

**12th International Workshop on Langerhans cells, Innsbruck, Austria
November 3. - 6. 2011**

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The International Workshop on Langerhans cells is organized every two years. In 2005 and 2009 the congress took place on the island Madeira, Portugal, since the founder of Langerhans cells – Paul Langerhans – died on Madeira and has been buried on the island. This year, Prof. Nikolaus Romani, from the Innsbruck Medical University, hosted the congress in Innsbruck, Austria. Langerhans cells are antigen presenting cells residing in the epidermis. Upon encountering pathogens, Langerhans cells get activated and will migrate towards lymph nodes to induce appropriate T cell immune responses. Langerhans cells have now become attractive as targets for immuno therapies of inflammatory and infectious diseases, as well as cancers. The purpose of the International Workshop on Langerhans cells was to share the latest data among scientists; to establish and intensify the network of LC researchers; and to bridge researchers and industry.

Five plenary sessions with invited and selected speakers guided the audience through the most recent findings in the Langerhans cell field: 'ontogeny', 'migration & maturation', 'infection', 'tolerance & immunity' and 'disease & therapy'. Since Langerhans cells are a member of the dendritic cell family, there was much attention for different DC subsets and their role in immunity. In mice, Langerin⁺ dermal DCs have been identified almost a decade ago. Up to recently, no human equivalent of this subset had been found. In the 'ontogeny' session, Naomi McGovern from the Newcastle University revealed a human dermal DC subset expressing low levels of Langerin.

During 'Disease & Therapy' there was much attention for targeting Langerhans cells and dendritic cells for vaccination strategies. By using antibodies or carbohydrates structures coupled to antigens or liposomes, LCs can be targeted to induce specific CD4⁺ or CD8⁺ immune responses (Patrizia Stoizner (Innsbruck, Austria), Juliana Idoyaga (New York, USA), Cynthia Fehres (Amsterdam, the Netherlands), Christian Lehman (Erlangen, Germany)).

In addition, during the 'Infection' session it was stressed by different presentations eg. from Esther de Jong (Amsterdam, the Netherlands) and Teunis Geijtenbeek (Amsterdam, the Netherlands), that the T cell immune response elicited by the Langerhans cell critically depends on the type of pathogen and the receptors triggered by the pathogen. SangKon Oh (Dallas, USA) highlighted the difference in vaginal LCs and skin LCs by showing micro array data in the 'disease and therapy' session.

Taken together the meeting was a great success. The social program and the poster party invited people to discuss their data in a pleasant way and gave scientists the opportunity to network. The next Langerhans cell meeting will be held in Amsterdam in September 2013 and will be organized by Esther de Jong, Marcel Teunissen and Teunis Geijtenbeek (AMC, Amsterdam).