

IRC SEMINAR

"CD169+ Macrophages and dendritic cells: Collaboration results in efficient induction of adaptive immune responses"

Joke DEN HAAN, PhD

(VU University Medical Center, Molecular Cell Biology and Immunology, Amsterdam, The Netherlands)

Host: Johannes Stöckl

Tuesday, 9th May 2017 15:00 Uhr

Vienna Competence Center, Seminar Room, 1st Floor, Lazarettgasse 19, 1090 Vienna



Biosketch

Joke den Haan obtained her PhD from the University of Leiden in 1997 on the biochemical characterization of human minor histocompatibility antigens (cum laude). She did a post-doc at the University of Washington, Seattle, in the lab of Mike J. Bevan on antigen presentation by dendritic cell subsets (1998-2003). In 2004 she joined the department of Molecular Cell Biology and Immunology at the VUMC in Amsterdam. She is an associate professor since 2015.



Her group is studying different types of macrophages and DCs that are present in lymphoid organs and how they can activate immune responses. Previously, she discovered a unique role for mouse CD8⁺ dendritic cells in the cross-presentation of antigens to CD8⁺ T cells. Currently, her studies focus on antigen uptake by CD169⁺ macrophages and the transfer to dendritic cells and B cells. Her aim is to use this knowledge to generate new types of vaccines to generate strong immune responses against cancers such as melanoma.

Key publications

- Veninga, H., E.G.Borg, K.Vreeman, P.R.Taylor, H.Kalay, K.Y.van, G.Kraal, L.Martinez-Pomares, and J.M.den Haan. 2015. Antigen targeting reveals splenic CD169 macrophages as promoters of germinal center B-cell responses. Eur.J.Immunol. 45:747-757.
- Beijer,M.R., R.Molenaar, G.Goverse, R.E.Mebius, G.Kraal, and J.M.M.den Haan. 2013. A crucial role for retinoic acid in the development of Notch-dependent murine splenic CD4-CD8- and CD4+ dendritic cells. Eur.J.Immunol 43:1608-1616.
- den Haan, J.M.M. and L.Martinez-Pomares. 2013. Macrophage heterogeneity in lymphoid tissues. Seminars in Immunopathology 35:541-552.
- Backer,R., T. Schwandt, M. Greuter, M. Oosting, F. Jungerkes, T. Tuting, L. Boon, T. O'Toole, G. Kraal, A. Limmer, and J. M. den Haan. 2010. Effective collaboration between marginal metallophilic macrophages and CD8+ dendritic cells in the generation of cytotoxic T cells. PNAS, 107:216.
- den Haan, J. M., S. M. Lehar, and M. J. Bevan. 2000. CD8(+) but not CD8(-) dendritic cells cross-prime cytotoxic T cells in vivo. J. Exp. Med. 192:1685.