

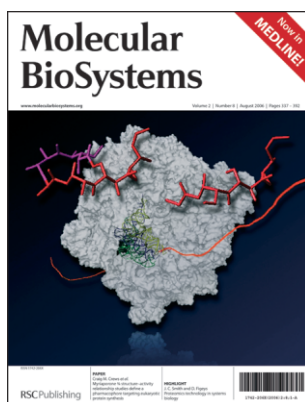
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IN THIS ISSUE

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Cover

See John Hines, Myriam Roy, Hua Cheng, Christina M. Agapakis, Richard Taylor and Craig M. Crews, page 371. Myriaporone (red) represents just one hemisphere of the macrolide ribosome inhibitor, tedanolide (violet/red). Nevertheless, it retains most of its activity. Image reproduced with permission of Craig M. Crews *et al.*, from *Mol. BioSyst.*, 2006, 2, 371.

CHEMICAL BIOLOGY

B29

Chemical Biology

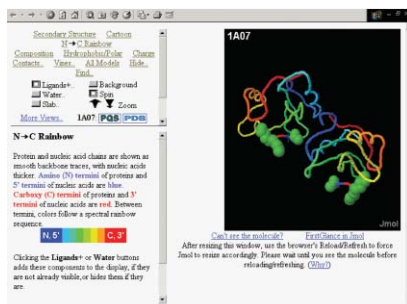
August 2006/Volume 1/Issue 8

www.rsc.org/chemicalbiology

Drawing together research highlights and news from all RSC publications, *Chemical Biology* provides a 'snapshot' of the latest developments in chemical biology, showcasing newsworthy articles and significant scientific advances.

EDITORIAL

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Added value online features for *Molecular BioSystems*

Additional online features are now available for *Molecular BioSystems*' authors and readers.

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Hot off the Press

Topics highlighted in this month's *Hot off the Press* include the cytotoxic effect of nanotubes, a method for simultaneous multiple biomarker detection and new evidence that clathrin polymerization causes endocytosis.



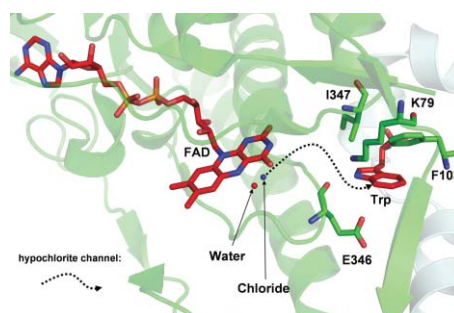
HIGHLIGHTS

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Molecular mechanisms of enzyme-catalysed halogenation

J. L. Ross Anderson and Stephen K. Chapman*

In this highlight we examine the proposed catalytic mechanisms of the halogenases, how these relate to their structures and consider how this chemistry might be harnessed and developed to produce novel enzymatic activity.

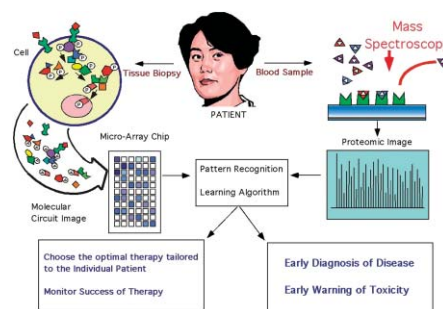


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Proteomic patterns for cancer diagnosis—promise and challenges

Gordon R. Whiteley

Proteomic patterns have been discovered for a variety of cancers and cancer related diseases. The platforms used have been both mass spectrometry and microarrays and the incorporation of computer informatics has resulted in innovative possibilities for novel diagnostics.

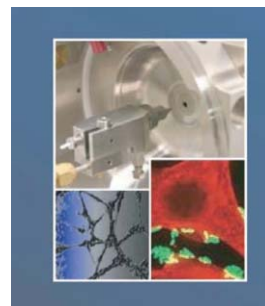


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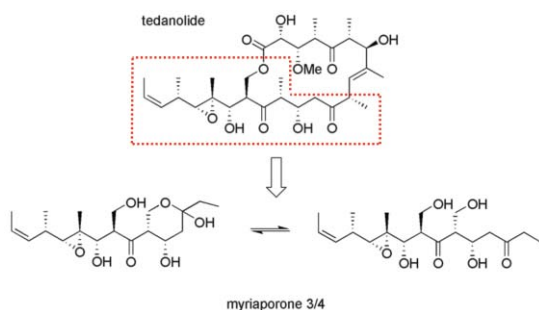
Proteomics technology in systems biology

Jeffrey C. Smith and Daniel Figeys*

Recent technological innovations have increased our repertoire of proteomic approaches in systems biology studies. This short review highlights a selection of the most common, innovative, and recent methods currently used in the scientific community.



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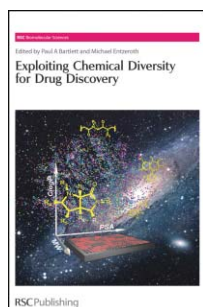


Myriaporone 3/4 structure–activity relationship studies define a pharmacophore targeting eukaryotic protein synthesis

John Hines, Myriam Roy, Hua Cheng, Christina M. Agapakis, Richard Taylor and Craig M. Crews*

Myriaporone 3/4 is a natural product structurally mimicking the southern hemisphere of tedanolide ribosome inhibitors. Despite its relatively simple structure, myriaporone 3/4 retains much of the activity of tedanolides, arising from heretofore unrecognized pharmacophores.

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Fluorescence technologies for the investigation of chemical libraries

Eric Trinquet and Gérard Mathis

This is Chapter 10 of the book *Exploiting Chemical Diversity for Drug Discovery* which forms part of the RSC Biomolecular Sciences series. More information about this book and the whole series is available from www.rsc.org/biomolecularsciences or the RSC Sales team, email: sales@rsc.org.