

Extreme drug discovery: finding new medicines from extreme environments

Professor Marcel Jaspars



7.30 p.m 6th January, 2016
Main Lecture Theatre, (3.25)
John Anderson Building
University of Strathclyde

<http://www.royalphil.org>

Biography

Marcel Jaspars is Professor of Organic Chemistry at the University of Aberdeen. Research in the Jaspars group focuses on the functions and applications of natural products, particularly those from marine organisms. The goal of the work is to determine the biological role of selected natural products as well as using them as pharmaceuticals and tools for biomedical research. The core skills in the group are natural product isolation and structure determination using spectroscopic methods.

Marcel has recently established the Marine Biodiscovery Centre, a £1.6 M investment bringing together scientists from different disciplines to focus on marine resources for novel pharmaceuticals, and to investigate fundamental questions in chemical ecology and biosynthesis.

<http://www.abdn.ac.uk/ncs/profiles/m.jaspars>

Abstract

Nature appears to be an inexhaustible source of inspiration for new medicines. This year's Nobel Prize for Physiology or Medicine was awarded to scientists who discovered natural treatments for parasitic diseases. We have been fascinated by the ability of life to thrive in every possible environment on Earth. In the Marine Biodiscovery Centre at Aberdeen we are investigating the potential of invertebrates and microorganisms from extreme environments for their potential to provide novel chemical diversity which might be of value in treating infectious diseases, cancer and inflammation. I will introduce examples from cold oceans, deep sea trenches and hyper arid deserts, all of which provide their own rich chemistry.