



escola  
de ciências  
e tecnologias  
da saúde



# XXXI LIAC Meeting on Vascular Research

Lisboa, 9-12 September 2015

ULHT, Av Campo Grande, 376 1749-024 Lisboa

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## Scientific Programme

### Wednesday, 9 September

Time	
17.00 – 18.00	Opening desk – welcome and documentation

### *OPENING SESSION*

#### **Antonio Tamburro conference: *The Symphony in Portugal***

Alexandre Delgado, The Center for Information and Research on Portuguese Music, Lisboa Portugal

18.00 – 19.00

Alexandre Delgado was born in Lisboa, in 1965 and develops his work in music as an interpreter (violin) and as a composer. His extraordinary career has many landmarks. It includes a varied formation as a student, at the National Conservatory of Music, several scholarships and masterclasses, and many distinctions, namely the prize "Young Musicians" (1987) and the prize "João de Freitas Branco" (1992). His work as a composer includes several instrumental and orchestral pieces and, more recently, two operas. Alexandre Delgado actually develops an intense social activity within his expertise area, as a cultural promoter (national radio, television) but also as a critic as well, being thoroughly recognized as one of the most notorious and prestigious studios of Portuguese chamber and orchestral music.

19.00 – 20.00

Lisboa's Wine & Cheese battle

## Thursday, 10 September

### SESSION 1. MOLECULAR AND SUPRAMOLECULAR STRUCTURE

*Chairman: Alain-Pierre Gadeau*

Time	Speaker	Institute
9.00 – 9.45	<b>Keynote Lecture 1. Sylvie Ricard-Blum</b> The collagens: tissue designers and regulator of biological processes	U Lyon
9.45 – 11.00	<b>Free communications</b>	
	<b>Brigida Bochicchio.</b> Molecular and Supramolecular Structure of glycopeptides as scaffolds in tissue engineering	U Basilicata
	<b>Vicenta Llorente-Cortés.</b> Domain CR9 of Low-Density Lipoprotein Receptor-Related Protein 1 (LRP1) Is Critical for Aggregated LDL-Induced Foam Cell Formation from Human Vascular Smooth Muscle Cells	CSIC-ICCC (Barcelona)
	<b>Zeinab El Dirani.</b> Beneficial effects of physical training on the vascular dysfunction induced by intermittent hypoxia	U Libanaise
	<b>J Leal Monedero.</b> Protocols for studying Pelvic Venous Pathology	Hospital Rúber Internacional (Madrid)
11.00 – 11.45	<b>Coffee break + Session with Posters 01 and 02</b>	

11.45 – 12.30	<b>Keynote Lecture 2. Valerie Samouillan</b> Scanning of the supramolecular organization of the proteins of the extracellular matrix by biophysical techniques	U Toulouse
13.00 – 14.30	<b>Lunch</b>	

### SESSION 2. CELL BIOLOGY AND SIGNALING

*Chairman: Michel Spina*

Time	Speaker	Institute
14.30 – 15.15	<b>Keynote Lecture 3. Vicente Andrés</b> Role of A-type lamins in aging and cardiovascular disease	CNIC (Madrid)
15.15 – 16.15	<b>Free communications</b>	
	<b>Alain Gadeau.</b> Down regulation of hedgehog signaling in nerves and myocytes contributes to the impaired ischemic muscle repair in elderly	INSERM U1034, Bordeaux
	<b>Cristina Sena.</b> Sulforaphane supplementation improves vascular dysfunction in type 2 diabetes	IBILI, U Coimbra
	<b>Cristina Sena.</b> Cross talk between perivascular adipose tissue and endothelial dysfunction associated with obesity	IBILI, U Coimbra
16.15 – 17.00	<b>Coffee break + Session with Posters 03 and 04</b>	
	<b>Filipe Paula.</b> Notch signaling in the endothelial dysfunction of systemic sclerosis	UN Lisboa
	<b>Pascal Maurice.</b> Elastin-derived peptides in thrombosis: friend or foe?	UMR CNRS/URCA 7369, Reims
17.45	<b>CLOSURE SESSION</b>	

