

# STELLINGEN



**Stellingen behorende bij het proefschrift**

**Studies on Gata 1: Cell Cycle, Survival  
and Differentiation**

**De rol van Gata 1 in de cel cyclus, overleving en  
differentiatie**

**29 Juni 2005  
Erasmus MC Rotterdam**

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- 1 Differentiating erythroid cells communicate with each other in the erythroblastic island through a homotypic signalling mechanism (Red Cell Differentiation Signal -REDS-) that enables the maintenance of the homeostasis of red blood cell production (this thesis).
- 2 The differentiation of primary erythroid progenitors in the hanging drop culture method recapitulates erythroid differentiation *in vivo*. The forced proximity of cultured cells due to gravity in the hanging drops allows intercellular interactions, which lead to coordinated *ex vivo* differentiation of erythroid progenitors (this thesis).
- 3 Activation of death receptors or cytochrome C pathway in *ex vivo* cultures favours erythroid differentiation and downregulation of Gata1 levels (this thesis).
- 4 Gata1 overexpressing cells are less sensitive to UV-light irradiation when compared to wildtype cells (this thesis).
- 5 Gata1 is expressed in murine (and human) dendritic cells and is required for their survival (this thesis).
- 6 Good communication is limited to the overlap of the languages of interacting individuals: the spoken language and each one's world. In order to communicate it is necessary to master both of the other's language domains. Probably this is one of the factors slowing down scientific progress.

*Inspired by:*

**“The limits of my language mean the limits of my world.”**

**“Die Grenzen meiner Sprache bedeuten die Grenzen meiner Welt.”**

*Ludwig Wittgenstein (1889 - 1951).*

- 7 Practicing science makes you a citizen of the world.

*Inspired by:*

**“I aim to be a citizen of the world”.**

**“Ego sum civis mundi.”**

*Desiderius Erasmus (1466 - 1536).*

- 8 Curiosity is the origin of wisdom.  
*Inspired by:*  
**“If you are satisfied after a discovery, you won’t make more discoveries.”**  
*Seneca (4 BC – 65 AC).*  
**“The only true wisdom is in knowing you know nothing.”**  
 Ἐν οἶδα ὅτι οὐδέν οἶδα  
*Socrates (470 BC – 399 BC).*
- 9 The Stellingen of this thesis are not absolute as a whole. I would have written something completely different six months earlier or six months later.  
*Inspired by:*  
**“Everything is relative.”**  
**“Alles ist relativ.”**  
*Albert Einstein (1879-1955). 100 years of the Relativity Theory.*
- 10 Writing a thesis requires dedication and discipline until writing becomes an addiction.  
*Inspired by:*  
**“The desire of writing grows with writing.”**  
**“Desiderium scribendi scribendo crescit.”**  
*Desiderius Erasmus (1466 – 1536).*
- 11 It is important to keep a critical mind, particularly when reading literature, for it allows you to discern and to improve.  
**“In short, he became so absorbed in his books that he spent his nights from sunset to sunrise, and his days from dawn to dark, poring over them; and what with little sleep and much reading his brains got so dry that he lost his wits. [...] And it so possessed his mind that the whole fabric of invention and fancy he read of was true, that to him no history in the world had more reality in it.”**  
 “En resolución, él se enfrascó tanto en su lectura, que se le pasaban las noches leyendo de claro en claro, y los días de turbio en turbio; y así, del poco dormir y del mucho leer, se le secó el cerebro de manera que vino a perder el juicio. [...] Y asentósele de tal modo en la imaginación que era verdad toda aquella máquina de aquellas soñadas invenciones que leía, que para él no había otra historia más cierta en el mundo.”  
*Miguel de Cervantes Saavedra (1547-1616). IV centenary of the publication of “El famoso hidalgo Don Quijote de la Mancha”.*

