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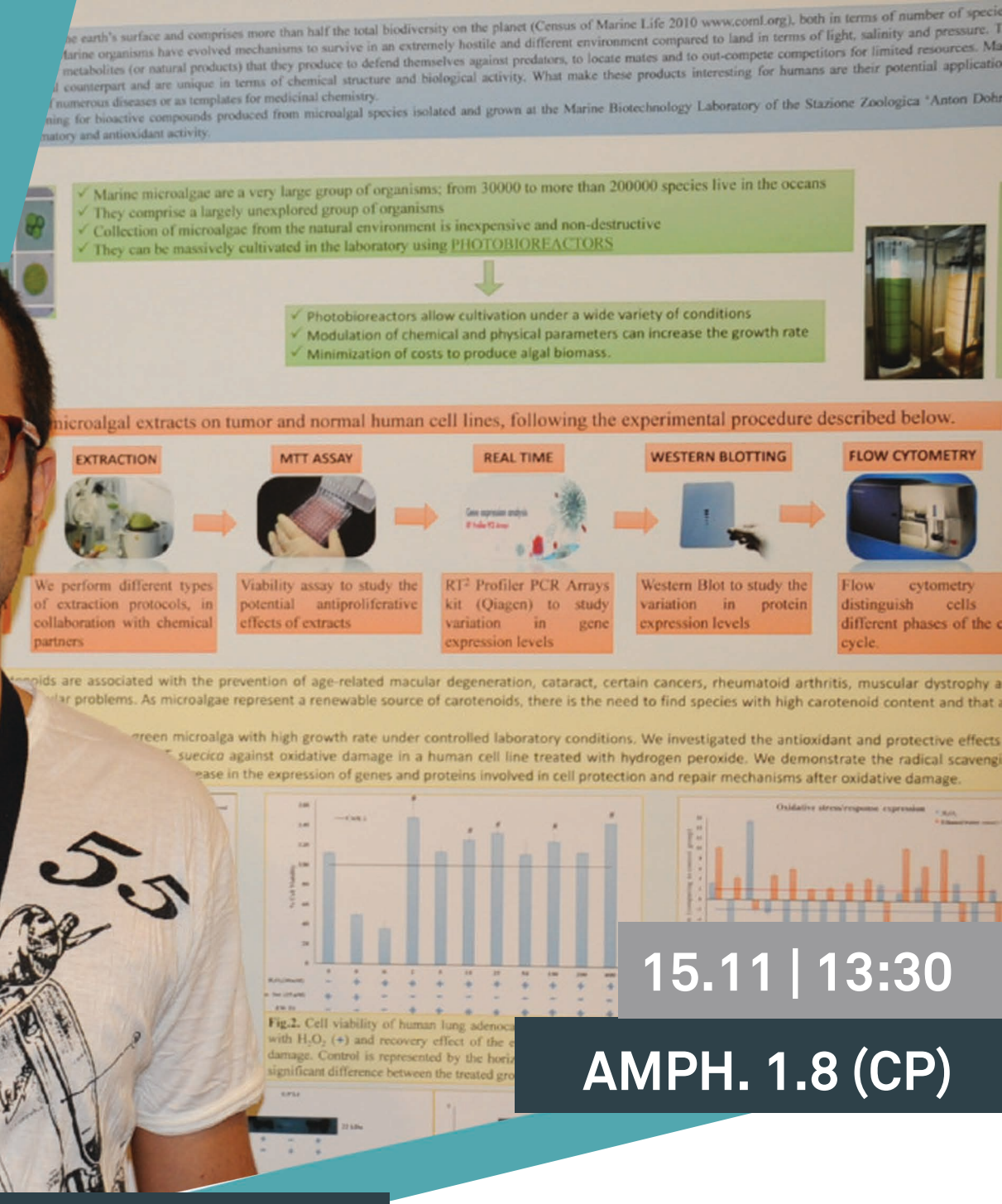

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SUSTAINABLE AND HIGH-EFFICIENT PRODUCTION OF TETRASELMIS SUECICA AS INNOVATIVE PRODUCT WITH HIGH BIOLOGICAL VALUE FOR COSMECEUTICAL MARKET

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STAZIONE ZOOLOGICA OF NAPLES “ANTON DOHRN”, INTEGRATED MARINE ECOLOGY DEPARTMENT, MARINE BIOTECNOLOGY LAB

Microalgae have attracted great attention as natural compound producers. Cosmeceutical industry represents the field with more interest for the marine sources and compounds. Tetraselmis suecica is a marine microalga rich in tocopherols, carotenoids, chlorophyll, and. In my previous study, I have investigated the potential cosmeceutical application of this species, characterizing the pigment content of ethanol/water extract of T. suecica. Moreover, I have analysed the protective effect of this extract against oxidative damage, demonstrating that T. suecica possesses a strong antioxidant and cell repairing activity on human lung cells. This total extract targets the dehydrocholesterol reductase-24 and prostaglandin reductase 2 genes and reduces the levels of prostaglandin E2 (patent pending). With this project, I intend to investigate the variation of bioactive pigments and biological activity along the growth curve of the T. suecica (HCMR). Moreover, I would perform more in deep study using explanted human tissues for the analysis of antioxidant, repairing, antiinflammatory and regenerative properties of T. suecica extracts.

SHORT CV

Christian Galasso studied Medical Biotechnology at the University of Naple “Federico II”. He defenced his PhD dissertation in Marine Biotechnology 4 months ago at the University of Naples 'Federico II'. During his PhD project, he studied the marine model organism sea urchin Paracentrotus lividus in order to create a molecular tool for the study of programmed cell death. Moreover, he conducted drug discovery studies for the identification of new marine natural compounds from marine organisms, with potential antiproliferative, antiinflammatory, antioxidant and antineurodegenerative effect. At the moment, he is a young researcher at Stazione Zoologica of Naples, involved in an Italian research project for the identification of marine species with cosmeceutical and nutraceutical industrial applications.

CCMAR · UAlg Universidade do Algarve · FCT Fundação para a Ciência e a Tecnologia · Izasa Scientific A WerfenLife Company · embric European Marine Biological Research Infrastructure Cluster

Embric Project (TNA 1st call)