

XXI SPB - National Congress of Biochemistry

Évora, 14-16 de outubro de 2021



XXI SPB CONGRESS BOOK

14-16 OCTOBER 2021

Évora

Colégio Espírito Santo, University of Évora



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Symposia
S1 – Molecular Mechanisms of Disease
S2 – Plant Cell Biology and Biotechnology
S3 – Toxicology and Environmental Biochemistry
S4 – Structural Biology and Molecular Modelling
S5 – SPB - SPN: Neurobiology of Aging and Stress
S6 – Functional Genomics and Systems Biology
S7 – Membranes and Cell Biophysics
S8 – SBBq - Proteins in Health and Environment
S9 – SEBBM - Chemical Biology, Drug Discovery and Development

Special Symposia
SS1 - Art, Biochemistry and Innovation in life sciences
SS2 - COVID-19 Special Session

Registration and Abstract Submission
3 of september 2021

Contacts:
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Plenary Lectures
Magali Cucchiari, SUMC, Hamburg, Germany
Biomaterial-guided gene therapy for cartilage repair
José M. Manzano, ZAUM - TUM, Munich, Germany
Allergy and Environment: the impact of climate change
João Laranjinha, CNC - FFUC, Coimbra, Portugal
The neurovascular-neurometabolic axis in aging and neurodegeneration
José Moura, FCT - UNL, Lisboa, Portugal
Artificial Enzymes

Invited speakers
Monzur Murshed, U. MacGill, Canada
Álvaro Tavares, U. Algarve
Ana Mata Duran, UEx, Spain
João Ramalho Santos, U. Coimbra
Ana Sousa, U. Aveiro
Maria João Bebbiano, U. Algarve
Elizabete Carmo-Silva, U. Lancaster, UK
Helena Carvalho, U. Porto
Miguel Castelo Branco, U. Coimbra
Tiago Gil Oliveira, U. Minho
António Canto, U. Évora
Ana Luísa Carvalho, U. Nova Lisboa
M. Rosário Domingues, U. Aveiro
Maria João Sarmento, U. Lisboa
Ricardo Louro, U. Nova Lisboa
Cecilia Arraiano, U. Nova Lisboa
Carmen Jerónimo, U. Porto

“TUNING BIOCHEMISTRY WITH LIFE SCIENCES AND SOCIETY”

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Biochemistry and Society: Biochemistry applied to Art and Heritage



Art & Biochemistry

Caldeira A.T., Martins M.R., Salvador C., Arantes S., Bhattacharya S., Palma V., Silva I.

Established in 2009, the HERCULES Lab is a research infrastructure from the University of Évora, devoted to the study and valorisation of cultural heritage, focusing on the integration of physical and material sciences methodologies and tools in interdisciplinary approaches.

Nowadays, the laboratory researchers are engaged in the material and historical study of different cultural heritage artifacts, namely, archaeological artifacts (ceramics, glass, metals, organic materials), art objects (easel paintings and polychrome sculpture, metals, historical textiles, ancient manuscripts), and built heritage (mortars, stone, mural paintings and glazed tiles).

Biochemical approaches are being used to study of the biodegradation processes of the materials used to produce artistic artifacts led to the development of novel biotechnology-based products used for identification of bio-contaminants and for materials conservation, that you can find in this exposition.

Let's get the bones "talking"!

Teresa Fernandes and Célia Lopes

Laboratory of Biological Antropology

Human skeletons constitute the most direct and trustworthy testimony of the populations that preceded us. In fact, they contain a great deal of information about the ways of life, the type of diet and the impact of pathogens and chronic diseases on the living and health patterns of populations in the past.

Today, the study of skeletons allows, after the usual macroscopic analyses, the use of molecular biology and biochemical techniques for a more detailed analysis. Examples of this action are the use of collagen to calculate isotopic ratios or the analysis of peptides, which are fundamental in the reconstitution of diets, or the use of ancient DNA for attributing the aetiology of some diseases.

The exhibit illustrates some of the ways in which neoplastic, metabolic, and infectious diseases can reach bone tissue.