PROBIO – PROspection for BIOactive compounds in the North Sea

Creating a knowledge base for Blue Biotech innovation in Flanders

Marine environment offers a wide variety of resources containing potential bioactive compounds. These marine bioactive compounds can be used for diverse applications. The biodiscovery of new active compounds has so far been limited in the North Sea region. The **PROBIO** project wants to unravel the underexplored potential of a selection of local organisms, with potential for commercial harvesting or cultivation, by screening their bioactive compounds.

At KU Leuven, one of the participants of PROBIO, we have a **vacancy, immediately open, for the duration of 6 months**, aiming at the **screening and identification of the pharmacological target(s)** by using selected bioactive compounds with a commercial potential for the development of drugs (medication) useful for the treatment of cardiovascular or neurodegenerative diseases, pathologies involving pain and inflammation.

The candidate will work with low and high-throughput bioassays, based on the **voltage clamp** technique (an **electrophysiological approach**), enabling to elucidate the **affinity and selectivity of bioactive compounds on approx. 70 different pharmacological targets**. These targets are available as cDNAs and their mRNAs will be expressed heterologously in a cell system (*ex vivo*). The targets comprise a myriad of voltage- and ligand-gated ion channels (sodium, potassium, calcium, GABA-A, TRP, nicotinic acetylcholine, …), as well as G-protein coupled receptors (opioid, cannabinoid, …).

Training will be provided.

Interested or more information? Please contact: Prof. Dr. Jan Tytgat, Toxicology and Pharmacology, KU Leuven, Campus Gasthuisberg, O&N2, PB922, Herestraat 49, 3000 Leuven, jan.tytgat@kuleuven.be or 016 32 34 03.

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