

PHARMASEA:

INCREASING VALUE AND FLOW IN THE MARINE BIODISCOVERY PIPELINE

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The PharmaSea project focuses on obstacles in marine biodiscovery research, development and commercialization and brings together a broad interdisciplinary team of academic and industry researchers and specialists to address and overcome these. The partners are demonstrating how to widen the bottlenecks and increase the flow of ideas and products derived from the marine microbiome towards a greater number of successes in a larger number of application areas.

Despite the tremendous potential of marine biodiscovery, exploitation, particularly at a commercial scale, has been hampered by a number of constraints. These relate to access (physical and legal), genetics of the organisms, compound isolation, structure elucidation, early reliable validation of biological activity and best mechanisms of flow-through into exploitation. PharmaSea is solving these chronic bottlenecks by developing essential actions beyond the state-of-the-art and linking them with best practice and appropriate pragmatic approaches. The robust pipeline structure established within PharmaSea processes a wide genetic basis including marine microbial strain collections held by partners and new strain collections from extreme environments (deep, cold and hot vent habitats) to produce new products with desirable characteristics for development by commercial partners in three market sectors, health (infection, inflammation, CNS diseases), personal care and nutrition. The global aim of PharmaSea is to produce two compounds at larger scale and advance them to pre-clinical evaluation. To address relevant challenges in marine biodiscovery related to policy and legal issues, PharmaSea is bringing together practitioners, legal experts, policy advisors/makers and other stakeholders, focusing on the feasibility of harmonising, aligning and complementing current legal frameworks with recommendations and ready to use solutions tailored to marine biodiscovery.

This presentation will cover aspects of the PharmaSea project design, operation and the most recent results emerging from the pipeline as well as in the policy sphere.