

Travel report working visit Monash University, Melbourne, Australia.

From February until July 2016 I visited the Department of Immunology and Pathology at Monash University in Melbourne, Australia. I worked at this department for five months in the lab of Menno van Zelm in collaboration with Professor P. Gibson from the Department of Gastroenterology at The Alfred Hospital. This collaboration made it possible to study the effects of infliximab on the B-cell compartment in patients with Crohn's disease.

Within my PhD project I focus on the immunological aspects and therapy of granulomatous inflammatory disease such as Crohn's disease. Our previous work showed B-cell dysregulation in patients with Crohn's disease. Interestingly, this was partially restored in patients successfully treated with infliximab. Next, we wanted to study the effects of infliximab on the immune system and identify subsets that could be potential biomarkers for therapy. Therefore, we wanted to study the B- and T-cell compartment before start of therapy and during therapy with early and late time points. Fortunately, the Department of Gastroenterology of The Alfred Hospital has a large cohort of patients with inflammatory bowel disease.

We were able to include 12 patients with Crohn's disease to analyze the peripheral B- and T-cell compartment with 11-colour flowcytometry, at four time points before and during treatment with infliximab. We hypothesize that there are early immunological markers predicting response to infliximab and that the B-T cell interaction is of particular interest for this effect on the immune system. We are currently analyzing the data collected at Monash. This study will result in a manuscript and will be part of my thesis.

The Department of Immunology and Pathology had a very social and international character and was very welcoming to me as a visiting PhD student. In addition to my research project I also participated in weekly journal clubs, labmeetings and seminars that broadened my immunological perspective. Several universities and research institutes are based in Melbourne, making it an excellent place for a working visit. I appreciated the organized seminars with outstanding (inter)national guest speakers.

This international working visit gave me the opportunity to learn a lot and it was a really good experience from both a professional and personal perspective. Therefore, I would encourage other Phd students to do a working visit abroad, if possible.

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