

6th French – Czech "Barrande (Vltava) " Biosciences Meeting

New trends in pharmacology and therapeutics

Programme

SUNDAY September 22nd, 2019

- 18:00 Meeting point for participants from outside Strasbourg at the reception of "Centre Culturel Saint Thomas", 2 rue de la Carpe Haute, 67000, Strasbourg
- 19:00 Welcome dinner at the restaurant "Zuem Strissel", 5 place de la Grande Boucherie, 67000 Strasbourg

MONDAY September 23rd, 2019

- 8:30 **Conference place:** Salle de la convivialité, Centre Culturel Saint Thomas, 2 rue de la Carpe Haute, 67000, Strasbourg.
- 8:50 **Opening** by the conference organizers – **Mathieu WELLHOF** (Attaché de coopération scientifique et universitaire, French institute in Prague), **Tomas ETRYCH** and **Jean-Luc GALZI**

1st section: *Chemistry in the cell*

Chair: Tomáš Etrych

- 9:00 – 9:25 **Alain WAGNER**, *Biofunctional Chemistry Laboratory, UMR 7199, Faculty of Pharmacy, LabEx Medalis, 67400 Strasbourg-IIIkirch, France*
Low Conversion Chemistry for Stoichiometric Bioconjugation
- 9:25 – 9:50 **Milan VRABEL**, *Institute of Organic Chemistry and Biochemistry of the Czech Academy of Sciences, Prague, Czech Republic*
Bioorthogonal Reactions of Heterodienes: Application in Bioimaging and Beyond
- 9:50 – 10:15 **Katerina POLAKOVA**, *Regional Centre of Advanced Technologies and Materials, the Faculty of Science, Palacký University Olomouc, Czech Republic*
Carbon dots for biomedical applications
- 10:15 – 10:40 **Jiri MISEK**, *Department of Organic Chemistry, Faculty of Science, Charles University, Prague, Czech Republic*
Chiral fluorescent probes for chemical biology and catalysis
- 10:40 – 11:00 Posters and coffee break

2nd section: Drug delivery and vectors

Chair: Jean-Luc GALZI

- 11:00 – 11:25 **Daniel SCHERMANN**, CNRS UMR 8258 – Inserm U1267, Paris Descartes University – School of Pharmacy, Paris, France
Optimized miniplasmid vectors for non-viral gene therapy
- 11:25 – 11:50 **Tomas ETRYCH**, Institute of Macromolecular Chemistry, Czech Academy of Sciences, Prague, Czech Republic
Hydrophilic and amphiphilic copolymers useable as efficient nanotherapeutics or diagnostics
- 11:50 – 12:15 **Guy ZUBER**, UMR 7242 Biotechnology & Cellular Signaling, CNRS-University of Strasbourg, France
Tuning self-assembling polyplexes with an endosomal pH-sensitive disassembling ability favors intracytosolic delivery of oligonucleotides and proteins

12:15 – 13:30 Posters and lunch

3rd section: Drug discovery and platforms

Chair: Daniel SCHERMANN

- 13:30 – 13:55 **Radim NENCKA**, Institute of Organic Chemistry and Biochemistry, Czech Academy of Sciences, Prague, Czech Republic
Design of novel human neutral sphingomyelinase 2 inhibitors as potential therapeutics
- 13:55 – 14:20 **Didier ROGNAN**, Laboratoire d'Innovation Thérapeutique (LIT), UMR7200 CNRS-Université de Strasbourg, 67400 Illkirch
Discovery of first-in-class extracellular FLT₃ inhibitors by in silico and experimental high-throughput screening: From hits to a preclinical candidate
- 14:20 – 14:45 **Jaroslav ROH**, Faculty of Pharmacy in Hradec Králové, Charles University, Czech Republic
Structure-Activity Relationships of 3,5-Dinitrophenyl-Containing Heterocyclic Compounds as Selective Antitubercular Agents
- 14:45 – 15:10 **Priscille BRODIN**, Université Lille, CNRS, INSERM, CHU Lille, Institut Pasteur de Lille, U1019 – UMR 8204 – CIIL - Center for Infection and Immunity of Lille, F-59000 Lille, France
Phenotypic screenings for the identification of new drugs and new targets involved in host-mycobacteria interactions

