

## The new home of industrialised proteomics

By Life Scientist Staff

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The [Australian Cancer Research Foundation](#) (ACRF), the [Children's Medical Research Institute](#) (CMRI) and [SCIEX](#) have come together to announce the ACRF International Centre for the Proteome of Cancer (ProCan). The facility is the flagship for what SCIEX is calling 'industrialised proteomics' — that is, large-scale protein analysis.

ProCan was established with \$10 million in seed money from ACRF and will be based at CMRI at [Westmead Hospital](#). SCIEX has meanwhile provided state-of-the-art mass spectrometry equipment and technicians to help CMRI establish the protocols and methodology ProCan is using. When it opens in September, the facility's first mission will be 'the human cancer proteome project'.

Over the next 5–7 years, ProCan will analyse thousands of proteins in 70,000 samples of all types of cancer, generating a database that will be made accessible worldwide and will underpin new discoveries in cancer research. By combining this data with information about the response of the cancers to treatment, it will be possible to predict with increased accuracy the therapeutic response of any individual tumour.

“The end result will be a rapidly available and more accurate decision tool that clinicians can use to choose the optimal combination of existing cancer treatments for each individual patient — in other words, an increasingly personalised approach to cancer therapy,” said Professor Roger Reddel, head of CMRI's Cancer Research Unit and co-lead on the project.

“What's also exciting is what we'll learn about perturbations in protein levels in cancer, which will result in the identification of new molecular targets for developing cancer drugs,” added co-lead Professor Phil Robinson. “But the potential of this technology doesn't stop at cancer. We can apply the same approach in future for any disease.

“We are excited to partner with many international experts in cancer, mass spectrometry and bioinformatics on this project,” Professor Robinson continued. “We’re setting the stage for an industrial proteomics revolution in disease research and treatment.”