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Full Reference (including all authors (presenter in bold) & title):

Enhancing Neuroblastoma Risk Stratification Through Proteomic Signatures

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Conference/Meeting Name: Australian Bioinformatics and Computational Biology Society (ABACBS) Conference 2025
Location (city, state, country): Adelaide, South Australia, Australia
Dates: 24th November 2025 – 26th November 2025
Presentation Type (invited keynote, oral, poster): Poster presentation



Photo from the ABACBS Conference dinner at UniBar: making new friends and catching up with old ones.

The Australian Bioinformatics and Computational Biology
Society (ABACBS) Conference is Australia's largest annual meeting for bioinformatics and computational biology. The 2025 meeting was held over two days at Adelaide Oval, overlooking the city skyline, and was attended by more than 500 delegates, including researchers, clinicians, students, data scientists and industry representatives. The program featured four keynote speakers and eight themed sessions covering cancer and molecular medicine, gene regulation and epigenetics, new omics technologies, and the application of computational tools to public health.

A clear theme throughout the meeting was the growing use of advanced computational approaches, including agent-based AI systems, to analyse large and complex biological datasets. Several talks focused on RNA-sequencing in clinical oncology, including applications within the ZERO Childhood Cancer program. There was also strong interest in benchmarking existing bioinformatics tools to improve reproducibility and reliability in basic and clinical research. Another important area of discussion was equity in genomics, including the need to address underrepresentation of Aboriginal and Torres Strait Islander peoples in genomic datasets.

One of the most impactful presentations for me was delivered by Prof. Alex Brown (The Kids Research Institute Australia and ANU). He spoke about Indigenous leadership in genomic medicine and the structural barriers that limit equitable access to precision healthcare. His talk highlighted that improving technical performance alone is insufficient; genomic medicine must also address representation, trust and community partnership to achieve meaningful health outcomes.

I presented a poster on my postdoctoral work at ProCan at the Children's Medical Research Institute, where I'm using large-scale proteomic data to identify prognostic protein signatures in neuroblastoma. The poster sessions were held during morning and afternoon tea, allowing for detailed discussion with researchers from different fields. I received the People's Choice Award for my poster, which was unexpected.

The ABACBS conference is also accompanied by satellite events including the Student COMBINE meeting, and EMCR events. I participated in an EMCR "Shark Tank" event, where teams developed and pitched research ideas to a panel of judges. Although our team did not win, the experience strengthened my ability to communicate complex scientific ideas concisely and respond to critical questioning.

The knowledge gained from this conference will directly benefit my current research. Exposure to benchmarking frameworks and AI-enabled analytical pipelines will inform how I design and test proteomic signatures to ensure they are robust and clinically meaningful. Discussions around equity and data representation also reinforced the importance of ensuring that translational cancer research benefits diverse patient populations. A key take-home message is that computational oncology is rapidly evolving, and rigorous validation, reproducibility and equitable implementation are becoming central to translational impact. Advances in bioinformatics are not abstract technical developments; they are directly shaping how we stratify patients, interpret molecular data and guide precision treatment decisions.

Finally, a personal highlight was reconnecting with old friends and colleagues during the conference dinner. The dinner was hosted at the iconic University of Adelaide UniBar, a venue that was particularly meaningful to me, as it was a regular spot during both my undergraduate and PhD years.