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Nationality: Portuguese

Orientation: Sustainable Use of Marine Resources
Specialization Area: Transformation and Valorization
Research Area: 2.16 New products of marine origin

PhD project: ***Sphaerococcus coronopifolius* bromoterpenes: Antitumor activity and intracellular signal pathways characterization on *in vitro* human cellular cancer models**

Supervisors: Dr Rui Pedrosa (Institute Polytechnic of Leiria)
Dr. Luis M. Botana (University of Santiago de Compostela)
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Summary: Recent trends in drug research from natural sources suggest macro-algae as one of the major producers of bioactive secondary metabolites with great biomedical potential and ability to interfere with the pathogenesis of many human diseases. The main purpose of this study will be the evaluation of the antitumor activity and the cellular pathways induced by bromoterpenes isolated from alga *Sphaerococcus coronopifolius* collected on the Berlenga Natural Reserve (Atlantic), which showed promising results on human cancer cell model (HepG-2 cells). Antitumor activity and the intracellular signal pathways linked to the cell death and cell cycle mechanisms will be studied. This study add pharmacological value to *Sphaerococcus coronopifolius* bromoterpenes as new drugs for cancer therapeutics.

