular and cellular aspects to behavior, cell-type-specific alterations of synaptic transmission, neuronal activity, synapse formation, intracellular signaling and epigenetic/genetic responses, which are encountered in psychiatric diseases.			
Compétences acquises à l'issue de l'UE (concepts, méthodologie et outils)	Attending to this course will provide to students a solid background on cutting-edge approaches to dynamically study and/or manipulate neuronal circuits that are altered in a vast panel of psychiatric disorders. It will put forward the concept that studying the neurobiological correlates of psychiatric diseases is crucial, not only for a better understanding of the brain's (dys)functions, but also for the development of innovative strategies with a potential therapeutic value.			
Prérequis				
Modalités d'évaluation/100	Ecrit	Oral	CC	Autre
	60	40	0	0
Langues utilisées	Dans les cours, TD, TP		Dans les documents, supports	
	ANGLAIS		ANGLAIS	
Localisation	Campus Pierre et Marie Curie, Place Jussieu, 75005 Paris			

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