

## Poster Presentation

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### *Fast, reliable automation of protein crystallisation drop set-up*

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The automation of protein crystallography screening has contributed significantly to the rapid progress of crystallography-based structural biology. Automation offers increased throughput and repeatability. It also offers the ability to accurately dispense smaller volumes of both protein and screen solutions, which saves valuable protein and reduces reagent costs. Automation of protein crystallisation screening trials requires accurate placement of nanoliter volumes of protein and screen drops, in addition to the reproducible and accurate dispensing of solutions of varying viscosities. This is particularly important for the set-up of the highly viscous lipid mesophases in the Lipidic Cubic Phase (LCP) crystallisation technique for membrane protein crystallisation trials. This poster describes the features of TTP Labtech's mosquito<sup>®</sup> Crystal and mosquito<sup>®</sup> LCP, showing their ability to address the issues inherent in the automated set-up of protein crystallisation screen trials. An instrument capable of automating both microbatch and vapour diffusion methods of protein crystallography (sitting drop, hanging drop) as well as crystallisation of membrane proteins using the bicelle and LCP methods, without instrument configuration changes, offers significant flexibility for the crystallography laboratory. mosquito Crystal and mosquito LCP offer fast throughput, high precision, unrivalled reproducibility and low volume accuracy.

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