

INSTITUT DE PHARMACOLOGIE MOLÉCULAIRE ET CELLULAIRE

MONDAY NOVEMBER 4th 2019

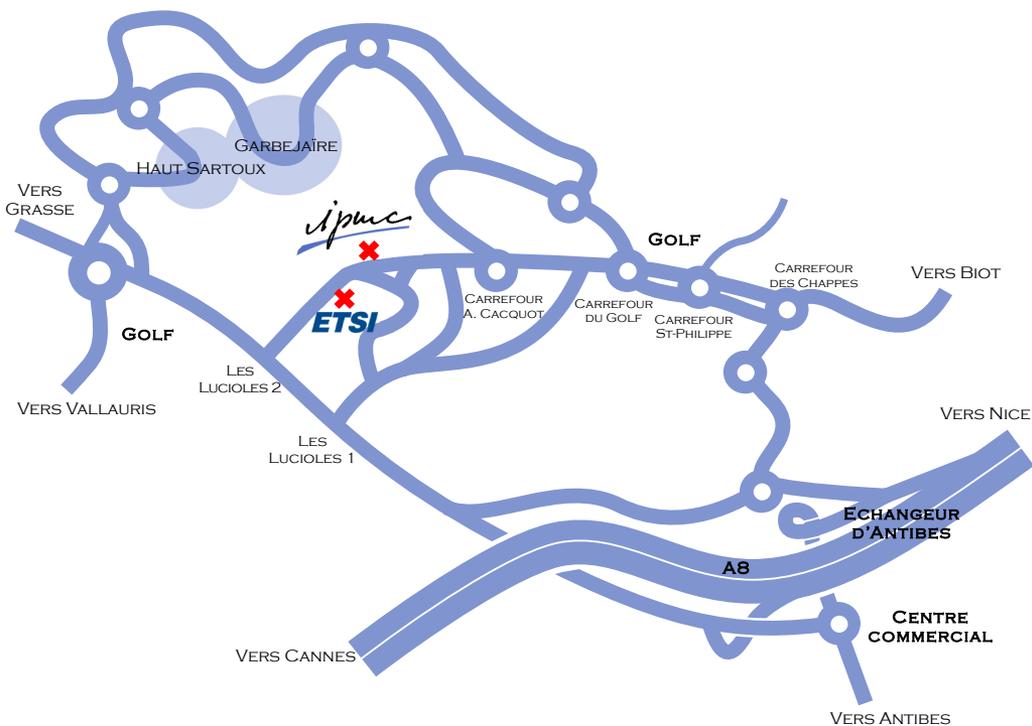
IPMC

30 years of biology
on the Riviera





www.ipmc.cnrs.fr



VENUE ADDRESS :

ETSI, 650 route des Lucioles, 06560 Valbonne.

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REGISTRATION TO THE CONFERENCE VIA THE LINK BELOW

(until October 16th)

<https://portal.etsi.org/Meetings.aspx#/meeting?MtgId=36291>

ETSI WIFI: ETSI_WIFI_PUBLIC

WPA2 Encryption key: etsimeeting

8.45 Opening of the day: **Jean-Louis Nahon** (Director IPMC)

Invited speakers

9.00 Peter Saint George-Hyslop (Tanz Centre for Research in Neurodegenerative Diseases and University of Toronto - University of Cambridge UK)
Phase Separation of Intrinsically Disordered Proteins Drive New Protein Synthesis in Neuronal Dendrites and Synapses in Physiological and Pathological States.
Introduced by Frédéric Checler

9.45 Brigitte Kieffer (McGill University Montréal Canada- INSERM)
Opioid receptors, neural networks and brain function.
Introduced by Michel Lazdunski

10.30 Coffee break

The Past

11.00 Philippe Ancian (Citoxlab-Charles River, Evreux, France)
Working in the pharma/biotech industries: opportunities and challenges.
Introduced by Gérard Lambeau

11.30 Bernard Aftali (Sagol School of Neuroscience, Sackler Faculty of Medicine, Tel Aviv University-Israel)
M-current inhibition in hippocampal neurons triggers intrinsic and synaptic homeostatic responses at different temporal scales.
Introduced by Florian Lesage

