

EXPERIENCE REPORT Lauren de Bever

From February till May I performed a research internship at the Brimble group at the University of Auckland in New Zealand. During my research, I focused on the design and synthesis of boron containing peptides for Boron Neutron Capture Therapy (BNCT). This is a specific type of radiotherapy that uses thermal neutrons to excite boron-10 and create the cytotoxic particles *in situ*. I successfully synthesized a series of A20FMDV2-boron peptides containing 1, 2, 4, 8 or 12 boron atoms positioned at either the N- or C-terminus. The A20FMDV2 peptide was chosen as it selectively binds the $\alpha\beta6$ integrin that is overexpressed in cancer. The synthesized peptides have been sent away to evaluate their binding to the $\alpha\beta6$ -integrin. These results will be used in further research to direct rational re-design of the peptides. I loved the opportunity to experience research in one of the biggest research groups in New Zealand (see photo) to see for myself how different a lab can be organised and how education works at the other side of the world. The way people cooperate and communicate in this group was really pleasant and they made me feel right at home as soon as I joined. It also gave me a new appreciation for things that I took for granted back home. I definitely got to appreciate our well organised and really safe labs back at home. Moreover, I expanded my knowledge of peptide synthesis and in particular various analysis methods. Overall, this internship really taught me to work as an independent researcher, but also to ask for advice at the right moment.



In contrast to the big city life during the week, I tried to leave Auckland as much as possible during the weekends to experience the beautiful outdoors of New Zealand. Auckland University has a lot of great outdoor clubs, which organize a lot of trips. Every weekend I had a different trip to a place on the North Island. This included several hiking, climbing, kayaking and rafting trips. This was an amazing way to get to learn local kiwi's, internationals from all over the world and to see even more of the country. I made a lot of friends and got to experience so many different cultures and stories.

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