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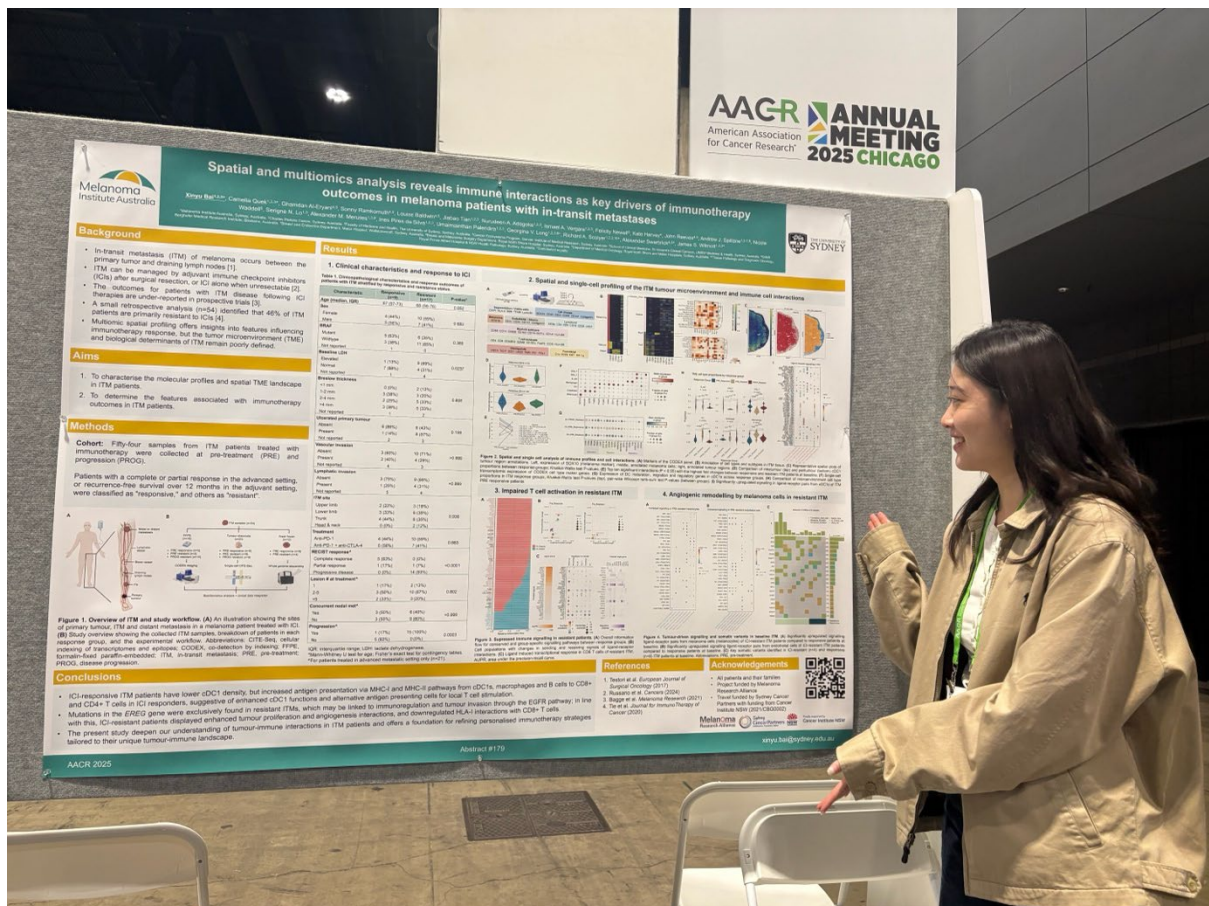
Full Reference: Xinyu Bai; Camelia Quek; Ghamdan Al-Eryani; Sonny Ramkomuth; Louise Baldwin; Jiabao Tian; Nurudeen A. Adegoke; Ismael A. Vergara; Felicity Newell; Kate Harvey; John Reeves; Andrew J. Spillane; Nicola Waddell; Serigne N. Lo; Alexander M. Menzies; Ines P. da Silva; Umaimainthan Palendira; Georgina V. Long; Richard A. Scolyer; Alexander Swarbrick; James S. Wilmott. *Abstract 179: Spatial and multiomics analysis reveals immune interactions as key drivers of immunotherapy outcomes in melanoma patients with in-transit metastases*. Cancer Research 2025; 85 (8_Supplement_1): 179. <https://doi.org/10.1158/1538-7445.AM2025-179>

Conference/Meeting Name: American Association for Cancer Research (AACR) Annual Meeting 2025

Location: Chicago, Illinois, USA

Dates: April 25-30, 2025

Presentation Type: Poster



Presenting my work on spatial immunotherapy resistance at AACR 2025. A memorable highlight was chatting with several mentors from Harvard Medical School who shared valuable advice on developing spatial biology pipelines.

Conference Report:

The AACR Annual Meeting is one of the world's premier gatherings for cancer researchers, clinicians, and industry professionals. With over 20,000 delegates from around the globe, this year's theme—"Inspiring Science, Fueling Progress, Revolutionizing Care"—highlighted cutting-edge advances across all aspects of cancer biology and translational research. Keynote addresses from leaders like Dr. Johanna Joyce and Dr. Catherine Wu set the tone for an inspiring and collaborative event.

There was particular buzz around spatial multiomics, AI-driven pathology, and tumour ecosystem modelling—areas closely aligned with my research. My poster, titled "Spatial and multiomics analysis reveals immune interactions as key drivers of immunotherapy outcomes in melanoma patients with in-transit metastases," presented insights from CODEX imaging of the tumour microenvironment, showing how certain cellular neighbourhoods and immune interactions are reshaped in treatment-resistant melanoma. This work sparked conversations with international leaders, including collaborators from Dana-Farber and Harvard Medical School, some of whom I met in person for the first time after virtual collaborations.

Attending AACR significantly advanced my professional development. I joined several career development panels focused on transitioning from PhD to postdoc, scientific communication, and building mentorship networks—valuable resources as I begin my postdoctoral career. The insights I gained, especially around spatial data integration and clinical applicability, will directly benefit my current melanoma research program and help refine computational workflows that our broader SCP network can adopt.

A personal highlight was experiencing the vibrant energy of Chicago—from poster halls and scientific talks to jazz nights and, of course, the iconic deep-dish pizza! This unforgettable trip not only helped me share Australian cancer research with the global community but also reinforced the power of collaboration and mentorship in shaping our future impact.