

Research Visit to the University of Dundee

January 7th – February 1st, 2008
Dundee, Scotland, UK

The aim of the research visit was to learn affinity chromatography and cast light on the molecular interactions involving lymphocyte (β_2) integrin inside-out signaling. The experiments were performed at the Division of Immunology of Dundee University, Scotland with the guidance of our collaborator Dr. Susanna Fagerholm. The University of Dundee has reputation for excellent research, one example of which is the discovery of *p53* cancer gene by Professor Sir Davin Lane.

The first aim of the research was to find whether proteins 14-3-3 and talin can simultaneously bind to phosphorylated β_2 integrin cytoplasmic tail. Talin is known to be important in integrin activation, and 14-3-3 is involved in cell spreading events. Their binding sites are close to each other but not necessarily overlapping. Second aim of the research was to study the competitive binding of 14-3-3 and filamin, a large actin cross-linking protein.

The visit was successful and many interesting discoveries about the binding of the proteins were made. Many of these findings were unexpected and affect my future research aims. In addition to lab work, I had an opportunity to participate in various interesting seminars. I also had a short oral presentation of my research results in a local lab meeting.

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