Macromolecular crystallography provides unparalleled details of 3D structure of biological macromolecules and provides the basis for the rational design of therapeutics. The Monash Macromolecular Crystallisation Facility at Monash University provides access to a fully automated platform for the high-throughput crystallisation of biological macromolecules. The use of robotics allows for miniaturisation of crystallisation experiments, which enables screening of a wide range of conditions with limited sample volumes. The Facility also houses state-of-the-art instrumentation for collecting X-ray diffraction data and crystal structure determination.
**Mission statement:** Provision of high quality, efficient, timely, cost effective services in the area of macromolecular crystallisation and structure determination.

**Crystallisation of macromolecules:**
- Drop dispensing (vapour diffusion and LCP), hit optimisation, additive screening and seeding
- Custom screen making
- Drop imaging (automated and manual)
- Remote access to images via web interface

**Contact**

**Manager**
Dr Danuta Maksel
Dr Maksel has been the Facility Manager since its inception. She is an expert in the crystallisation of biological macromolecules.
Phone: +61 (3) 9905 9788
+61 (3) 9905 9777
Email: danuta.maksel@monash.edu

**Director:** Professor Jamie Rossjohn FAA, NHMRC Future Research Fellow
Professor Jamie Rossjohn’s current research interests are centred on understanding the basis of infection and immunity, specifically host recognition, responses developed by the pathogen and drug design to modulate and/or counteract these events and his teams consists of expert crystallographers.
Prof. Rossjohn’s research team and collaborators have provided seminal insight into the pathogenesis of infectious diseases, adaptive and innate immunity and autoimmunity, publishing more than 270 papers including generalist journals such as Nature, Science, Cell and PNAS, as well as top tier journals in this area: Nature Immunology, Nature Reviews Immunology, Nature Reviews Drug Discovery, Immunity and Journal of Experimental Medicine.
– Photo by Mark Graham

monash.edu/research/infrastructure/platforms/crystallisation.html