

CIÊNCIAS RESEARCH DAY 2020

POSTER SESSION

28 October 2020

BloISI | Instituto de Biosistemas e Ciências Integrativas

Malate Quinone oxidoreductase (Mqo) from *Staphylococcus aureus*: preliminary data

A. Barreto, A.P. Refojo, M.M. Pereira

N-terminal phosphorylation of huntingtin exon 1: liquid-liquid phase separation and aggresome formation in mammalian cells

Andrea Quezada, D. Kovalchuk, F. Herrera

Ataxia related protein saccin knockout disrupts the intermediate filaments network in glial cells

F. Murtinheira, M.B. Costa-Teixeira, R. Letra-Vilela, C. Valente, A. Oliva, F. Herrera

CRISPR-based assessment of SIGRAS10 function during tomato fruit development and ripening

Flávio Soares, D. Pimentel, C. Neves, R. Amaro, D. Lecourieux, A. Granell, A.M. Fortes

Zinc Binding to Tau Influences Aggregation Kinetics and Oligomer Distribution

G.G. Moreira, J.S. Cristóvão, V.M. Torres, A.P. Carapeto, M.S. Rodrigues, C. Cordeiro, I. Landrieu, C.M. Gomes

The S100B Alarmin Is a Dual-Function Chaperone Suppressing Amyloid- β Oligomerization through Combined Zinc Chelation and Inhibition of Protein Aggregation

J.S. Cristóvão, **A.J. Figueira**, A.P. Carapeto, M.S. Rodrigues, I. Cardoso, **C.M. Gomes**

Functional Recovery of a GCDH Variant Associated to Severe Deflavinylation - Molecular Insights into Riboflavin Supplementation in GA-I Patients

J.V. Ribeiro, C.M. Gomes, B.J. Henriques

Development of 3D epidermal models to understand saccin function in the skin

M.B. Costa-Teixeira, F. Murtinheira, S. Lopes-Ventura, F. Herrera, A. Oliva

Post-translational modifications modulate STAT3 cellular distribution

M. Diallo, R. Letra-Vilela, D. Martins-Alves, F. Herrera

How mycorrhizas alter the metabolic profile of host tree roots. The ectomycorrhizas of cork oak and *Pisolithus tinctorius*

Mónica Sebastiana, F. Monteiro, A. Figueiredo, M. Silva, A. Ferreira, A. Ponces, C. Cordeiro, M. Maia, R. Nascimento, R. Malhó, J. Sardans, J. Penuelas

Eco-Friendly coatings against multiresistant bacteria

O. Ferreira, **E.R. Silva**

Speeding-up the identification of membrane PAINS with a new computational approach

Pedro R. Magalhães, P. Reis, D. Vila-Viçosa, M. Machuqueiro, **B.L. Victor**

Oxidized S100B modulates its chaperone activity against A β aggregation

Romina Coelho, C. Cordeiro, A.M. Grabrucker, C.M. Gomes

Effect of post-translational modifications on the behavior of stimulated STAT3-GRIM19 heterodimers

Ricardo Letra-Vilela, B. Cardoso, F. Murtinheira, M. Diallo, F. Herrera

=====

cE3c | Centro de Ecologia, Evolução e Alterações Ambientais

Ratio between contagion probability and resistance genes loss rate is key for the emergence of a positive correlation between the diversity of virulence and antibiotic-resistance genes

Célia P.F. Domingues, J.S. Rebelo, T. Nogueira, J. Pothier, F. Monteiro, F. Dionisio

Emission scenarios in IPCC Reports 1990-2020

Jiesper S. Tristan Pedersen

How the measures imposed due to COVID-19 influence the human microbiome?

João S. Rebelo, C.P.F. Domingues, F. Dionisio, A. Botelho, T. Nogueira

Long life of persistent cells –faults and errors resulting in a power-law decay

João S. Rebelo, C.P.F. Domingues, F. Monteiro, T. Nogueira, F. Dionisio

Does boat noise affects Lusitanian toadfish reproduction?

Paulo J. Fonseca, M. Vieira, M.C.P. Amorim

=====

CEAUL | Centro de Estatística e Aplicações da Universidade de Lisboa

Statistical methods for the study of extracellular vesicles content and their potential as biomarkers of multiple myeloma aggressiveness

Carolina Pestana, L. Sousa, E. Carneiro, B. Ferreira, F. Barahona, J. Caetano, R. Lopes, C. João

The role of Statistics in fighting COVID: CEAUL's contributions

Raquel Correia, S. Pereira, S. Bashir, T. Marques, L. Sousa

=====

CFCUL | Centro de Filosofia das Ciências da Universidade de Lisboa

A Investigação no Centro de Filosofia das Ciências da Universidade de Lisboa

João L. Cordovil

=====

CIUHT | Centro Interuniversitário de História das Ciências e Tecnologia

Monastic Enclosures at the National Library

Ana Duarte Rodrigues

Einstein, Eddington and the 1919 total solar eclipse: Two memorable expeditions prepared in times of pandemic

Ana Simões

Rethinking nationalism: the propaganda against cancer of the Portuguese Institute of Oncology in the 1930s and 1940s

Beatriz Medori

Matters of containment

Celia Meirelles

Tomar and Water: morphological interpretation and its interrelations with water devices

Clara Marques

Documenting biodiversity | a time travel through citizen science in Portugal

Cristina Luís

Eucalyptus for malaria prophylaxis

Ignacio García-Pereda

The New Lisbon Lazaretto (1860-1910). In-between architecture and science.

