# Bio3Pharm French -Portuguese Symposium

## From molecular biosciences to therapies September 13-15 > 9am-5pm

European Institute of Chemistry and Biology, Pessac















## Bio3Pharm - French-Portuguese symposium

on Biomaterials, Biomolecules, Biophysics and Pharmaceutical sciences: From molecular biosciences to therapies in partnership with: Polytechnic Institute of Guarda – University of Beira Interior – ULisboa September 13–15th, 2023 – IECB, 2 Rue Robert Escarpit, 33600 Pessac

Wednesday, September 13th	Thursday, September 14th	Friday, September 15th
10:00 - 10:30 Participants arrival	Session 2. BIOMOLECULES Chaired by Dr Salgado (IECB)	Session 4. PHARMACEUTICS Chaired by Dr Barthelemy (ARNA)
	9:00 Conferences Cameron MACKERETH - Research Director IECB	9:00 Conferences  Jeanne CHAIN - Researcher ARNA Lab
10:30 Opening ceremony	Carla CRUZ - Professor in Chemistry - Health Sciences UBI	Andre MOREIRA - Professor in Biochemistry - IPG
Philippe BARTHELEMY - Director ARNA Lab - INSERM	10:15 Coffee break	10:15 Coffee break
11:00 Plenary conferences	10:45 - Conferences	10:45 - Conferences
Chair : Gilmar SALGADO	Samir AMRANE - Researcher IECB	Edouard BADARAU - Associate Professor in Medicinal Chemistry CBMN
Associate Professor in Chemistry and Biology - IECB	Alexandra PAULO - Professor in Medicinal Chemistry Faculty of Pharmacy - Ulisboa	Paula COUTINHO - Professor in Bioscience and Biotechnology School of Health IPG
<b>Keynote:</b> Gilles GUICHARD Director of the Sciences and Technologies Department - CNRS	11:30 - 12:30 Oral presentations	11:30 - 12:45 Oral presentations
	Coralie ROBERT - PhD in Chemistry and physics	Faith KIVUNGA- PhD in Chemistry and technology for life
	Marie-Lise JOBIN - Postdoctoral researcher	Tristan GIRAUD - Postdoctoral researcher
	Israa ALJNADI - PhD in Medicinal Chemistry - Ulisboa	Ana Filipa NUNES - MSc IPG
	Joana FIGUEIREDO - PhD in Chemistry - UBI	Adrien DENIZET - PhD in Organic chemistry
12:00 - 13:30 Lunch	12:30 - 14:00 Lunch	Jorge LOUREIRO - PhD Natural Resources Potential and Innovation Centre - IPG
Session 1. BIOMATERIALS - Chaired by Dr Le Nihouannen (BioTis)	Session 3. BIOPHYSICS Chaired by Dr Habenstein (CBMN)	12:45 Closing ceremony
13:30 Conferences	14:00 Conferences	
Joelle AMEDEE - Research Director BioTis & Nicolas L'Heureux - Research Director INSERM	Isabel ALVES - Research Director CBMN	
Maximiano P. RIBEIRO - Professor in Biomaterials - IPG	Hugo A.L. FILIPE - Researcher CPIRN-IPG	
15:15 Coffee break	15:15 Coffee break	
15:45- 17:00 Oral presentations	15:45 - 16:45 Oral presentations Loïc DELCOURTE- PhD in Chemistry	
Gaëtan ROUDIER PhD in Cell Biology and Physiopathology Ana Rita RAFAEL - MSc IPG	Léon REMBOTTE - PhD in Chemistry	
Francisca BARBOSA - MSc IPG	André MIRANDA - PhD in Biochemistry - UBI	
Justine COUVEZ - PhD in Organic Chemistry	Caique D'ANGELO - MSc IPG	
Otilia GONCALVES - MSc IPG	17:00 Cocktail	





#### Bio3Pharm

### From molecular biosciences to therapies

( in partnership with Polytechnic Intitute of Guarda-University of Beira Interior - ULisboa ) Sep 13-15th 2023

#### Wednesday, September 13th

#### Session 1. BIOMATERIALS Chaired by Dr Damien Le Nihouannen (BioTis)

Biomaterials and innovation in tissue engineering

Biomaterials for skin regeneration

Development and first use of a completely biological thread-based vascular graft as an arteriovenous shunt in sheep

Characterization extracellular vesicles derived from prostate cancer cells

3D Printing materials for microchip engineering

Nanovectors for temperature- and light-activated release of therapeutic agents and monitoring by magnetic resonance imaging

Biomaterials for cell encapsulation

#### Thursday, September 14th

#### Session 2. BIOMOLECULES Chaired by Dr Gilmar Salgado (IECB)

Molecular study of RNA binding by splicing factor domains

Bioinspired nucleic acids G-quadruplexes

G-quadruplex structures in HIV-1

How can we selectively target oncogene promoter G4s with drug-like small molecules?

Atomic scale study of grapevine dieback by Nuclear Magnetic Resonance spectroscopy

Illuminating the plasma membrane: Innovative imaging microscopy techniques for investigating the membrane receptor dynamics

Development of G4-helicase interaction inhibitors for cancer therapy

G-quadruplex and small molecules: A dual approach for anticancer strategy

#### Session 3. BIOPHYSICS Chaired by Dr Birgit Habenstein (CBMN)

The role of the lipid environment in GPCR activity: in vitro and in cellulo approaches

Molecular Dynamics simulations: from model systems to biotechnological applications

Architecture of a bacterial signalosome revealed by magic-angle spinning NMR-based integrative structural biology

Acoustic sorting of spheroids using fast image processing

Non-canonical secondary structures in B-MYB proto-oncogene: a biophysical overview

Green Synthesis of silver nanoparticles

#### Friday, September 15th

#### Session 4. PHARMACEUTICS Chaired by Dr Philippe Barthelemy (ARNA)

Aptamers for Drug delivery Systems: more than targeting agents

Gold-Based Nanomaterials for Cancer Therapy

Algae-based therapeutics systems

Lipid Conjugated Oligonucleotides for Anticancer Therapeutic Application

ATP-responsive aptamers for liposome controlled release

Colorwound: the history behind an entrepreneur program

Total synthesis of Securinega alkaloids and study of their biological activities

Polymeric Nanoparticles for drug delivery