## Stellingen behorende bij het proefschrift

## Post-transcriptional Regulation of Gene Expression by Rod1

- 1. Rod1 is required for Nonsense-Mediated mRNA Decay in HEK293 cells. (this thesis)
- 2. Rod1, Upf2 and Upf1 co-regulate hundreds of target genes in HEK293 cells, several of them potential NMD targets. (this thesis)
- 3. Rod1, Ptbp1 and Raver1 co-regulate alternative splicing events in differentiated MEL cells. (this thesis)
- 4. Rod1 and Ptbp1 are both predominantly splicing repressors. (this thesis)
- 5. Ptbp1 is (partially) required for Rod1 binding to RNA. (this thesis)
- 6. Alternative splicing has contributed to the emergence of complex proteomes (and organisms) from a relatively small genome.
- 7. It is ironic that the inaccuracy of diverse cellular mechanisms contributes both to the rise of a species and to the demise of the individual.
- 8. It is remarkable that, as scientists, we try to learn in 'a few' years what cells have 'learned' in billions.
- Of all the things that exist, perhaps the hardest for scientists to understand is existence itself.
- A totally blind process can by definition lead to anything; it can even lead to vision itself.
  Jacques Monod (1910-1976)
- "...sempre que um homem sonha, o mundo pula e avança como bola colorida entre as mãos de uma criança."
  António Gedeão (1906-1997)

(...everytime a man dreams, the world jumps and moves forward like a coloured ball in the hands of a child)