

13:00 The effect of a modified LDL, called electronegative LDL, on cardiomyocytes.

Sonia Benítez (IIB Sant Pau; CIBERDEM, Barcelona, Spain)

13:30-14:30 Lunch time

IV Session (Cell Biology and Physiopathology/ Signalling in Cardiovascular Disease)

Chairpersons: Jose Luis Sánchez Quesada and Noemi Rotllan

14:30 Endothelial cell homeostasis in response to shear stress.

Muriel Laffargue (INSERM, Toulouse, France)

15:00 Genomic studies to inform cardiovascular disease.

Maria Sabater (IIB Sant Pau, Barcelona, Spain)

15:30 PCSK9: A Role below lipid lowering.

Maria Borrell (IIB Sant Pau; CIBERCV, Barcelona, Spain)

16:00 PCSK9 inhibitors alter the distribution of macrophage-derived cholesterol efflux to familial hypercholesterolemia lipoproteins and promote in vivo macrophage-specific reverse cholesterol transport.

Carla Borràs (IIB Sant Pau; CIBERDEM, Barcelona, Spain)

16:15-16:45 Coffee break

16:45 Lipidomics analysis on plasma HDL, LDL, and VLDL purified from atherosclerotic patients with advanced carotid lesions.

Antonio J Lapedda (University of Sassari, Italy)

17:00 Extraction, characterization, and in vitro anticoagulant activity of acidic glycans purified from marine invertebrates.

Giovanni Nieddu (University of Sassari, Italy)

18:00 LIAC Meeting

21:00 Gala Dinner

SATURDAY (October 7th, 2023)

Visit to CAVA in Sant Sadurni d'Anoia

Scientific Organizing Committee

Brigida Bochicchio

(University of Basilicata, Potenza, Italy)

Vicenta Llorente Cortes

(CSIC-IIB Sant Pau; CIBERCV, Barcelona, Spain)

Joan Carles Escolà

(IIB Sant Pau; CIBERDEM, Barcelona, Spain)

Noemi Rotllan

(IIB Sant Pau; CIBERDEM, Barcelona, Spain)

José Luís Sánchez Quesada

(IIB Sant Pau; CIBERDEM, Barcelona, Spain)

José Guerra

(IIB Sant Pau; CIBERCV, Barcelona, Spain)

Lina Badimon

(IIB Sant Pau; CIBERCV, Barcelona, Spain)

Cristina Rodríguez

(IIB Sant Pau; CIBERCV, Barcelona, Spain)

Venue: IIB Sant Pau - Conference Room of the 11th pavillion (antic Convent)
c/Sant Antoni M Claret 167
08025 Barcelona



L.I.A.C

Latinorum Investigatorum
de Arteriis Colloquium

The Latin Society for Vascular Research



**XXXVIII Latinorum
Investigatorum de
Arteriis Colloquium
Research Symposium**

**4th - 7th October 2023
Barcelona (Spain)**

WEDNESDAY (October 4th, 2023)

16:00 OPENING SESSION "Science and Philosophy"
Antonio Mario Tamburro Inaugural Lecture:
Kiss and Run and Social Contacts in Health and Disease.
Carles Enrich (University of Barcelona, Barcelona, Spain)

17:00 Visit "Recinte Modernista Sant Pau Barcelona"

18:30 Wine and Cheese Battle at the entrance of the Pavillion 11th "antic Convent"

THURSDAY (October 5th, 2023)

09:00 IIB Sant Pau Inaugural Lecture
The influence of elastin on vascular cell phenotypes during vessel wall development.
Robert Mecham (Washington University School of Medicine in St.Louis, USA)

I Session (Biomaterials and tissue engineering)

Chairpersons: Valerie Samouillan and Vicenta Llorente.

10:00 Hyaluronan-elastin based scaffolds in vascular tissue engineering: A chemical Approach.

Antonio Laezza (University of Basilicata, Potenza, Italy)

10:30 Elastin-silk based material.

Raul Machado (University of Minho, Portugal)

11:00 Coffee break

11:30 Tissue adhesives based on elastin-like recombinamers.

