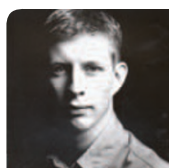




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► **COVER:** 'Information mining' by Susanne Harris, inspired by the review on p220.



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Despite the need for better therapies for psychiatric disorders such as depression and schizophrenia and major advances in the understanding of their molecular basis, novel drugs, particularly those that might revolutionize treatment, have been rare in recent years. This month we feature a Perspective that synthesizes the opinions of experts from across the field of neuroscience following a symposium that discussed the underlying reasons for this problem and steps that could improve the effectiveness of drug discovery in this field. Taking a more systems-oriented approach is one idea that is gaining popularity in drug discovery for complex diseases such as psychiatric disorders, and, in his Perspective, Kitano highlights the intrinsic robustness of biological systems as a key property that should be considered in systems-oriented drug design, using examples based on existing drugs to illustrate the potential of this approach. Sophisticated computational techniques could have an important role in such approaches, but, as in drug discovery efforts in general, a key challenge will be making the most of the vast amounts of biological data now available. With this challenge in mind, in their Review, Logging and colleagues highlight recent developments in the use of electronic data in drug discovery biology, and consider the remaining challenges. Turning to the challenge of identifying appropriate compounds once a biological target has been selected, Hajduk and Greer discuss the development and evolution of fragment-based drug design, which has emerged as a valuable and complementary alternative to conventional high-throughput screening for lead discovery. Last, Porter and colleagues review the mechanisms by which lipids and lipidic excipients affect the oral absorption of lipophilic drugs, and how such knowledge can be used to optimize their delivery.

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