

**SEROTONIN TYPE 6 RECEPTOR ANTAGONISTS:  
recent progress in sustainable synthesis methods  
and novel therapeutic applications**

**PROGRAMME**

**14/06/2022**

*Opening session*

09:45-10:00 REGISTRATION

10:00-10:05 **Magdalena Sajdak**, Polish Academy of Sciences – Scientific Center in Paris  
*Welcome Speech*

10:05-10:30 **Frédéric Lamaty**, Institut des Biomolécules Max Mousseron, University of Montpellier  
**Gilles Subra**, Institut des Biomolécules Max Mousseron, University of Montpellier  
**Philippe Marin**, Institut of Functional Genomics, ISERM  
**Pawel Zajdel**, Jagiellonian University Medical College

*Session 1: Sustainable synthetic approaches*

10:30-10:55 **Xavier Bantreil**, Institut des Biomolécules Max Mousseron, University of Montpellier  
*Biologically active molecules and Enabling Technologies: the Future in Motion?*

10:55-11:20 **Vittorio Canale**, Jagiellonian University Medical College  
*Medicinal mechanochemistry approach for a sustainable synthesis of 5-HT<sub>6</sub> receptor antagonists*

11:20-11:45 **Ophélie Bento**, Institut des Biomolécules Max Mousseron, University of Montpellier  
*When mechanochemistry meets biology: synthesis and characterization of the pharmacological properties of 5-HT<sub>6</sub> receptor ligands*

11:45-12:15 COFFEE BREAK

*Session 2: Multitargeted approaches involving 5-HT<sub>6</sub> and 5-HT<sub>3</sub> receptor modalities*

12:15-12:40 **Katarzyna Grychowska**, Jagiellonian University Medical College  
*From selective 5-HT<sub>6</sub>Rs antagonists to dually-acting 5-HT<sub>3</sub>/5-HT<sub>6</sub>Rs antagonists: a story of 1H-pyrrolo[3,2-c]quinoline*

12:40-13:05 **Christophe Rochais**, Centre d'Etudes et de Recherche sur le Médicament de Normandie  
*Polypharmacology approaches directed to 5-HT<sub>6</sub>Rs in Alzheimer's disease: from MTDL to pleiotropic prodrugs*

13:05-13:30 **Karolina Pytka**, Jagiellonian University Medical College  
*HBK-15 – a unique multimodal compound showing fast antidepressant-like and procognitive effects*

13:30-15:30 LUNCH BREAK

*Session 3: Structural Biology, interactomics and signalling*

15:30-15:55 **Hugues Nury**, Institut de Biologie Structurale, University of Grenoble  
*Conformational transitions of a serotonin receptor and a nicotinic one*

15:55-16:20 **Séverine Chaumont-Dubel**, Institut of Functional Genomics, ISERM  
*The 5-HT<sub>6</sub> receptor in neurodevelopment: From embryo to adult, location and partners are paramount*

16:20-16:45 DISCUSSION

**15/06/2022**

09:15-09:30 REGISTRATION

*Session 4: Selective 5-HT<sub>6</sub>R inverse agonists - novel therapeutic opportunities*

09:30-09:55 **Carine Bécamel**, Institut of Functional Genomics, ISERM  
*5-HT<sub>6</sub> receptor-operated mTOR signaling as target for disease modifiers preventing onset of cognitive deficits in schizophrenia*

09:55-10:20 **Christine Courteix**, Université Clermont Auvergne, INSERM U1107, NEURO-DOL  
*5-HT<sub>6</sub>R inverse agonists, a new strategy in the treatment of neuropathic pain*

10:20-10:40 COFFEE BREAK

10:40-11:05 **Laurent Givalois**, INSERM U1198, University of Montpellier  
*Evaluation of two 5-HT<sub>6</sub>R antagonists in an acute model of Alzheimer's disease*

11:05-11:30 **Julie Le Merrer & Jerome Becker**, INSERM U1253 "Imaging and Brain"  
*The two faces of the 5-HT<sub>6</sub> receptor in autism spectrum disorders: beneficial or deleterious*

11:30-12:15 DISCUSSION & CLOSING REMARKS

12:15-14:00 LUNCH BREAK