

Inserm Workshop 270

Photopharmacologie : contrôle des protéines avec des interrupteurs photochimiques synthétiques
Photopharmacology : control of proteins using synthetic photoswitches

21-23 Novembre 2022 / **November 21-23, 2022** ■ Bordeaux, France

Lundi 21 novembre 2022 ■ **Monday November, 21 2022**

15:30 - 16:00	Reception of participants
16:00 - 16:15	Welcome and presentation by the organizers
SESSION I	DEVELOPMENT OF PHOTOCONTROLABLE LIGANDS AND PROTEINS
16:15 - 16:45	Photopharmacology: a chemical perspective of light operated drugs Amadeu LLEBARIA (IQAC-CSIC, Barcelone, Espagne)
16:45 - 17:15	Peptides as a Optoeigenetic Tools Olalla VAZQUEZ (Fachbereich Chemie Philipps-Universität, Marburg, Allemagne)
17:15 - 18:30	Coffee break / Poster session
18:30 - 19:15	Keynote Controlling the Fate and Function of Proteins with Photopharmacology Dirk TRAUNER (NYU, New York, USA)
19:30	Dinner

Mardi 22 novembre 2022 ■ **Tuesday November, 22 2022**

06:30 - 09:00	Breakfast
SESSION II	OPTICAL, MOLECULAR AND FLUIDIC ENGINEERING
09:00 - 09:30	Optical manipulation of neuronal activity with wavefront engineering Eirini PAPAGIAKOUMOU (Institut de la vision, Paris, France)
09:30 - 10:00	Tethered Ligands to Optically Control and Visualize Cell Surface Proteins in vivo Johannes BROICHHAGEN (Institute for Molecular Pharmacology (FMP), Berlin, Allemagne)
10:00 - 10:30	Coffee break
10:30 - 11:00	Photopharmacology to control biological processes in single cells and in vivo Pau GOROSTIZA (IBEC-ICREA-BIST-CIBER, Barcelona, Espagne)
11:00 - 11:45	Keynote : Wireless, Millimeter-Scale Devices for Photopharmacology in Small Animal Models John A. ROGERS (Northwestern University, Evanston, USA)
12:00 - 14:00	Lunch

14:00 - 15:00	Poster session (flash talks)
SESSION III	IN VITRO AND EX VIVO APPLICATIONS
15:00 - 15:30	Optopharmacological control of NMDA receptors Laetitia MONY (ENS, Paris, France)
15:30 - 16:00	The potential of GPCR photopharmacology for the discovery of new biological mechanisms Xavier ROVIRA (CSIC - Instituto de Quimica Avanzada de Cataluna (IQAC), Barcelona, Spain)
16:00 - 16:30	Coffee Break
16:30 - 17:00	Optical control of trimeric ion channel activity by chemical photoswitches Thomas GRUTTER (Université de Strasbourg, Strasbourg, France)
17:00 - 17:30	Remote control of neuronal endogenous potassium channels Guillaume SANDOZ (Université de Nice, Nice, France)
17:30 - 19:30	Poster session
19:30 - 20:15	Cocktail
20:15	Dinner

Mercredi 23 novembre 2022 ■ Wednesday November, 23 2022

06:30 - 09:00	Breakfast
SESSION IV	IN VIVO AND TRANSLATIONAL APPLICATIONS
09:00 - 09:30	Photopharmacology, a new promising approach to fight Alzheimer's disease Charleine ZUSSY (Université de Montpellier, Montpellier, France)
09:30 - 10:00	Towards photopharmacology in the clinics: tools, insights and applications Wictor SZYMANSKY (University of Groningen, Gronigen, Pays-Bas)
10:00 - 10:30	t.b.d. Matthew BANGHART (UCSD, San Diego, USA)
10:30 - 11:00	Coffee Break
11:00 - 11:45	Keynote : Optical control of endogenous inhibitory ion channels for understanding their roles in long-and shortterm neuronal plasticity Richard H. KRAMER (UC Berkeley, Berkeley, USA)
12:00 - 14:00	Lunch
14:00	Departure