



**Professor Phillip J  
Robinson, BSc (Hons), PhD**

Head of Cell Signalling Unit,  
Children's Medical Research Institute,  
The University of Sydney

Director of ProCan – The ACRF  
International Centre for the  
Proteome of Cancer

Director of Australian Cancer  
Research Foundation-Centre  
for Kinomics

## Case Study

### Project Goal

ProCan is the proteome of human cancer funded by the Australian Cancer Research Foundation ACRF. Over the next 5-7 years, ProCan will analyse 70,000 samples of all types of cancer from all over the world. The goal of precision medicine is that in the future we will be able to take any tumor and be able to present to the clinician a suite of drug and surgical treatment options specific to that person.

### The Challenges

- Access to quality specimens with well documented clinical end points.
- Reproducible sample preparation and digestion from challenging sample types such as tissue.
- Digging deeper into the proteome in a routine and robust manner to enable discovery of novel markers.

### The Solution

- SWATH® Acquisition on a large scale for high throughput proteomics, enabling large clinical studies to be undertaken.
- Six TripleTOF 6600s working in a way that generates reliable results between instruments and over time.
- OneOMICS™ data processing platform for fast processing of SWATH® Acquisition data in the cloud.

### The Outcomes

- Development of the PCT-SWATH workflow, consisting of robust sample preparation and data acquisition protocols enabling high-throughput proteomic analysis in large tissue sample cohorts.
- Providing large-scale proteogenomics data that can be used to inform cancer drug development and decisions on treatment in precision medicine.

**“Precision medicine became viable for us with the advent of SWATH® Acquisition... The ability to use mass spectrometry at an industrial scale is something wholly new and it's only two or three of us in the world doing that at the moment”**

#### Type of Organization

ProCan is an international research project located at Children's Medical Research Institute (CMRI) in Sydney Australia.

#### Goals

ProCan will develop a database of information to advance scientific discovery and enhance clinical outcomes worldwide.

#### SCIEX Products

- TripleTOF® 5600 System
- TripleTOF® 6600 System
- Triple Quad 6500 System
- SWATH® Acquisition

**“It's been very valuable to work closely with SCIEX. Their services and support has been consistent and high level which has been really helpful to us.”**

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