## Stellingen

behorende bij het proefschrift:

Generation of an Immunocompetent B-cell Repertoire

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- 1. IL-7—mediated suppression of premature Ig light-chain rearrangement is the most definitive function yet described for IL-7 in human B-cell development. (This thesis)
- 2. In addition to the classical primary or consecutive germinal center responses, memory B cells originate from local and systemic germinal center-independent responses. (This thesis)
- 3. Intensive proliferation, at least in part, underlies the expansion of B cells in persistent polyclonal B-cell lymphocytosis. Phenotypically, these B cells are distinct from IgM+ memory B-cells in healthy donors and B cells in mature B-cell malignancies.(This thesis)
- 4. A substancial fraction of IgA+ memory B cells has a polyreactive B-cell receptor. Since these receptors are capable of recognizing many diverse bacteria strains, this leads to a new concept of controlling bacterial flora in gut. (This thesis)
- 5. Since much more can be measured about cells, than about antibodies, diagnostics of IgE-mediated diseases should be expanded for IgE+ memory B-cell measurements in blood. (This thesis)
- 6. B cells are blood cells. Studies of normal and abnormal B-cell development/function have crossed the 2 prominent disciplines of hematology and immunology since the inception of Blood 50 years ago. (...) Progress in basic and clinical B-cell research has been a gradual continuum, with notable spikes of discovery frequently driven by technical advances. This will continue. (Tucker W. LeBien, Blood, September 2008)
- Contemporary science is one of the most communal activities ever pursued by humanity, and is among the most international careers possible. (Jonathan W. Yewdell, Nature Reviews, May 2008)
- 8. The important thing in science is not so much to obtain new facts as to discover new ways of thinking about them (Sir William Bragg, Nobel Prize for Physics, 1915)
- 9. Our freedom to doubt was born out of a struggle against authority in the early days of science. It was a very deep and strong struggle: permit us to question to doubt to not be sure. I think that it is important that we do not forget this struggle and thus perhaps lose what we have gained. (Richard Feynmann, "The Value of Science", address to the National Academy of Sciences, Autumn 1955)
- 10. Faith and reason are like two wings on which the human spirit rises to the contemplation of truth (John Paul II, "Fides et ratio" Encyclical Letter, September 1998)

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11. "Je suis de ceux qui pensent que la science est d'une grande beauté. Un savant dans son laboratoire n'est pas seulement un technicien: c'est aussi un enfant placé en face des phénomènes naturels qui l'impressionnent comme un conte de fées. Nous ne devons pas laisser croire que tout progress scientifique se réduit à des mécanismes, des machines, des engrenages, qui, d'ailleurs, ont aussi leur beauté propre." (Marie Curie, During a debate in Madrid, "The Future of Culture", 1933).

(I am among those who think that science has great beauty. A scientist in his laboratory is not only a technician: he is also a child placed before natural phenomena which impress him like a fairy tale. We should not allow it to be believed that all scientific progress can be reduced to mechanisms, machines, gearings, even though such machinery also has its beauty.)

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