

October 2008

Volume 13 · Numbers 19/20 pp. 831–908



Cover Story

The featured review in this issue of Drug Discovery Today, by Andrew M Davis, Stephen A. St-Gallay and Gerard J Kleywegt, discusses how the development of structural models from X-ray crystallography is helping to drive drug discovery by allowing chemists to visualize the interaction between target and ligand. The authors point out that there is a relative lack of general appreciation of the process of producing a model from the experimentally-derived electron densities. They bring attention to some of the uncertainties, giving literature examples and give useful advice for chemists who may be beginning drug discovery programs marrying empirical and X-ray data. Cover image: © Deco / Alamy

DRUG DISCOVERY O DAY

REVIEWS

KEYNOTE

831 Limitations and lessons in the use of X-ray structural information in drug design

Andrew M. Davis, Stephen A. St-Gallay and Gerard J. Kleywegt

842 Chemically modified siRNA: tools and applications

Jonathan K. Watts, Glen F. Deleavey and Masad J. Damha

GENE TO SCREEN

856 The public road to high-quality curated biological pathways

Michiel E. Adriaens, Magali Jaillard, Andra Waagmeester, Susan L.M. Coort, Alex R. Pico and Chris T.A. Evelo

INFORMATICS

863 Drug discovery in the era of Facebook—new tools for scientific networking

David S. Bailey and Edward D. Zanders

POST SCREEN

- 869 Do enthalpy and entropy distinguish first in class from best in class?

 Ernesto Freire
- 875 Progress in the evaluation of CDK inhibitors as anti-tumor agents Campbell McInnes
- 882 Virus-sized vaccine delivery systems

 Jean-Pierre Y. Scheerlinck and Deanne L.V. Greenwood

Jean-Pierre 1. Scheeninck and Dearine L.v. Greenwood

888 Cell-based treatments for diabetes

Peter M. Jones, Monica L. Courtney, Christopher J. Burns and Shanta J. Persaud

- 894 Natural products in drug discovery

 Alan L. Harvey
- 902 On the stage division mechanism in pharmaceuticals development processes

Nicola Dimitri