15:10 – 15:30 Posters and coffee break

4th section: *Bio-imaging and theranostic*

Chair: Milada SIROVA

- 15:30 – 15:55 **Elodie BRETTON**, *ICube Laboratory, UMR CNRS 7357, University of Strasbourg, France*
MRI-guided Therapies in Interventional Radiology
- 15:55 – 16:20 **Miroslav POPPER**, *Institute of Molecular and Translational Medicine, Palacky University Olomouc, Czech Republic*
Small animal imaging centre of the Institute of Molecular and Translational Medicine
- 16:20 – 16:45 **Jean-Luc COLL**, *INSERM U1209/UGA/ CNRS UMR5309, Institut for Advanced Biosciences, La Tronche, France*
Optical guided theranostic approaches
- 16:45 – 17:10 **Peter KESA**, *Center for Advanced Preclinical Imaging (CAPI), First Faculty of Medicine, Charles University, Prague, Czech Republic*
In vivo Photoacoustic Monitoring of the Biodistribution of Cyanine Dyes Doped HPMA in Healthy and Tumor Mice
- 17:10 – 17:35 **Adam MODRY**, *Center for Advanced Preclinical Imaging (CAPI), First faculty of medicine, Charles University, Prague, Czech Republic*
PET imaging of mantle cell lymphoma
- 17:35 Posters and drink
- 19:00 Dinner at the restaurant "La Vignette", 29 Rue Mélanie, 67000 Strasbourg

TUESDAY September 24th, 2019

5th section: *Physiopathology and drug discovery*

Chair: Peter KESA

- 9:00 – 9:25 **Sylviane MULLER**, *School of Biotechnology, University of Strasbourg, France*
Mechanism-guided novel therapies for treating inflammatory diseases
- 9:25 – 9:50 **Milada SIROVA**, *Institute of Microbiology, Czech Academy of Sciences, Prague, Czech Republic*
Anti-cancer immune responses and targeted therapy based on polymer drug delivery systems
- 9:50 – 10:15 **Frederic SIMONIN**, *UMR7242-BSC, CNRS, University of Strasbourg, 67400 Illkirch, France*
A bifunctional biased mu opioid agonist - neuropeptide FF receptor antagonist as analgesic with improved acute and chronic side effects
- 10:15 – 10:40 Posters and coffee break

6th section: *Animal models, organoids*

Chair: Sylviane MULLER

10:40 – 11:05 **Vincent FLACHER**, *Laboratoire CNRS UPR3572 Immunology, Immunopathology and Therapeutic Chemistry (I2CT), Institut de Biologie Moléculaire et Cellulaire, Université de Strasbourg, Strasbourg, France*

An innervated, vascularized and immunocompetent human skin model to study cutaneous neuroimmune interactions

11:05 – 11:30 **Helena FULKOVA**, *Institute of Animal Science and Institute of Experimental Medicine CAS, Prague, Czech Republic*

Nucleolus precursor bodies: Atypical organelles in atypical cells

11:30 – 11:55 **Jocelyn LAPORTE**, *Translational Medicine Department, IGBMC, Illkirch, France*
Modulation of amphiphysin and dynamin rescues severe congenital myopathies

12:00 – 13:15 Posters and lunch

7th section: *Inflammation*

Chair: Jocelyn LAPORTE

13:15 – 13:40 **Veronique WITKO**, *Institut Cochin, Paris, France*

Modulation of cytosolic Proliferating Cell Nuclear Antigen (PCNA) in neutrophils to promote the resolution of inflammation

13:40 – 14:05 **Eva KOZIOLOVA**, *Institute of Macromolecular Chemistry, Czech Academy of Sciences, Prague, Czech Republic*