José Avelãs Nunes

The strength of the tide in Seixal – Tagus estuary

Patrícia Monteiro

Almada Negreiros on Display

Pedro Freitas

Unveiling the scientific and historical value of a colonial botanical collection of the herbarium of University of Porto

Sofia Viegas

=====

CMAFciO | Centro de Matemática, Aplicações Fundamentais e Investigação Operacional

Models for the Hop-constrained Steiner Tree Problem

Bernard Fortz, L. Gouveia, P. Moura

ManiFEM a free C++ library for meshes and finite elements on manifolds

Cristian Barbarosie, A.-M. Toader, S. Lopes

The Consistent Travelling Salesman Problem in Healthcare Scheduling

Mafalda Ponte, L. Gouveia, A. Paias

Stability for a Periodic Delay Hematopoiesis Model with Impulses

Teresa Faria, J.J. Oliveira

=====

CQE Ciências | Centro de Química Estrutural

Glucosylpolyphenols with potential to change the paradigm in Alzheimer's disease therapeutics: synthesis, inhibition of A β -induced Fyn activation and Tau phosphorylation

Ana M. de Matos, A.P. Rauter

Synthesis of nanoporous carbon materials

Ana Mestre, A.P. Carvalho

Metallo drugs for cancer therapy: challenges and expectations

Andreia Valente, T.S. Morais, L. Côte-Real, A.I. Tomaz, M.J. Brito, M.H. Garcia

Corrosion inhibition of AA2024-T3 using anodic films containing tannic acid and gallic acid

Carla. Sofia Proença, B. Serrano, A.M. Cabral, M.E.M. Araújo, J. Correia

Materiais de limpeza a seco em superfícies de emulsão acrílica não envernizadas

Cátia S. Gonçalves, A. Bailão, M.E. Araújo

Developing building blocks for automatic assembly of Trypanosomatidae surface glycans

Eduardo C. de Sousa, A.P. Rauter

Fighting multi-drug resistant tuberculosis: paving the way with different approaches.

Filomena Martins, J. Marquês, C. Faria, S. Santos, M. Soledade Santos, R.F. de Almeida

Alzheimer's disease: exploring GalNAc mimetics towards binding affinity to A β and Prion
João M. de Barros, A.P. Rauter

Valorization of sugars obtained by liquefaction of lignocellulosic materials
Luciana Barbosa da Silva, A. P. Rauter

Novel nucleos(t)ide analogs of potential therapeutic interest
Nuno M.R.M. Xavier

Study of VOCs emissions from leaves of the main four Portuguese tree species through
headspace microextraction techniques in extreme fire conditions
Oriana Gonçalves, N.R. Neng, J.M.F. Nogueira

High throughput bar adsorptive microextraction (HT-BA μ E): Parallel microextraction of
ketamine and norketamine from up to 100 urine samples simultaneously
Samir M. Ahmad, N.R. Neng, J.M.F. Nogueira

Designing new nucleoside-based butyrylcholinesterase inhibitors
Vasco Cachatra, A.P. Rauter

Nanomaterials for environmental remediation and sensing
Virgínia Ferreira

=====

IA | Instituto de Astrofísica e Ciências do Espaço

Modelling the Universe with Machine Learning
António da Silva

Better Science Through an Enhanced User Interface with the ALMA Archive - Powering
metadata-driven queries
António Dias, I. Matute, S. Madeira, C. Pappalardo, J. Afonso

Cloud tracking technique and Akatsuki's space-based observations in ultraviolet
Daniela Espadinha, P. Machado, J. Peralta, J. Silva, G. Gilli, R. Gonçalves, M. Silva, F. Brasil

Studying the Dynamics and Variability of the Upper Atmosphere of Venus using a General Circulation Model

Diogo Quirino, G. Gilli, V. Silva, S. Lebonnois

Gravitational waves and electrodynamics: new perspectives

Francisco Cabral, F.S.N. Lobo

Atmospheric Gravity Waves: with Venus GCM simulations and Venus Express VMC data

Francisco Brasil, P. Machado, J. Peralta, G. Gilli, J. Silva, D. Quirino, D. Espadinha

Studying global dust storms on Mars using high resolution spectroscopy

Hermano Valido, P. Machado, A. Cardesín-Moinelo, J. Silva, C. Bento

The participation of IA/FCUL in the ATHENA X-ray Mission: WFI science towards the earliest AGNs

