

Travel Report – Keystone Symposium **Molecular Cell Biology of Macrophages in Human Diseases**
Santa Fe, New Mexico, USA – February 9-14, 2014

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In February 2014, I attended the Keystone symposium “Molecular Cell Biology of Macrophages in Human Diseases” in Santa Fe, New Mexico. The scientific organizers of this meeting were Frederic Geissmann, Judith Allen and Cristopher Glass. As my PhD project is on the role of human macrophages in rheumatoid arthritis, with a focus on the mechanism of Fc gamma receptor-Toll like receptor cross-talk, this meeting was very relevant to me.

This four-day meeting was composed of plenary sessions and poster sessions. In the plenary sessions, both invited speakers and authors of selected abstracts presented their work. The meeting started with a keynote lecture by Carl Nathan, revisited some ideas on macrophage activation. The first day then focused on genetics of macrophages and on their development. These topics were not directly relevant to my own work, but it did give me a good background on macrophages.

During the second day, the scope switched to macrophage subsets and effector functions. I particularly enjoyed the presentation of Julie Blander about detection and responding to microbial viability (the concept of ‘vita-PAMPs’). On the same day, Judith Allen gave an interesting talk on macrophage activation of resident versus recruited macrophages. Her data indicate that macrophage source is functionally dominant over local plasticity. On the third day, there was a few talks on macrophages in zebrafish. I have never worked with this model system, but I learned a lot of the possibilities this system provides regarding genetics, imaging and developmental studies.

To me, the fourth and last day focusing on macrophages in inflammatory and metabolic disease was the most interesting. Among others, Leonie Taams spoke about human macrophages and T cells in rheumatoid arthritis, which is close to my own research, but from a different point of view. The meeting was closed by a keynote lecture by Ruslan Medzhitov, who proposed an interesting concept on macrophages as a control system of homeostasis and inflammation.

On top of the talks, the poster sessions were very interesting and useful. In three sessions, over 125 posters were presented and during these sessions there was a lot of interaction. I also presented my work with a poster, and there was plenty of interest. The questions and comments I got really helped me to further sharpen my ideas on my data, which will for sure also improve the manuscript I am now preparing. Further, I got a lot of ideas by viewing and discussing other posters. Besides, I think I was able to help others with suggestions on their topics. Overall, to me the interaction during the poster sessions, as well as during the social events and breaks, was the most valuable of this meeting.

On top of being very interesting, the meeting was excellently organized and the setting – blue-sky Santa Fe – was beautiful. I really enjoyed the meeting and I it positively contributed to my PhD project. I would like to thank the Dutch Society for Immunology for their financial contribution to my visit.