

Experienced Mass Spectrometry Operator- Proteomics

- **Make an important contribution to the health of children through medical research**
- **Work with one of Australia's most respected national and independent medical research institutes**
- **Gain valuable experience in the not-for-profit sector**

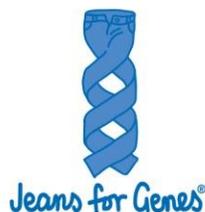
Children's Medical Research Institute (CMRI) was Australia's first dedicated paediatric research facility and is now one of the nation's most highly regarded independent medical research centres. Our research focuses on the areas of cancer, neuroscience, embryonic development and birth defects, and gene therapy and we have a strong international reputation based on our research outcomes. CMRI's research programs are supported by state-of-the-art facilities and committed research and support staff. Our achievements are made possible by a loyal network of community supporters, highly engaged donors and the very successful Jeans for Genes® fundraising campaign.

The ACRF International Centre for the Proteome of Cancer (ProCan) is located at CMRI. The rapidly expanding ProCan team currently comprises more than 30 staff in proteomics, pathology, software engineering and data science. They use innovative technology to simultaneously measure thousands of proteins in tiny cancer samples. Led by CMRI's Professor Phil Robinson and Professor Roger Reddel, the ProCan team are analysing about 70,000 cancers of all types over 5-7 years. Advanced computer analysis techniques are being used to compare the protein data with pathology results and clinical outcome data. The overall goal is to make a precise diagnosis of the cancer type and its molecular subtype, and to provide doctors with a list of treatments options to which the cancer is likely to respond and which to avoid.

The position involves large-scale tissue sample preparation using a barocycler for proteomic analysis, and shared responsibility in the maintenance and running of mass spectrometers. The ideal candidates will have hands-on laboratory experience, with a strong analytical background, experience in liquid chromatography mass spectrometry (LC-MS). The appointee will be required to troubleshoot LC as well as perform basic instrument maintenance.

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The ideal candidate will have expertise in developing qualitative/quantitative mass spectrometry assays, with a strong technical and analytical background. Hands-on experience with proteomic sample preparation, MS and LC instrumentation is essential. This includes the design and



execution of label free and labelled proteomics experiments. The appointee will also be required to troubleshoot MS, nano- and micro-flow HPLC as well as perform instrument maintenance.

The successful candidate must hold the following:

- PhD/MSc in Biochemistry, Biotechnology or equivalent experience in a related field.
- Minimum 5 years of hands-on LC-MS/MS experience, and strong troubleshooting and maintenance abilities.
- Strong analytical background in qualitative and quantitative assay development and assay evaluation for proteomics applications.
- Strong knowledge of proteomic sample preparation and purification/enrichment techniques.
- Experience in quantitative label-based and label-free MS techniques (e.g. DIA/SWATH, iTRAQ, TMT) is a distinct advantage.
- Experience with standard database search algorithms and data analysis tools such as Protein Pilot, MASCOT, TPP, Proteome Discoverer, Skyline, Scaffold, and MaxQuant.
- Proficiency in handling large data sets including basic bioinformatics and biostatistics skills.
- Experience in the management of commercially sensitive information.
- Experience in a PC2 facility is essential, while experience in a proteomics core facility or proteomics laboratory environment is desirable.

Contract term up to three years and salary levels are dependent on the candidates' skills and experience. Additional benefits include the provision of a Public Benevolent Institution salary packaging scheme and participation in an employer-contributed superannuation fund.

Applications should include a cover letter (citing **PV1928**), curriculum vitae and contact details (phone/email) of three professional referees and be forwarded to recruitment@cmri.org.au

Please direct preliminary enquiries regarding the position to Natasha Care (ncare@cmri.org.au) or Dylan Xavier (dxavier@cmri.org.au).

Applicants will be assessed on receipt, and the closing date is noon on **Friday 13th September**.

