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The Undiscovered Bourne: The Helsinki Low-Volume Medium-Throughput Crystallisation Facility. A. Goldman, P. Heikinheimo, S. Mäki, V.-P. Jaakola, L. Lehtiö, H. Repo, Inst. of Biotechnology, Univ. of Helsinki, FIN-00640 Helsinki, Finland.

We recently installed an automated protein crystallisation system, including a Hamilton Microlab STAR liquid handling robot for preparing screens, a Cartesian Microsys for protein drops and a Thermo Rhombix Imager for imaging. Themo Rhombix software integrates all the components, so we can run individual steps, store experiment design and history and query the results. A full-time technician runs the service.

Our goal was to provide a crystallisation centre in Finland: *i.e*. to crystallise proteins at 50-200 nl volumes, to provide premixed screens for those wishing to screen at home and to provide imaging services. We currently crystallise protein from seven different groups. Crystallisations are performed twice a week and after the experiment is set up, end-users are notified by email when their experiments are imaged. Plates are imaged on the day of setup, weekly till a month old and once a month until four months old. The scientist can analyse the drop images from their own computer either through the web or *via* the Oracle database. We will present results from our first year of operation.

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