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## **ROS-producing macrophages in immune modulation**

Kraaij, M.D.

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**Author:** Kraaij, Marina

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## Stellingen behorende bij het proefschrift getiteld

# ROS-producing Macrophages in immune modulation

1. Macrophage-derived reactive oxygen species induce regulatory T cells. (*this thesis*)
2. The reactive oxygen species producing capacity is different among human macrophage type-2 subsets. (*this thesis*)
3. The difference in T cell stimulatory capacity of macrophage type-2 subsets is not directly linked with their differential reactive oxygen species producing capacity. (*this thesis*)
4. The reactive oxygen species producing capacity of fully differentiated macrophages is not affected by exposure to immunosuppressive drugs. (*this thesis*)
5. Using anti-macrophage antibodies in combination, it is clear that they are not perfectly correlated with each other, so that the number of "subpopulations" of macrophages that can be defined is a function of the numbers of markers. (*Adapted from The Biology of Macrophages, 2012 Edition 1.1*)
6. The use of monoclonal antibody F4/80 leads to the recognition that macrophages in tissues are very numerous, and they occupy a precise anatomical niche in relation to other tissue cell types. (*PNAS 1984; 81:4174-4177*)
7. Macrophages are phagocytic cells that produce and release reactive oxygen species in response to phagocytosis or stimulation with various agents. (*Mol Aspects Med. 2001 ;22(4-5):189-216*)
8. Regulatory mechanisms provided by redox-activated signaling events guarantee the correct spatial and temporal proceeding of immunological processes. (*Redox Rep. 2013;18(3):88-94*)
9. The most exciting phrase to hear in science, the one that heralds new discoveries, is not 'Eureka!' but 'That's funny...' (*Isaac Asimov; cited in Ashton Applewhite, William R. Evans and Andrew Frothingham, And I Quote, 2003*)

10. Imagination is everything. It is the preview of life's coming attractions. (*Albert Einstein; credited to Einstein in 'Expect to Win' (1981) by Bill Glass and credited to Einstein in 'Reaching Your Possibilities through Commitment' (1981) by Gerald W. Marshall*)
11. You can't go around building a better world for people. Only people can build a better world for people. Otherwise it's just a cage. (*Terry Pratchett, Discworld #12 'Witches Abroad'*)
12. Knowledge is a weapon. I intend to be formidably armed. (*quoted by Richard, 'Temple of the Winds', Sword of truth series by Terry Goodkind*)
13. My definition of winning at squash is playing and surviving, and I've never lost a match. (*United States Senator Arlen Specter*)

Marina D. Kraaij  
Leiden, 24 september 2014