

## Medical Research Data Scientist/Bioinformatician

- **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**
- **Located in Westmead, one of Sydney's and Australia's major biomedical research hubs**

Children's Medical Research Institute (CMRI) was Australia's first dedicated paediatric research facility and is now one of the world's most highly regarded independent medical research centres. Our research focuses on the areas of embryonic development and birth defects, cancer, neuroscience and gene therapy and we have a strong international reputation based on our research outcomes. It is also home to the world-first proteomics project, ProCan, which is changing the way cancer is diagnosed and treated. 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.

We are seeking a suitably qualified Data Scientist/Bioinformatician to join the Bioinformatics and Data Science Research Facility. This role will involve collaborating with medical researchers from the CMRI and collaborating institutions to develop and tailor computation tools, statistical and mathematical solutions around specific research questions. It will involve engaging in experimental design, building novel algorithms or using 'best practices' tools to transform experimental and clinical data into relevant knowledge that may lead to actionable novel research findings or improvements to clinical decision-making. The successful applicant will have opportunities to explore and interrogate a diverse range of data, some of which include: genomics, epi-genomics, transcriptomics, proteomics, structural biology, cell imaging and clinically relevant data. Additionally, the successful applicant will reside alongside highly experienced medical research data scientists/bioinformaticians and software engineers.

Applicants will need to possess the following skills and attributes:

- At least, an Honours (Class I), MSc or PhD in Physics, Mathematics, Statistics, Bioinformatics, Software Engineering or Computer Science degree.
- 3+ years' experience working in a professional research capacity with biological/medical data.
- Evidence of creating, implementing bioinformatics pipelines/workflows on high performance and cloud-based computing platforms.



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- Data manipulation and exploratory data analytical skills in either R, python or Matlab.
- Troubleshooting common problems within Linux environment.
- Proven application programming and scripting skills.
- Mathematical modelling and strong statistical analytic skills to deal with high-dimensional data.
- Highly motivated (desire to contribute to medical research), problem-solving skills, proven ability to work autonomously and still be team-oriented.
- Proven and demonstrable experience in machine learning, and an interest to learn AI.
- Well organised, with proven ability to prioritise and time manage projects.
- Excellent communications skills - written and oral.

We will review applications as they are received. You will be provided with a competitive remuneration package in accordance with qualifications 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:

1. A cover letter (citing **PV1912**) with statement of motivation and a detailed description of the qualifications described above.
2. A curriculum vitae including a chronological list of publications.
3. Contact details (phone/email) of three professional referees.

Applications should be forwarded to [recruitment@cmri.org.au](mailto:recruitment@cmri.org.au). Closing date for applications is **20th May 2019**.