Polymer-based drug delivery systems for treatment and diagnosis of inflammatory diseases

14:05 – 14:30 **Jean-Luc GALZI**, *UMR 7242 Biotechnology & Cellular Signaling, CNRS, School of Biotechnology, University of Strasbourg, 67400 Illkirch, France*

Dynamics of GPCR signaling and application to bioactive molecules discovery

14:30 – 14:40 Closing of the meeting by the conference organizers – **Mathieu WELLHOFF** (Attaché de coopération scientifique et universitaire, French institute in Prague) and **Jean-Luc GALZI**

Presented posters

1. **Igor DOVGAN**, *Biofunctional Chemistry, UMR 7199, Faculty of Pharmacy, LabEx Medalis, Strasbourg-Illkirch, France*
Automated one-to-one linkage of proteins and payload
2. **Nadja GROYSBECK**, *UMR 7242 Biotechnology & Cellular Signaling, CNRS-University of Strasbourg, France*
Thiolate-specific conjugation of cetuximab and nanobody to circa 2 nm gold nanoparticles as novel approach for targeting and imaging
3. **Marie-Louise JUNG**, *Prestwick Chemical, 67400 Strasbourg-Illkirch, France*
The Prestwick Chemical Library, a valuable tool for screening
4. **Galina KARABANOVICH**, *Farmaceutical Faculty, Charles University, Hradec Kralove*
Novel derivatives of dexrazoxane: synthesis and structure *in vitro* cardioprotective activity relationships study
5. **Adela KRATOCHVILOVA**, *Institute of Animal Physiology and Genetics CAS, Laboratory of Odontogenesis and Osteogenesis, Brno, Czech Republic*
Inhibition of pro-apoptotic caspases in osteoblasts causes changes in expression of Ocn and PheX genes
6. **Xavier Le Guevel**, *INSERM U1209/UGA/ CNRS UMR5309, Institut for Advanced Biosciences, La Tronche, France*
Development of gold nanoclusters for optical imaging in the shortwave infrared window
7. **Alena LIBANSKA**, *Institute of Macromolecular Chemistry, Czech Academy of Sciences, Prague, Czech Republic*
Delivery systems for treatment and diagnosis of inflammatory diseases
8. **Quentin MULLER**, *Laboratoire CNRS UPR3572, Immunology, Immunopathology and Therapeutic Chemistry (I2CT), Institut de Biologie Moléculaire et Cellulaire, Université de Strasbourg, Strasbourg, France*
Innervated and Vascularized Immunocompetent Human Tissue Engineering Skin to the Study of Cutaneous Neuroinflammation
9. **Raphaëlle QUILLET**, *UMR 7242 Biotechnology & Cellular Signaling, CNRS-University of Strasbourg, France*
The neuropeptide FF₁ receptor/rfamide-related peptide 3 system modulates nociception, opioid analgesia, inflammatory pain and luteinizing hormone release in rodents
10. **Sruthi Vijaya RETNAKUMAR**, *School of Biotechnology, University of Strasbourg, France*
Exploiting autophagy-lysosomal dysfunction as therapeutic target in inflammatory bowel diseases
11. **Caroline ROQUES**, *UTCBS Unité des Technologies Chimiques et Biologiques pour la Santé, UMR CNRS 8258 / Inserm U1022, Faculté de Pharmacie de Paris, France*
Vectors for Molecular Imaging and Targeted Delivery
12. **Roberto SILVA-ROJAS**, *Pathophysiology of Neuromuscular Diseases Team, Translational Medicine and Neurogenetics Department, Institut de Génétique et de Biologie Moléculaire et Cellulaire (IGBMC), 67400 Illkirch-Graffenstaden, France*
Reversal of the cellular phenotype of tubular aggregate myopathy (TAM) using a pharmacological approach

[List of 6th Barrande Biosciences Meeting participants.](#)