12.00 Agnès Viale (Center for Molecular Oncology at MSKCC., NY, USA)
From Obese Mice to Lean Genomics.
Introduced by Jean-Louis Nahon

12.30 Lunch

14.00 Michel Lazdunski (founder IPMC) and **Pascal Barbry** (former Director of IPMC)

The Present

Chairs : Isabelle Mus-Veteau, Frédéric Luton (IPMC)

14.45 Jacques Barik (IPMC)
The Brain Reward Circuit in Psychiatric Disorders

15.00 Thomas Bertero (IPMC)
Biophysical forces rewire cell metabolism to guide cell mechanics: from tissue to molecular scale

15.15 Mounia Chami (IPMC)

The Ryanodine receptor: a new therapeutic target for Alzheimer's disease

15.30 Barbara Bardoni (IPMC)

Pathophysiology and therapeutic challenges of developmental brain disorders: the Fragile X syndrome as a paradigm

15.45 Éric Lingueglia (IPMC)

Acid-Sensing Ion Channels in Pain

16.00 Bruno Antony (IPMC)

New twists in protein-membrane interactions

16.15 Coffee break

The Future, Interdisciplinarity and new technologies

Chairs: Delphine Bichet, Amanda Patel, Stéphane Martin (IPMC)

16.45 Nicolas Glaichenhaus (IPMC) and **Cyprien Gilet**, (I3S)

Advanced mathematical methods for analyzing clinical and biological data

17.00 Massimo Mantegazza (IPMC) and **Mathieu Desroches** (INRIA)

Novel mechanism of migraine-linked cortical spreading depression

17.15 Guillaume Drin (IPMC) and **Agnese Seminara** (INPHYNI)

Role of the distance and energy in intracellular lipid transport

17.30 Gérard Lambeau, (IPMC)

Clinical applications of PLA2s and their receptor PLA2R1

17.45 Fabienne Anjuère (IPMC) and **Gilles Poissonnet** (Centre Antoine Lacassagne of Nice, IUF)

Immune environment of cutaneous squamous cell carcinoma: towards the identification of novel therapeutic targets

18.00 Enzo Lalli (IPMC) and **Silvia Boffini** (Medical Data Laboratory of UCA)

Exposome, genetics and disease: the model of Southern Brazil

18.15 Pascal Barbry (IPMC)

Human Cell Atlas Project

18.30 Closing of the day: **Jean-Louis Nahon** and **Florian Lesage** (Deputy Director IPMC)



Peter St George-Hyslop: currently University Professor in the Division of Neurology, Department of Medicine at The University of Toronto, and Professor of Experimental Neuroscience at the University of Cambridge. He has received numerous academic honours including election to the Royal Society of London, Royal Society of Canada, US National Academy of Medicine, the Order of Canada and the UK Academy of Medical Sciences, as well as the Howard Hughes International Scholar Award, Potamkin prize, Metropolitan Life Award, Dan David Prize, Ryman Prize, Zenith Award and Royal College of Physicians of Canada Gold Medal in Medicin.

He has made major contributions to the understanding of the functional genomics of multiple human neurodegenerative diseases including Alzheimer disease (AD), frontotemporal lobar degeneration (FTLD) and amyotrophic lateral sclerosis (ALS). He has played a major role in cloning of genes associated with susceptibility to these disorders including APP, APOE, PS1, PS2, SORL1, TREM2 and several others. He has built protein structural, molecular, cellular and animal models of these disorders, and used them to explore candidate therapeutics including early work on anti-A β vaccines, inhibitors of Abeta aggregation, inhibitors of gamma-secretase, and microglial modulators such as CSF1R inhibitors. His work on intrinsically disordered low complexity such as FUS and ANXA11 have led to an understanding of how these proteins contribute to the formation of membraneless intracellular organelles, particularly ribonucleoprotein granules that mediate new protein synthesis in dendrites and axon terminals. It is also improved our understanding of how missense mutations and abnormal post-translational modifications in these intrinsically disordered proteins disrupt new protein synthesis in axons and dendrites, and leads to FTLD and ALS.



