Immune Profiling in Health and Disease

October 3-5, 2016, I visited the conference "Immune Profiling in Health and Disease" which took place in the Marriott Waterfront Hotel in Seattle and was organised by Adaptive Biotechnologies, Nature Immunology, Nature Medicine, Nature Biotechnology, and Nature Genetics.

The aim of the organisers was to bring together leading scientists to discuss vaccine design, microbiome-host interactions, technological advances, and the clinical and research applications that can arise from immunosequencing. The conference program was filled up with invited speakers, and the conference organisers had managed to attract many top researchers who shared their state-of-the art research with the audience. With 30 minutes time for regular speakers and 1 hour time for keynote speakers, the speakers could go into great depth or give a more complete overview of the various studies had done. The conference program also included 4 short talks for participants who had submitted their abstract. This also allowed some more junior scientists to share their data.

The organisers had picked several topics for this year's conference, to reflects today's hot topics in science. These topics were vaccine design, microbiome-host immune cell crosstalk, technological and computational advances, and immune profiling in cancer. I was mostly interested in the talks focusing on human immunology and was well served already at the start of the conference with talks from Adrian Hayday, Louis Picker, and Kari Nadeau. Talks by Peter Kwong and Dmitriy Chudakov gave interesting perspectives from the side of structural biology and chemistry. Garry Nolan impressed attendees with the possibilities of new technologies his lab has developed. A part of the other talks had used TCR or BCR immunosequencing, which was a technique I was not familiar with yet. However, both the conference organiser Adaptive Biotechnologies and the speakers gave me new insight into how this technology can aid research. The conference ended with a session about cancer research. Although less relevant for my own research, the various talks gave me new insights into this field of research as well.

The first day ended with the combined poster session and welcome reception. The quality of the posters was very high, which resulted in interesting discussions for many hours. The number of the posters and ample time available allowed participants to visit all the individual poster stands. My own poster was well-visited and I enjoyed the opportunities to discuss my work with fellow researchers.

The second day ended with a reception at the Adaptive Biotechnologies headquarters. Shuttle buses made sure all participants could easily travel between the conference site and the company building. The reception allowed further interaction between researchers, while enjoying good food and drinks. We also had the opportunity to have a look behind the scenes and got a tour through the company and its labs.

Altogether, this conference provided an excellent opportunity to hear about scientific advances and meet great scientists in the field of immune profiling, and I am grateful that the NVP supported my participation in this event.

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