## Friday, 11 September

### SESSION 3. BIOMATERIALS AND TISSUE ENGINEERING

*Chairman: Brigida Bochicchio*

Time	Speaker	Institute
<b>Keynote Lecture 5. Livia Visai</b>		
9.00 – 9.45	Self-renewal of Human Pluripotent Stem cells can be maintained by nanofiber composite in three-dimensional hydrogel scaffolds	U Pavia
9.45 – 11.00	<b>Free communications</b>	
	<b>Gabriele Corsaro.</b> Neoglycosylation of elastin: a novel material for regenerative medicine	U Milano-Bicocca
	<b>Michel Spina.</b> Removal of alpha-Gal xenogenic barrier from bioprosthetic heart valve substitutes for improvement in cardiopathic patients life length and quality	U Padova
	<b>Ricardo Moreira.</b> Elastogenesis in a tissue-engineered heart valve specifically developed for the mitral position	RWTH Aachen University
11.00 – 11.45	Coffee break + Session with Posters 05 and 06	
<b>Keynote Lecture 6. Antonio D'Amore</b>		
11.45 – 12.30	Bi-layer polyurethane-extracellular matrix cardiac patch improves ischemic ventricular wall remodelling in a rat model	Pittsburgh U
13.00 – 14.30	Lunch	

### SESSION 4. INNOVATION AND TECHNOLOGY FROM DIAGNOSTICS TO THERAPEUTICS

*Chairman: Philippe Charpiot*

Time	Speaker	Institute
<b>Keynote Lecture 7. Laurent Riou</b>		
14.30 – 15.15	Clinical and experimental potential of the noninvasive quantification of myocardial perfusion entropy by nuclear imaging	U Grenoble
15.15 – 16.15	<b>Free communications</b>	
	<b>Carlota Saldanha.</b> Hemorheology and Vascular Diseases	IMM, U Lisboa
	<b>Eduardo Vilela.</b> Galectin 3 levels after running – a systematic review and perspective	Hospital Center of Vila Nova de Gaia/Espinho
	<b>Hugo Ferreira.</b> Physiological computing: using vascular signals for something completely different	IBEB, U Lisboa
16.15 – 17.00	<b>Coffee break + Session with Posters 07 and 08</b>	
<b>Keynote Lecture 8. Geoffrey Mitchell</b>		
17.00 – 17.45	Opportunities for Direct Digital Manufacturing in Vascular Research	PU Leiria, CDRSP
18.00	<b>CLOSURE SESSION</b>	

## Saturday, 12 September

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### SESSION 5. CLINICAL APPLICATIONS

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*Chairman: Vicenta Llorente-Cortés*

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Time	Speaker	Institute
9.00 – 9.45	<b>Free communications</b>	
	<b>Antonio J Leppeda.</b> Identification of differentially expressed proteins in atherosclerotic patients with type 2 diabetes	U Sassari
	<b>Henrique Silva.</b> Exploring the microcirculatory response to the 'passive leg raising' test - the effect of age	CBIOS, U Lusófona
	<b>Diogo Fonseca.</b> Endothelium-dependent vasoactivity of the human internal mammary artery: the influence of cardiovascular risk factors	FF, U Coimbra
9.45 – 10.30	<b>Coffee break + Session with Posters 09 to 12</b>	

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**Conclusion**

**CLOSURE SESSION**

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# Poster Communications

## **PC01. DENDRITIC CELLS TAKE PART TO EARLY AND LATE RESPONSE TO ISCHEMIC MYOCARDIAL INJURY**

*Paolo Romagnoli, Laura Pieri, Stefano Bacci, Beatrice Defraia, Gian Aristide Norelli, Aurelio Bonelli*

