

## **The University of Queensland. Services for the structural biology at the Centre for Microscopy and Microanalysis (CMM). An Integrated approach.**

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The structural analysis of proteins or protein multimers down to an atomic level is still one of the major challenges in structural biology and which can often only be mastered in an multidisciplinary approach. With x-crystallography traditionally the method of choice and single particle electron microscopy as a last 'low resolution' alternative, in cases where large enough protein crystals just weren't achievable. With the more and more widespread availability of single electron detectors and ultra-stable, dedicated cryo electron microscopes this has changed to a great extent. Researchers have now a real choice between these two methods without compromising on the resolution. Here at the UQ we wanted to take advantage of the close proximity of the UQROCX and the CMM cryoEM facility and we decided to offer our expertise in each of our fields to the UQ structural research community and the wider structural research community in Australia. Since the beginning of 2018 UQROCX has been operating under the umbrella of CMM and soon we can offer an integrated workflow where isolated proteins are systematically tested on whichever methodological approach works best and is the most appropriate for a successful structural analysis.

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