

CHEMICAL & BIOMOLECULAR ENGINEERING

Center for Biomanufacturing Science & Technology

# CBST SEMINAR

MONDAY | MAY 13, 2019

10:00 A.M.

366 COLBURN LAB



## KATRIN KRAMER

University of Otago, New Zealand

### *“Cancer Vaccines – Using Virus-like Particles for Immunotherapy”*

My research interest focuses on the development of cancer immunotherapies. I am especially interested in understanding how the delivery form of immunotherapies influences their efficacy and how novel therapies can be combined to induce an effective anti-cancer immune response. During my PhD at the School of Pharmacy, University of Otago, I worked on generating and comparing different linking mechanisms between cancer antigen and vaccine adjuvants and how they influence the generation of anti-tumour immune responses. My current projects as a Research Fellow in the Department of Pathology focus on developing an immunotherapy for breast cancer and its use in combination with a variety of novel therapies. For this I use virus-like particles (VLP) delivering tumour antigens in order to prime immune cells to selectively recognise and destroy cancer cells while sparing healthy cells. Furthermore I work on understanding how successful immunotherapies are in a diverse patient population and whether specific patient groups benefit from different treatment combinations.

Dr. Kramer received her bachelor's degree in medical and pharmaceutical biotechnology from the IMC University of Applied Sciences Krems (Krems an der Donau, Lower Austria) and her Ph.D. in bioconjugation chemistry, immunotherapy from the University of Otago: “Bio-conjugate approaches for improved targeted toll-like receptor based vaccines”.

Kramer was a research intern at Haemostatix Ltd in Nottingham, United Kingdom, and a student advisor, laboratory demonstrator to undergrads, a postdoc fellow and a research fellow at University of Otago, Dunedin, New Zealand.

Her research focus is developing and improving immunotherapy for breast cancer and early detection of cancers by setting up training of medical detection dogs by K9MD in New Zealand. Kramer has multiple honors, awards and publications, and is fluent in English, French, and German.



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