Sergio Acosta (G.I.R. BIOFORGE, University of Valladolid, Spain)

12:00 Supercharged elastin-like polypeptides with bactericidal properties.

Maria Puertas (G.I.R. BIOFORGE, University of Valladolid, Spain)

12:30 Bioadhesive microcapsules a new cellular treatment for the diffuse cartilage lesions.

Desiré Venegas (G.I.R. BIOFORGE, University of Valladolid, Spain)

12:45 Characterization and validation of the chimeric resilin-elastin-fibroin bioinspired polypeptide as biomaterial for regenerative medicine.

Antonio Vico (G.I.R. BIOFORGE, University of Valladolid, Spain)

13:00 - 14:00 Lunch time

II Session (Biomaterial and Tissue Engineering)

Chairpersons: Brigida Bochicchio and José Carlos Rodríguez Cabello

14:00 Morphological aspects and mechanisms of aging of vascular elastic fibers as revealed by early and recent technological advances - A critical overview.

Michel Spina (Padua University, Italy)

14:30 Textile-reinforced elastin-like recombinamers as a platform for cardiovascular implants.

Alicia Fernández (RWTH Aachen University, Germany)

15:00 Improvement of the aorta elastic properties by a synthetic elastic protein in elastin-haploinsufficient mice.

Gilles Faury (University of Grenoble, France)

15:30 Tissue engineered vessels as tridimensional model for biomechanical in vivo studies.

Èlia Bosch Rué (IIB Sant Pau, Barcelona, Spain)

16:00 Coffe break

16:30 Bioconjugation of carbohydrates to gelatin sponges as improved scaffolds for 3D cell cultures.

Antonietta Pepe (University of Basilicata, Italy)

17:00 3D printing and modelling in Cardiology.

Abdel Hakim Moustafa (IIB Sant Pau, Barcelona, Spain).

17:15 Exploring the interactions of elastin peptides with model membranes by numerical simulations

Manon Ragouilliaux (Reims Champagne-Ardenne University, France)

17:30 Effect of electrostatic interactions on protein coacervates based on elastin-like recombinamers.

Julio Fernández (G.I.R. BIOFORGE, University of Valladolid, Spain)

17:45 In vitro and in vivo evaluation of ELR-based membrane as wound dressing.

Diana Juanes (G.I.R. BIOFORGE, University of Valladolid, Spain)

FRIDAY (October 6th, 2023)

III Session (Cardiovascular Signalling and Modeling)

Chairpersons: Joan Carles Escolà and Sonia Benítez

09:00 Physical and biochemical alterations of heart tissues and lipoproteins induced by hypercholesterolemia; inhibitory effects of the LRP1-based immunotherapy.

Valerie Samouillan (Paul Sabatier University, Toulouse, France)

09:30 Unveiling at nanoscale the elasticity of individual aortic fiber during ageing and pathophysiological conditions: role in aortic stiffness.

Laurent Duca (Reims Champagne-Ardenne University, France)

10:00 Ultrastructural and immunohistochemical detection of hydroxyapatite nucleating role by rRNA and nuclear chromatin derivatives in pro-calcific aortic valve interstitial cell cultures and ex vivo mineralized valve leaflets.

Antonella Bonetti (University of Udine, Italy)

10:30 Targeting cholesteryl ester accumulation in the heart improves cardiac insulin response.

Aleyda Benitez (CSIC, Barcelona, Spain)

11:00 Novel pharmacological approaches in abdominal aortic aneurysm: Insights from NR4A3 transgenic mice.

Cristina Rodríguez (IIB Sant Pau; CIBERCV, Barcelona, Spain)

11:30 Coffee break

12:00 Targeting RhoA isoprenylation and signalling: the cardioprotective power of statins beyond lipid lowering

Gemma Vilahur (IIB Sant Pau; CIBERCV, Barcelona, Spain)

12:30 Novell therapeutic inhibition of miRNAs in an atherosclerosis pre-clinical model.

Noemi Rotllan (IIB Sant Pau; CIBERDEM, Barcelona, Spain)