PharmaSea: increasing value and flow in the marine biodiscovery pipeline

Marcel Jaspars*1,2

¹Marine Biodiscovery Centre, Department of Chemistry, University of Aberdeen, Meston Walk, Aberdeen AB24 3UE, UK. – Royaume-Uni

²Project Leader, PharmaSea EU FP7 Consortium. http://pharma-sea.eu/pharmasea.html – Royaume-Uni

Résumé

PharmaSea focuses on obstacles in marine biodiscovery research, development and commercialization and brings together an interdisciplinary team of academic and industry researchers to address and overcome these. PharmaSea is 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 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, organism genetics, compound isolation, structure elucidation, early validation of bioactivity and best mechanisms of flowthrough into exploitation. PharmaSea is solving these bottlenecks by developing essential actions beyond the state-of-the-art and linking them with best practice and pragmatic approaches. The pipeline structure established within PharmaSea processes a wide genetic basis including marine microbial strains from extreme marine environments to produce new products with desirable characteristics for development by commercial partners in three market sectors, health (infection, inflammation, CNS diseases). 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 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, operation and the most recent results emerging from the pipeline.

Mots-Clés: Marine biotechnology, marine biodiscovery, marine microbiology, bioactivity

^{*}Intervenant