BioISI Day Programme

26th November 2020

09:30 – 10:00 – Welcome address by Margarida Amaral

10:00 – 10:30 – BioISI Facilities

- **Rui Malhó**: *Introducing the BioISI facilities*
- **Ricardo Dias**: *Genomics facility*
- **Luísa Serralheiro**: *Mass Spec facility*
- **Rui Malhó**: *Microscopy facility*
- **Hugo Botelho**: *Screening facility*

10:30 – 11:00 – Coffee Break

11:00 – 12:00 – Internal collaborative BioISI projects (5x 10 min) - Chair: Manuela Pereira

- **Federico Herrera**: *Restoring NKX6-2 function by protein complementation: a proof-of-concept.*
- **Bárbara Henriques**: *Multidisciplinary approach to study post-translational modifications in metabolic enzymes.*
- I**nna Uliyakina**: *Exploring the impact of Staphylococcus aureus on Cystic Fibrosis epithelial cell inflammation, differentiation and epithelial repair.*
- **Ana Catarina Alves**: *Novel mechanisms causing Familial Hypercholesterolaemia: Functional characterization of variants in the regulatory regions of PCSK9 and LDLR genes.*
- **Rita Pacheco**: *VALHealth- Valorisation of ALgae for Health: Bioactive Compounds from Marine Bioresources by Membrane Technology.*

14:00 – 15:00 – Bioindustry partnership projects (5x 10 min) - Chair: Rui Malhó

- **Anabela Bernardes da Silva**: *GOJIBERRIES and OPTIMAL – Partnerships for fruit Bioindustry*
- **Nuno A. G. Bandeira**: *SMARTMEM - Computational modelling for improved photo-activated detergent microcapsules*
- **Raquel Chaves**: *PulmaGene - Genetic blood testing of cancer therapies*
- **Paula Martins-Lopes**: *INNOVINE&WINE and INTERACT – Partnerships for the wine sector*
- **Iris Silva**: *HIT-CF – Personalised Treatment for Cystic Fibrosis Patients*

15:00 – 15:15 – Short Break

15:15 – 16:15 – Selected BioISI papers 2020 (5x 10 min) - Chair: Paulo Costa

- **Margarida Quaresma**: *Mutant CFTR Drives TWIST1 Mediated Epithelial-Mesenchymal Transition*
- **Manuela R. Costa**: *Genome-Wide Identification of Epigenetic Regulators in Quercus suber L.*
- **Mário Rodrigues**: *Mechanical Properties of Human Bronchial Epithelial Cells Expressing Wt- and Mutant CFTR*
- **Hugo Martiniano**: *Identification of biological mechanisms underlying a multidimensional ASD phenotype using machine learning*

- **Elisabete R. Silva**: *Biofouling Inhibition with Grafted Econea Biocide: Toward a Nonreleasing Eco-Friendly Multiresistant Antifouling Coating*

16:15 – 16:30 – Short Break

16:30 – 17:30 – PhD presentation pitches (20x 2 min)

- **Joana V Ribeiro**: *Molecular Insights into Riboflavin Supplementation in Glutaric Aciduria Type I Patients*
- **Lúcia Santos**: *CRISPR/Cas9 genome editing as a therapeutic approach for Cystic Fibrosis*
- **Madalena Pinto** *Personalised Therapies for All: Restoring Airway Function in Cystic Fibrosis by Stimulation of Alternative Chloride Channels*
- **Romina Coelho**: *Modulation of the anti-aggregation activity of the S100B chaperone by oxidative modifications relevant in Alzheimer's Disease*
- **Fernanda Ferreira**: *Ataxia related protein sacsin knockout disrupts the intermediate filaments network in glial cells*
- **Rafael Nunes**: *Can membrane-drug interactions be mediated by halogen bonds?*
- **Rebeca André**: *Effect of Fucus vesiculosus aqueous extract on cholesterol synthesis and absorption*
- **Pedro Reis**: *PypKa: a python module for flexible Poisson-Boltzmann based pKa calculations*
- **Flávio Soares**: *CRISPR/Cas9-mediated mutagenesis of SlGRAS10: role during tomato fruit development and ripening*
- **Ana Alves**: *Characterization of selected miRNAs during conifer embryo development*
- **Dario Marchese**: *Functional analysis of Phosphoinositides and lipid kinases in pollen tube apical growth*
- **Ana Reis**: *Multi-Host Tuberculosis: from Pathogen Genomics to Transmission Dynamics*
- **Diogo Pereira**: *Fungal biodiversity tendencies on palms' diseases spots*
- **Pedro Jorge Dias Teixeira**: *Adaptive evolution (h)as the key*
- **João Pedro Xavier dos Santos**: *Gene-environment interactions in Autism Spectrum Disorder*
- **Joana Vilela**: *Role of neurotransmission and synaptic processes in Autism Spectrum Disorder*
- **Joana Chora**: *Personalized Medicine in Familial Hypercholesterolemia*
- **Juan F. García-Moreno**: *The involvement of DIS3L2 in nonsense-mediated mRNA decay and its functional networks in cancer*
- **Joana Pereira**: *Stromal cell-derived cytokine signals promote the expression of tumor-related alternative splicing variant RAC1B in polarized intestinal cells*
- **Tânia Marques**: *An integrative approach to tissue-specific effects of microRNA regulatory networks*

17:30 – Closing Remarks