Israel Matute, J. Afonso, S. Amantidis, M. Abreu, R. Carvajal

Generalising the Tolman-Oppenheimer-Volkov equilibrium condition

José Pedro Mimoso, A. Maciel, M. Le Delliou

Detection of Chemical Species in Titan's Atmosphere using High-Resolution Spectroscopy

José Ribeiro, P. Machado, J. Dias, C. Freire

Characterising Atmospheric Gravity Waves on the nightside of Venus – A Systematic Study

José Silva, P. Machado, J. Peralta, F. Brasil

Mining the radio sky towards the earliest AGN

Rodrigo Carvajal, J. Afonso, I. Matute, S. Amantidis

Venus' cloud top wind measures: coordinated Akatsuki/UVI (cloud-tracking) and TNG/HARPS-N (doppler velocimetry) observations

Ruben Gonçalves, P. Machado, T. Widemann, J. Peralta, S. Watanabe, A. Yamakazi, T. Satoh, M. Takagi, K. Ogohara, Y.J. Lee, H. Avet, J.E. Silva

Structural analysis of massive galaxies using Hubble Space Telescope deep imaging at $z < 0.5$

Sandra N. Reis, F. Buitrago, P. Papaderos, I. Matute, J. Afonso, S. Amantidis, I. Breda, J. M. Gomes, A. Humphrey, C. Lobo, S. Lorenzoni, C. Pappalardo, A. Paulino-Afonso, T. Scott

The first super massive black holes - comparing models with observations
Stergios Amarantidis, J. Afonso, I. Matute, C. Pappalardo, H. Messias

Solar Coherence Instrument: A conceptual optical system for solar studies

Tiago E.C. Magalhães, J.M. Rebordão

=====

IBEB | Instituto de Biofísica e Engenharia Biomédica

How to improve Tissue Engineering bioreactor solutions to deliver accurate and replicable electromagnetic (EMS) and mechanical stimulation?

João Meneses, S.R. Fernandes (presenter)

A thermal study of Tumor Treating Fields (TTFields) for glioblastoma treatment"

Nichal Gentilal

Modelling Non-Invasive Electric and Magnetic Stimulation of the Cervical Spinal Cord

Sofia R. Fernandes

=====

IDL | Instituto D. Luiz

Extremely hot summers preceded by spring droughts in the Mediterranean

Ana C. Russo, C.M. Gouveia, E. Dutra, P.M.M. Soares, A. Ramos, R.M. Trigo

Atmospheric rivers and climate change – Responses and impacts

Alexandre M. Ramos, Ashley E. Payne, F. Martin Ralph, et al

What did Earth's earliest tides look like? Examining the tide in the Archaean (3.9 Ga) and Proterozoic (2.5 Ga) with a conceptual tidal model

Hannah Sophia Davies, J. Duarte, M. Green

Subduction Initiation by Polarity Reversal

Jaime Almeida, N. Riel, F. Rosas, J. Duarte

Recent increasing frequency of compound summer drought and heatwaves in Southeast Brazil

João L. Geirinhas, A. Russo, R. Libonati, P.M. Sousa, D.G. Miralles, R.M. Trigo

The 1.5°C global warming target and its meaning for future burned area in the Brazilian savanna

Patrícia S. Silva, A. Bastos, R. Libonati, J.A. Rodrigues, C.C. DaCamara

Saharan intrusions and heatwaves in Western Europe

Pedro M. Sousa, D. Barriopedro, R.M.Trigo, R. Garcia-Herrera, C. Ordóñez, P.M.M.Soaes

Will the North Atlantic Ocean Marine Heat Wave events increase in the Future?

Sandra M. Plecha & P.M.M.Soaes

=====

LIP | Laboratório de Instrumentação e Física Experimental de Partículas

177 Lu-DOTATATE Quantification for Patient Personalised Dosimetry in Therapy of Neuroendocrine Tumours

Cristiana Rodrigues

Micro-scintillating array for real-time sensitive dosimetry for proton therapy using 3D human skin model

Duarte Guerreiro

Developments of EnsarRoot framework for different applications

Elisabet Galiana

A new approach to measure the elastic scattering of α particles in inverse kinematics at energies around the Coulomb Barrier for the astrophysical p-process

Francisco Barba

New opportunities for Proton therapy research in Portugal and beyond

Jorge Sampaio

Determination of $^{118}\text{Sn}(p,\gamma)^{119}\text{Sb}$ cross section at astrophysical relevant energies from X-ray yields

Manuel Xarepe

Evaluation of the response function of the R3B/FAIR electromagnetic calorimeter CALIFA to high energy photons

Pamela Teubig

=====

MARE | Centro de Ciências do Mar e do Ambiente

Blue Ecotoxicology Research

Vanessa F. Fonseca, A.R. Matos, I. Caçador, B. Duarte

=====