

## **Gordon Research Seminar and Conference on Fungal Immunology**

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### **Background**

The NVVI travel grant enabled me to attend the Gordon Research Seminar and Conference on Fungal Immunology in Galveston, Texas. This biannual meeting took place for the third time.

### **Gordon Research Seminar**

It started with the Gordon Research Seminar, a pre-conference dedicated to young scientists, mainly PhD students and young postdocs. Within this small group of 40 people we had the great opportunity to discuss presented data during talks and poster sessions. The highlight was the keynote-lecture, held by Stuart Levitz from the University of Massachusetts Medical School. He gave a really nice overview about interaction between fungal pathogens and the host as well as a summary about his recent work on fungal vaccine development. The idea is to use fungal cell wall polysaccharides with a strong immunomodulatory effect in combination with adjuvants to mount a robust immune response. The two-day-meeting ended with a career talk held by Gordon Brown from the University of Aberdeen, Scotland, UK and Teunis Geijtenbeek from the AMC, Amsterdam. They presented their own career and during an open discussion we could address questions.

### **Gordon Research Conference**

After the two-day-preconference the main conference started. The obligatory application for the meeting beforehand and the presentation of only unpublished data yielded in a very high quality of all presentations. 180 scientists, most of them from Europe and the US, attended the GRC. Due to the specific selection of the field no parallel sessions took place. There were two talk sessions and one poster session per day, thus it was enough time to discuss in between the sessions.

### **Highlights**

Steven Holland from the NIH, NIAID, Washington DC, held the keynote-lecture. He talked about genetic mutations in patients with atypical mycobacterial infection and greatly made the link to pulmonary fungal infections by presenting some new mutations they found in a big patients cohort at the NIH. Further, Tobias Hohl from the Memorial Sloan-Kettering Cancer Center, New York presented latest data about the role of MyD88 and Card9 in neutrophil recruitment to the site of the fungal infection in different compartments. Jean-Paul Latgè from the Pasteur Institute, Paris, talked about immunostimulatory capacities of fungal cell wall components depending on size and structure and David Underhill from Cedars-Sinai Medical Center, Los Angeles, addressed the difficulty in identification and nomenclature of the gut mycobiome and the further link to immune responses, especially in IBD (inflammatory bowel disease) patients. Overall the conference had gathered all major researchers from the small field of fungal immunology and gave a great update on fungus-related pattern recognition, fungal components, adaptive immune responses to fungi, mycobiome and genetic background of fungal infections.

**Poster presentation**

On one day during the GRS and on two days during the GRC I had the possibility to present my data in a poster presentation. I am working on immunostimulatory and –modulatory properties of the *Aspergillus* cell wall component chitin. Since the data on this field is very controversial ranging from different techniques and sources to purify chitin and different immunological models, it was great to have so many other researchers working on this small field at one place. Especially in the discussion with the experts on the fungal cell wall I learned a lot about cell wall composition and chitin purification. Overall I got plenty of useful comments, which will impact the direction of my project.

Attending the GRS/GRC I got highly motivated for my final year of my PhD project. Overall, I will profit a lot in different angles from this meeting and thank the NVVI for their financial support to attend this great conference.