

Watch this space

This issue of *Microbiology Australia* will focus on the major steps of drug discovery and development. The continued discovery of therapeutic agents is an issue of concern for every society and, to a large extent, now transcends the parochialism of 'national benefit'.

The globalisation of drug discovery is evident in all stages of the scientific, business and humanitarian process from the issues of bioprospecting (access and return from biological and environmental resources), IP ownership, scientific research and collaboration to the assessment of global market return, the investments required for clinical development and the ultimate humanitarian benefit to public health and wellbeing. In this sense, every tier of society should recognise their stake and interest in the discovery of tomorrow's next generation of drugs.

Importantly, however, Australia may have a significant role to play in future drug development. In addition to possessing significant scientific skills and abilities in the area, Australia represents one of the 12 mega-biodiverse nations, due in part to its geological separation for more than 20 million years. As a result, Australia has a very high rate of endemism which



David S Nichols Centre for Food Safety and Quality School of Agricultural Science University of Tasmania GPO Box 252-54 Hobart, TAS 7000 Tel: (03) 6226 1831 Fax: (03) 6226 2642 E-mail: D.Nichols@utas.edu.au

represents a unique bioresource for drug discovery.

From a microbiological perspective it is tempting to concentrate on the issues of antimicrobial development. However, we should not loose sight of the important discoveries to be made in other areas such as antivirals, vaccines, agrichemicals, anticancer agents and other industrial applications in biotechnolgy. This issue will aim to touch on all of these areas.

In particular, the *In Focus* articles will examine the fundamental advances occurring in the areas of new methods of drug discovery and the identification of new drug targets that are necessary for the development of future theraputics. These issues link closely to the *Under the Microscope* articles discussing microbial aspects of bioprospecting, the screening of natural products, the science behind older remedies and drug diversity which are central to the collection, identification and characterisation of potential new drugs.

From a historical perspective it is interesting to chart the beginnings of drug discovery from the phase of dedicated researchers in academic institutions, to the dominance of commercial pharmaceutical corporations, to once again the involvement of research scientists and collaboration between universities and the pharmaceutical industry. Microbiologists should 'watch this space' for new drug discoveries in Australia.

