

## **Optimizing Your Crystals—Is it Really Worth the Time?**

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With the advent of the Structural Genomics initiatives, we have seen a host of new technologies emerge for automation of the tedious crystallization process. The latest robots and nanodispensers allow us to perform a larger number of crystallization screens faster with significantly less quantities of protein. There is a great temptation to harvest crystals directly from these small drops and immediately collect a data set---without any further improvement of the crystal quality. While this works well in some instances, there are many crystals that require further optimization before they are useful for structure determination.

Optimization strategies will be presented for a variety of different proteins in the following areas:

- Protein preparation
- Crystallization--methods and conditions
- Cryocrystallography—cryosolvent selection, soaking tricks

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