



Young Scientists Symposium

23rd - 24th May 2019

Conference programme

Thursday 23rd

8:15 – 8:45

REGISTRATION

8:45 – 9:00

WELCOMING TO THE YSS 2019
Rémi Fronzes

9:00 – 09:45

KEYNOTE: Sijbren Otto
How Functions Crucial To Life Emerge
Spontaneously From Chemical Networks
Chair: Antoine Amestoy

9:45 – 10:45

Session 1: Oncology
Chair: Christelle Liard (Siric Brio)

10:45 – 11:15

COFFEE BREAK
IECB Hall

11:15– 12:45

Session 2: Structural Biology
Chair: Gaëlle Lamon

12:45 – 13:30

LUNCH
IECB Hall

13:30 – 14:15

Poster session (odd number)
IECB Hall

14:15 – 15:45

Session 3: Biochemistry
Chair: Mayara Del Cistia

15:45 – 16:15

COFFEE BREAK
IECB Hall

16:15 – 18:0

Career session
Chairman: Antoine Amestoy

18:00 – 19:00

COCKTAIL

Friday 24th

9:00 - 9:30

REGISTRATION

9:30 - 10:15

KEYNOTE: Marina Kuimova
Mapping microscopic viscosity and temperature
using molecular rotors
Chair: Jorge GONZALEZ GARCIA

10:15 - 10:45

COFFEE BREAK
IECB Hall

10:45 - 11:30

Session 4: Spectroscopy
Chair: Antoine Scalabre

11:30 - 12:15

Session 5: Pharmacology
Chair: Pauline Pony

12:15 - 13:00

LUNCH
IECB Hall

13:00 - 13:45

Poster session (even number)
IECB Hall

13:45 - 14:45

Session 6: Methods
Chair: Ghita Touti

14:45 - 15:30

Session 7: Chemistry
Chair: Mayara Del Cistia

15:30 - 16:00

COFFEE BREAK
IECB Hall

16:00 - 16:45

KEYNOTE: Carlos Lodeiro
Translational Chemistry in Biochemical and
Environmental Applications: NanOmics and
NanoMet
Chair: Antoine Scalabre

16:45 - 17:15

Closing remarks and awards

Session 1: Oncology

9:45

Study of the microbial effect on cancer development and the molecular mechanisms involved

Leire Aparicio-Fernandez, University of the Basque Country UPV/EHU, Fungal and Bacterial Biomics Research Group, LEIOA, Spain

10:00

Validation of EZH2 as therapeutic target for infiltrating glioma of the brainstem: pharmacological and genetic approaches

Farah Rahal, University of Bordeaux, Inserm U1035, Bordeaux, France

10:15

Study of Immuno-oncogenic Functions of Meprin α and Evaluation of New Therapeutic Pathways in Hepatoblastoma

Malak Alannan, University of Bordeaux, Inserm U1035, Bordeaux, France

10:30

Development of 3D multicellular tumor spheroids for the study of bio- interaction with nanoparticles. Tumorigenesis models.

Tarek Sayde, EA3842, CAPTuR, Faculty of Medicine, Limoges, France

Session 2: Structural Biology

11:15 Understanding the late maturation steps of the eukaryotic ribosomal small subunit biogenesis (pre-40S)

Finaritra Raelijaona, "RNA: Natural and Artificial Regulations" (ARNA), INSERM U1212 - CNRS UMR 5320 – University of Bordeaux

11:30 Molecular mechanisms behind remorin nanodomain formation by solid-state NMR

Anthony Legrand, CBMN UMR 5248, Pessac

11:45 Nanodomain targeting by the bacterial membrane protein ZipA investigated by solid-state NMR

Arpita Tawani, Institut Européen de Chimie et Biologie (CNRS UMR 5248, Université de Bordeaux), 33600 Pessac, France

12:00 Roles of loop in quadruplex nucleic acids

Mingpan Cheng, ARNA Laboratory, Inserm U1212, CNRS UMR5320, IECB, Université de Bordeaux, F-33607 Pessac, France

12:15 Ornithine capture by a translating ribosome controls bacterial polyamine synthesis

Alba Herrero del Valle, Institut Européen de Chimie et Biologie, Univ. Bordeaux, Institut National de la Santé et de la Recherche Médicale (U1212) and Centre National de la Recherche Scientifique (UMR 5320), Pessac 33607, France.

12:30 NMR Structure and hnRNP A1 protein binding studies of a G-Quadruplex Forming Sequence Within the KRAS Proto-Oncogene Promoter Region

Julien Marquevielle, European Institute of Chemistry and Biology (IECB), INSERM U1212 - CNRS UMR 5320, University of Bordeaux, France.

Session 3: Biochemistry

14:15 Interaction properties of aromatic oligoamide foldamers with protein surfaces via an anchoring approach

Krishnendu Maji, CBMN (UMR5248), Pessac, France

14:30 Characterization of poly(acrylamide-co-acrylic acid) hydrogels stress relaxation to direct osteogenic differentiation of mesenchymal stem cells

Emilie Prouvé, Laboratoire d'ingénierie de surface (LIS), Centre de recherche du CHU de Québec, Université Laval, Québec, Canada

14:45 Production of fumagillin by the pathogenic fungus *Aspergillus fumigatus* and its effects on different cell lines

Uxue Perez-Cuesta, Fungal and Bacterial Biomimics Research Group, Department of Immunology, Microbiology and Parasitology, Faculty of Science and Technology, University of the Basque Country (UPV/EHU), Leioa, Spain.

15:00 PIAMV/Arabidopsis pathosystem for studying Remorins and membrane nanodomains in potexvirus cell-to-cell movement.

