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**A Pragmatic Approach to Automation and High Throughput Crystallography in a Pharmaceutical Setting.**  
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Structural information is increasingly being used during the discovery and optimization of potential therapeutics. At the same time there have been significant advances in the production of protein, data collection and the computational aspects of macromolecular crystallography. These events led to a bottleneck at the crystal growth phase. We tackled this problem by incorporating a series of loosely coupled robots and a powerful relational database to design and track the outcomes of crystallization experiments. These systems needed to be flexible enough to carry out the full gamut of screening and optimization experiments whilst maintaining success rates. At the present time the robotics systems consist of a Packard Multiprobe for dispensing solutions into crystallization trays, Cartesian Honeybee for setting up hanging drop experiments and an offline imaging system based on a Nikon E1000.

It was found that the use of robotics led to a modification of our approach to crystallizations. We found it beneficial to screen large numbers of different crystallization conditions to increase our success rate for a given construct and designed 1056 additional conditions that are now used in addition to commercially available screens.