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Structure and function of the endothelial glycocalyx in the microcirculation

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Stellingen

Behorende bij het proefschrift getiteld:

Structure and function of the endothelial glycocalyx in the microcirculation

- 1: The complexity of endothelial glycocalyx composition adds a crucial layer to regulation of cell-cell communication. *This thesis*
- 2: Endothelial glycocalyx damage is the common cause of both general vascular disease and renal failure in vasculature-related pathologies.
This thesis, adapted from the "Steno hypothesis" from Deckert et al. 1989
- 3: Further insight in structure-function relationships of the glycocalyx will provide opportunities to innovate medicine. *This thesis*
- 4: The development of technological innovations that enable determination of heparin sulfate sequence and modification are a critical factor for future studies. *This thesis*
- 5: "The glycocalyx is involved in all functions of the endothelium."
Reitsma et al. Pflugers Arch - Eur J Physiol, 2007& This thesis
- 6: "The high diversity in HS modification-patterns results in an information density which exceeds that of DNA or polypeptides." *Mundhenke et al. Am J Pathol. 2002*
- 7: Although considered as 'the third language of life' still far too little is known about the exact composition and function of the human glycome.
- 8: "It may be time (...) to embrace a more all-encompassing concept of an integrative glomerular barrier complex." *Haraldsson, Kidney Int., 2013*
- 9: Health care missed the PC and Internet revolutions, but it can't afford to miss the cloud and mobile revolution. *John Sculley, 2013*
- 10: "Research is to see what everybody else has seen, and to think what nobody else has thought" / "Je gaat het pas zien als je het doorhebt."
Albert Szent-Györgi, 1893-1986 / Johan Cruijff
- 11: "Never memorize something that you can look up." *Albert Einstein, 1921*
- 12: "Not to be absolutely certain is, I think, one of the essential things in rationality."
Bertrand Russell, 1947