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Full Reference: Rebecca C. Simpson, Erin R. Shanahan, Marcel Batten, Ines P. Silva, Irene L. Reijers, Judith M. Versluis, Alexander M. Menzies, Maria Gonzalez, Umaimainthan Palendira, Andrew Holmes, James S. Wilmott, Christian U. Blank, Richard A. Scolyer, Georgina V. Long; Abstract 3463: Longitudinal microbiome-immune dynamics in melanoma patients treated with immune checkpoint inhibitor immunotherapy. *Cancer Res* 1 April 2023; 83 (7_Supplement): 3463.

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Conference/Meeting Name: AACR Annual Meeting 2023

Location: Orlando Florida USA

Dates: 16th-19th April

Presentation Type: oral presentation

I attended the AACR Annual Meeting in Orlando Florida from the 16th-19th of April, where I gave a presentation on our study on longitudinal microbiome-immune dynamics during immune checkpoint inhibitor immunotherapy. AACR is one of the most prominent and highly influential cancer research conferences and is a keystone of the international cancer research community. The conference brought together over 22, 000 cancer clinicians and scientists from around the world to share and discuss new developments and breakthroughs across all areas of cancer research ranging from cancer biology to translational research and clinical studies. The opportunity to both attend and present my work at an influential cancer conference such as AACR was a highly beneficial experience, the engagement I received at my presentation is unmatched to previous conferences I have attended. The interest in my project is highly motivating as I progress towards the end of my PhD.

Areas of particular interest to me were the gut microbiome and cancer immunotherapy, diet regulation of cancer progression and immunometabolism. One of my personal highlights was the "Role of Aging, Immunity, Microbiome and Metabolism in next generation melanoma therapeutics" session which consisted of three keynote talks from Dr Patrick Hwu on next generation TIL therapy, Dr Ashani Weeraratna on the impact of aging on tumour progression and Dr Jennifer McQuade on the interplay of host, tumour and microbial metabolic phenotypes. It was very cool to hear about the preliminary results from the phase I controlled high fibre feeding study presented by Jennifer McQuade and her lab at MD Anderson as well as other talks on the impact of diet on anti-tumour immunity such as from Dr Lydia Lynch (Harvard) and the intra-tumoral microbiome from Dr Florencia McAllister. These sessions were particularly relevant to my area of research and helped frame ideas for ongoing aspects of my project.

It was also great to attend the conference with fellow MIA PhD students Jordan Conway and Grace Attrill and postdocs Dr James Wilmott and Dr Ismael Vegara. AACR was also a great opportunity to meet some of our collaborators in person who I have been interacting with over the last couple of years. It was great to meet and talk with researchers from all around the world who were just as excited to discuss and present their data as I was. You really felt the passion of the broader cancer community. Overall, it was a great opportunity and experience, and one is one of the highlights of my

PhD so far. This was hopefully only the first of many AACRs during my ongoing career in cancer research following the completion of my PhD later this year.