Brigitte Kieffer: McGill University Montréal Canada et U1114 INSERM Université de Strasbourg, France
B. L. Kieffer is Professor at the Dpt Psychiatry, McGill University. She also is Professor at the Université de Strasbourg France, where she developed most her past research activity (IGBMC, one of the leading European centres of biomedical research). She has isolated the first gene encoding an opioid receptor, opening an entire research field towards understanding the molecular basis of opioid-controlled behaviors. Her genetic dissection of the opioid system has brought

major advances in pain, addiction and mood disorders research, as well as in the area of molecular pharmacology and G protein coupled receptor research. She has developed and shared exquisite genetic tools worldwide, and has developed innovative research lines with strong impact in neuroscience and biomedical research. She has received numerous awards, including the Lounsbery (French and US Academies of Science) and the Lamonica Award of Neurology (French Academy of Science). In march 2014, she also received the International L'OREAL-UNESCO Award for Women in Science (European Laureate). She became an EMBO (European Molecular Biology Organization) in 2009 and was elected as a member of the French Academy of Sciences in 2013. BK's pioneering work has been truly transformative in opioid research and neuropsychiatric disorders, as well as for receptor biology and signaling research.



Philippe Ancian: Scientific Director, biomarkers - at Charles River Laboratories (CRL) he advises client for biomarker implementation strategies in drugs R&D programs. He also supervises biomarker analyses of preclinical as well as clinical samples. Before joining CRL, he supervised translational research, clinical biomarker programs as well as co-development of companion tests with IVD industry partners at Transgene, a late stage clinical biotech company involved in the development of therapeutic vaccines as well as oncolytic vectors. Before joining Transgene in 2010, he set-up and managed the biomarker Department at CIToxLAB. He began his career by leading the biomarker group at Galderma, and then the R&D activities of the pharma business unit of Proteus, a french biotech company involved in protein directed evolution. Philippe holds a PhD in molecular and cellular biology from the Nice University and is graduated as engineer in chemistry from the National School of Chemistry of Montpellier (France). Philippe is passionate about advanced therapies, incl. immunotherapies, as well as gene and cell therapies.



Bernard Attali: Sagol School of Neuroscience, Dept of Physiology & Pharmacology-Sackler Faculty of Medicine, Tel Aviv University-Israel.

Professor of Physiology at the Sagol School of Neuroscience, Dept of Physiology & Pharmacology-Sackler Faculty of Medicine, Tel Aviv University-Israel, Bernard Attali was educated in France and graduated in Chemistry and received a Pharm.D from Paul Sabatier University (Toulouse). After immigrating to Israel, he received a Ph.D in Neurobiology from the Weizmann Institute of Science. He made his Post-Doc training at the IPMC-Sophia Antipolis in Prof. Michel

Lazdunsky laboratory. Currently, Bernard Attali is Full Professor at the Sackler Medical School in Tel Aviv University, where his research aims at elucidating the structural, biophysical and physiological attributes of potassium channels.



Agnes Viale: Associate Director of the Center for Molecular Oncology(CMO) at MSKCC., NY, USA.

She began her career at Nice University in the laboratory of Dr. Jean-Louis Nahon, where she focused on the evolution of the Melanin Concentrating Hormone (MCH) gene family in primates. After obtaining her Ph.D in 1997, she moved to The Rockefeller University in New York, training in the lab of Dr. Jeffrey Friedman and developing her expertise in genomics. In January 2001 Dr. Viale joined Memorial Sloan Kettering Cancer Center (MSKCC) where she established the Genomics Core Facility, offering microarray technology to biologists at

the institute. An early adopter of next generation sequencing technology, the Viale lab rapidly evolved into a state of the art NGS facility. In 2014, she was appointed Associate Director of the Center for Molecular Oncology(CMO) at MSKCC. Central to the CMO's mission is the use of genomics technologies to diagnose and treat cancer patients. Since 2015, the Viale lab has adopted LEAN management to build an efficient and effective core at the center of MSK's precision oncology effort. In 2018, she was selected to participate in the Physician Executive Development Program at MSK which has led to an expansion of LEAN principles beyond the CMO to other centers at the institute.

Organizing Committee

**Ingrid Bethus, Magali Cerravolo, Mounia Chami, Cécile Laredo,
Isabelle Mus-Veteau, Roger Rezzonico, Simon Szmidt**

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Technical Support

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