

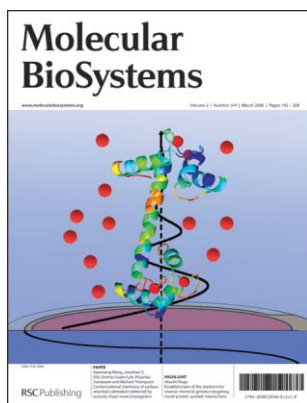
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ISSN 1742-206X CODEN MBOIBW 2(3/4) 145-208 (2006)



Cover

See Xiaomeng Wang, Jonathan S. Ellis, Emma-Louise Lyle, Priyanka Sundaram and Michael Thompson, page 184. On-line detection of the binding of ions and peptides to surface-attached calmodulin is reported, resulting in a semiquantitative detection of a protein conformational change. Image reproduced by permission of Michael Thompson *et al.*, from *Mol. BioSyst.*, 2006, 2, 184.

CHEMICAL BIOLOGY

B9

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.

Chemical Biology

March 2006/Volume 1/Issue 3

www.rsc.org/chemicalbiology

HOT OFF THE PRESS

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HOT OFF THE PRESS

Hot off the Press

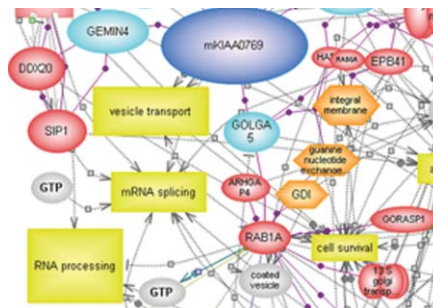
Topics highlighted in this month's *Hot off the Press* include the way cells take up carbon nanotubes, sequence recognition in molecules that bind DNA and the use of elastin to produce precisely oriented antibody arrays.

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Establishment of the platform for reverse chemical genetics targeting novel protein–protein interactions

Hisashi Koga*

To establish novel drug-screening assays, we identify novel protein–protein interactions and derivative pathways to clarify their relationship to certain diseases. Reverse chemical genetics based on such information should satisfy the demand for a dramatic enlargement of the assays.



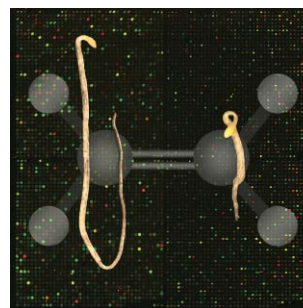
REVIEW

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Molecular mechanisms of ethylene signaling in *Arabidopsis*

Larissa M. Benavente and Jose M. Alonso*

Analysis of the ethylene signal transduction in plants illustrates the increased need and utility of multidisciplinary approaches in modern biology.



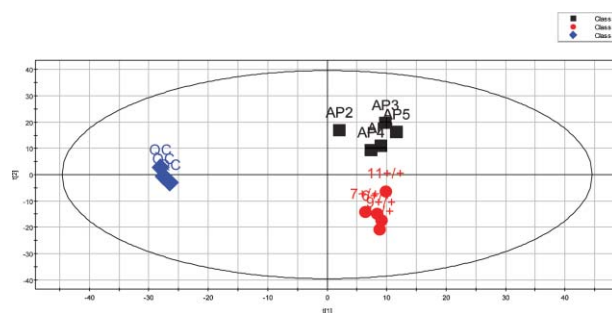
METHOD

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A multi-analytical platform approach to the metabonomic analysis of plasma from normal and Zucker (fa/fa) obese rats

R. Williams, E. M. Lenz, A. J. Wilson, J. Granger, I. D. Wilson,* H. Major, C. Stumpf and R. Plumb

Plasma obtained from normal Wistar-derived and Zucker (fa/fa) rats was analysed using ^1H NMR spectroscopy, UPLC-MS and capillary GC-MS to obtain global metabolite profiles for a metabonomic investigation of animal models of diabetes. All three techniques distinguished between the two strains, but with limited overlap in the metabolites detected.



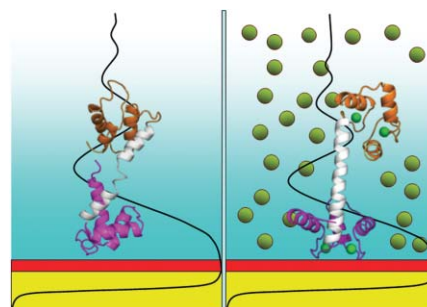
PAPERS

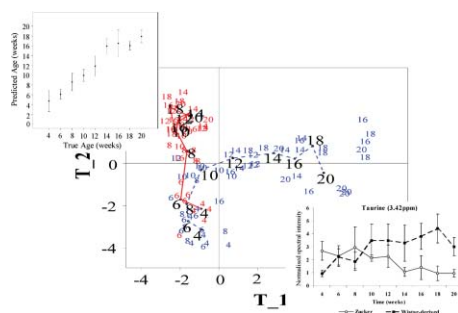
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Conformational chemistry of surface-attached calmodulin detected by acoustic shear wave propagation

Xiaomeng Wang, Jonathan S. Ellis, Emma-Louise Lyle, Priyanka Sundaram and Michael Thompson*

On-line detection of the binding of ions and peptides to surface-attached calmodulin is reported, resulting in a semi-quantitative detection of a protein conformational change.





The comparative metabonomics of age-related changes in the urinary composition of male Wistar-derived and Zucker (fa/fa) obese rats

R. E. Williams, E. M. Lenz, M. Rantalainen and I. D. Wilson*

Metabonomic analysis of urine demonstrated that, with age and the development of disease, the metabolic profiles of Zucker (fa/fa) obese animals diverged from those of normal, Wistar-derived, rats.



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