

## Stellingen behorende bij het proefschrift

### Epigenetic regulation in rodent primordial germ cell and preimplantation embryos

1. Epigenetic constitution of a round spermatid promotes rescue of female embryos in the absence of a functional paternal copy of *Xist* (this thesis).
2. Pericentric heterochromatin maintains its specific epigenetic features during genome wide reprogramming during primordial germ cell development in the mouse (this thesis).
3. Mouse embryos derived from round spermatid injections (ROSI) are a relevant model to investigate inter- and trans- generational inheritance of epigenetic modifications, in particular in view of the recent application of ROSI in the clinic (this thesis).
4. Absence of a staining signal in immunohistochemistry, can only be viewed as true absence of a protein when results from other approaches confirm the finding (this thesis).
5. Dissociation of chromocenters during PGC development is not accompanied by major satellite transcriptional activation in the individual pericentromeres (this thesis).
6. *In vitro* model systems have greatly contributed to our knowledge of mechanisms in development and cell differentiation. However, they do not always reflect the real biological phenomena, acting *in vivo*.
7. Cloning factories should add the following disclaimer to their “product”: genotype ≠ phenotype.
8. An important question in the context of the possible generation of human-pig chimeras with the purpose of generating personalized human organs for transplantation is: what defines humanity?
9. Not only do we inherit our parents' genes and their heirlooms, but we may also truly inherit their experiences through epigenetic mechanisms.
10. The most exciting results in research projects come when the suitcases are packed, and the removal van is ready for departure.
11. Με υπομονή και επιμονή και θέληση άλλη τόση, άνθρωπος ίντα θα σκεφτεί να μην το κατορθώσει – Κρητική μαντινάδα (with patience, perseverance and strong will, man can achieve anything that comes in mind – Cretan saying).