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Supervisor: Professor Clementina Manera

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PhD project title:

Microalgae as a sustainable source of bioactive compounds with high value in the pharmaceutical and nutraceutical fields.

Research summary:

My PhD research project aims at the extraction of bioactive substances from microalgal biomass or from culture media of microalgae, using highly extractive green solvents. The extraction will mainly focus on polysaccharide and lipid molecules, whose pharmacological activity will be studied in vitro, in cellular models and in vivo models that reproduce the inflammatory and oxidative damage, recognized as the basis of chronic pathologies. This project represents a valid model to contribute significantly to the production, with sustainable systems, of molecules capable of preventing and/or treating these diseases.