A. F. Deroubaix, UMR 5200, Laboratoire de Biogenèse Membranaire, CNRS - Université de Bordeaux, CS 20032, 33140 Villenave d'Ornon Cedex France

15:15 Prevalence of Rheumatoid Arthritis in the Middle Ages: An example of gender inequality

Nerea G. Ventades, Department of Genetics, Physical Anthropology and Animal Physiology, Faculty of Science and Technology, University of the Basque Country (UPV/EHU), Barrio Sarriena s/n 48940, Leioa, Bizkaia, Spain

15:30 Design of Bioinspired pH-responsive Foldamers for Intracellular Delivery of Biomacromolecules

Mégane Bornerie, CBMN, UMR 5248, Univ. Bordeaux, Pessac, France

Session 4: Spectroscopy

10:45 Optically active flexible materials based on molecular assembly template chiral hybrid nanostructures

Shaheen Pathan, Chimie et Biologie des Membranes et Nanoobjets, (UMR5248 CBMN) CNRS – Université de Bordeaux - Bordeaux INP, France

11:00 Circularly polarized luminescence induced by chiral organogel based on L-glutamide

Kyohei Yoshida, Université de Bordeaux, Institut Polytechnique Bordeaux, Pessac, France

11:15 Tannic acid-derivatized graphitic carbon nitride quantum dots as fluorescent nanoprobe for ascorbic acid

Ojodomo J. Achadu, Molecular Imaging and Photonics Group (IPM) Institute of Moléculaire Sciences (ISM), University of Bordeaux, Talence, France

Session 5: Pharmacology

11:30

Identification of diagnostic targets of the fungal genus *Scedosporium* for the development of a serological test in cystic fibrosis patients

Leire Martin-Souto, Fungal and Bacterial Biomics Research Group, Dept. of Immunology, Microbiology and Parasitology, University of the Basque Country, Leioa, Spain

11:45

Selective Targeting of Melanoma Biomarkers with DNA Aptamers

Shujaat Ali, ARNA Laboratory, Inserm U1212, CNRS UMR5320, University of Bordeaux, Bordeaux, France

12:00

Maternal consumption of piceatannol: prevention of neonatal hypoxia-ischemia brain damages

Benjamin Olivier, Centre RMSB – UMR 5536 – CNRS – Université de Bordeaux – Bordeaux, France.

Session 6: Methods

Monitoring the dynamics of PTP on individual mitochondria

13:45

Camille Colin, Univ. BORDEAUX, ISM, CNRS UMR 5255, NSysA Group, ENSCBP, Pessac, France

Enrichment of edible oils by polyphenol-phospholipid complexation

14:00

Maria del Pilar, Garcia-Mendoza1 1Univ. Bordeaux, CNRS, Bordeaux INP, CBMN, UMR 5248, F-33600, Pessac, France

Measure the phosphate starvation responses in plankton using an integrated microfluidic device

14:15

Mathias Girault, Soft Micro Systems, Centre de Recherche Paul Pascal, CNRS

LC-MS/MS-based analysis of mRNA 5' cap metabolism and its analogs in cytoplasmic extracts of mammalian cells

14:30

Dominika Strzelecka, Division of Biophysics, Institute of Experimental Physics, Faculty of Physics, University of Warsaw

Session 7: Chemistry

14:45 Self-assembled macrocyclic thioether silver complexes in homogeneous catalysis
Zhen Cao, Institute of Molecular Sciences, Bordeaux University, 33405 Talence, France

15:00 Towards the Design and Synthesis of Multi-Stranded β -sheet foldamers.
Camille Perdriau, Université de Bordeaux, CNRS, CBMN UMR 5248, IECB, Pessac, France

15:15 Supramolecular asymmetric photochirogenesis of 2-anthracene carboxylate dimers in synthetic antibody and silica hybrid nanofibers
Wijak Yospanya, IMRAM, Tohoku University, Katahira 2-1-1, Aoba-ku, Sendai 980-8577, Japan.

POSTERS

P1	Structural study of ligands targeting C9orf72 G-quadruplex RNA involved in FTD/ALS diseases
P2	Techno-functional properties of fractions produced by a biorefinery scheme
P3	Implementation of bacterial expression systems for the detection of L-asparaginase activity in droplet-based microfluidics
P4	Genomic signatures of human adaptation to different environments in Cameroon (Africa) based on exome sequencing
P5	Studies on protein-ligand interactions by NMR techniques
P6	Towards the Design and Synthesis of Multi-Stranded β -sheets foldamers
P7	Light Driven Conformational Control of Aromatic Oligoamide Foldamer
P8	How to Design High-Activity G Quadruplex/Hemin DNazymes
P9	Impact of membrane lipid poly-unsaturation on Dopamine D2 receptor signaling pathway
P10	OPTIMIZATION OF A SPE – UHPLC – PDA METHOD FOR QUANTITATIVE ANALYSIS OF FUMAGILLIN IN CELL CULTURE
P11	Activity, structure, and orientation of Bilirubin oxidase immobilized on electrodes followed by electrochemistry and FTIR
P12	Expression and purification of bacterial membrane protein wt-ZipA toward structural Analysis by solid-state NMR
P13	Production of labeled inner rod of the Type 3 Secretion System for solid state NMR analysis
P14	Self-assembling and free-radical generation of phospholipids derived from analogues of Vitamin B2
P15	Chiral helical nanocatalysts based on Keggin polyoxometalates species for enantioselective oxidation reactions
P16	FRET-based sensitized molecular systems for two-photon induced photorelease of carboxylic acids
P17	Light-up Aptasensors to detect mi RNA precursors