Cover image

The cover image depicts the ultra-HTS platform at Pharmacopeia (Cranbury, NJ, USA), which uses 1536-microwell assay plates from Corning (Acton, MA, USA) and proprietary reagent dispensing technology. The system is capable of performing assays at volumes of ≤2 ml per well and dispensing can be reliably performed down to <100 nl. The entire system can screen at a rate of >100,000 assay wells per day. To-date, a variety of assays have been developed to screen Pharmacopeia's >3 million-member combinatorial compound collection. Most recently, the system was used to assay receptor-mediated binding in whole cells. We thank Jim Mueller (Pharmacopeia) for this cover image.

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With the recent publications of the draft sequences of the human genome, the race is on to use this vast quantity of new information to help in the search for novel drugs. To add to the pressure, many companies have made great investments in new technologies in the past few years and now they must recoup these costs. The drive to use HTS technologies more efficiently and develop new and more effective techniques is therefore ever increasing. Several different approaches are being used to increase throughput and reduce costs before making the yes/no decision.

This third HTS supplement to *Drug Discovery Today* examines a variety of strategies including fluorescence life-time techniques, optical encoding of microarrays, well-less HTS formats and high-throughput toxicity screening methods. To follow on from the interviews with key researchers in small companies in the second HTS supplement, this issue focuses on the views of key researchers in big pharma. There are also news updates and highlights from this years' *Screentech* meeting.

We hope you will find this supplement enjoyable and informative reading.

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