## **PC02. MICRORNA-CONTAINING MICROPARTICLES FROM VASCULAR SMOOTH MUSCLE CELLS ARE A POTENTIAL SOURCE OF BIOMARKERS**

*David de Gonzalo-Calvo, Ana Cenarro, Fernando Civeira; Vicenta Llorente-Cortés*

## **PC03. LASER DOPPLER FLOWMETRY (LDF) AS AN ALTERNATIVE TECHNIQUE TO EVALUATE PERFUSION RECOVERY ON A MURINE MODEL OF HIND LIMB ISCHEMIA**

*Henrique Silva, Alain-Pierre Gadeau, Marie-Ange Renault, Hugo Ferreira, M Julia Bujan, L Monteiro Rodrigues*

## **PC04. EXPLORING THE CUTANEOUS REACTIVITY TO LOCAL HEATING WITH THE WAVELET TRANSFORM – A PILOT STUDY**

*Henrique Silva, Hugo Ferreira, L Monteiro Rodrigues*

## **PC05. CRYOPRESERVATION OF BIOENGINEERED, DECELLULARIZED AORTIC VALVES DOES NOT COMPROMISE THEIR PROPENSITY TO REPOPULATION BY HOST CELLS AND TISSUE REMODELLING. GOOD AND LESS GOOD OUTCOMES.**

*Antonella Bonetti, Michele Gallo, Filippo Naso, Paolo Franci, Adolfo Paolin, Roberto Busetto, Michele Spina, Gino Gerosa, Fulvia Ortolani*

## **PC06. PROMISING THERAPY TO TREAT CHRONIC ISCHEMIC SKIN DEFECTS USING A HYDROXYL-FARNASINE DERIVATIVE POLYPHENOL WITH A POTENT NADPH OXIDASE INHIBITION ACTIVITY**

*Pascual G.; Mesa-Ciller C.; Sotomayor S.; Blanc-Guillemaud V.; García-Honduvilla N.; del Castillo E.; Buján J.*

## **PC07. PLACENTAL STRUCTURAL ALTERATIONS IN PREGNANT WOMEN WITH VARICOSE VEIN PATHOLOGY**

*Mesa-Ciller, C.; Álvarez-Rocha, MJ.; Asúnsolo, A.; Payá, P.; Cifuentes, A.; García-Honduvilla, N.; Buján, J.*

## **PC08. EXPLORING THE EFFECT OF POSTURE ON THE PERIPHERAL CUTANEOUS MICROVASCULAR RESPONSE TO THE TOPICAL APPLICATION OF METHYL NICOTINATE**

*Henrique Silva, Catarina Rosado, Hugo Ferreira, Joana Antunes, L Monteiro Rodrigues*

## **PC09. NAILFOLD CAPILLAROSCOPY CRITERIA FOR DISTINCTION OF PRIMARY AND SECONDARY RAYNAUD'S PHENOMENON**

*Marta C. Amaral, Filipe S. Paula, Joana Caetano, Isabel A. Ferreira, Susana Oliveira, J. Delgado Alves*

**PC10. APPLICATION OF PHOTOPLETHYSMOGRAPHY TO MONITOR HEART RATE**

*João Requicha, Clemente Rocha, Rui Assunção, Henrique Silva, Margarida Estudante, Luis Lobo, Luís Monteiro Rodrigues*

**PC11. DIFFERENT UPTAKE OF NATIVE VERSUS AGGREGATED LDL BY AORTIC VALVE INTERSTITIAL CELLS IN NORMOLIPIDEMIC-LIKE IN-VITRO CONDITIONS**

*Antonella Bonetti, Vicenta Llorente-Cortés, Alberto Della Mora, Magali Contin, Franco Tubaro, Maurizio Marchini, Fulvia Ortolani*

**PC12. TESTING TISSUE PROTECTIVE CAPACITIES OF PLANT EXTRACTS**

*Patrícia Rijo, Marisa Nicolai, Ana Sofia Fernandes, Luís M. Rodrigues*