

Stellingen behorende bij het proefschrift

“Navigating Cells and Cytoskeletal Networks with a Novel Family of AAA-ATPases”

1. Navigators are microtubule plus-end binding proteins that can induce cell shape changes (this thesis).
2. The asymmetric distribution of Navigators in cells is caused by local post-translational modification or by asymmetrically localized binding partners (this thesis).
3. The differential effects of cytochalasin D and latrunculin A on Navigator localization have revealed a hidden f-actin binding domain in Navigator proteins that can be specifically activated by cytochalasin D, independently of the actin depolymerizing activity of this toxin (this thesis).
4. A single Navigator molecule can associate with either EB1 or f-actin in a mutually exclusive fashion (this thesis).
5. Although the enzymatic activity of Navigators remains unknown, localization studies show that these proteins are associated with a variety of cellular activities, such as the organization of the cytoskeleton and nucleoli (this thesis).
6. One of the biggest challenges in research is to sort the right from the wrong clues.
7. The knowledge that we have is little when compared to that of which we are ignorant.
8. The best way to deal with failures is to regard them as practice shots, and to keep trying.
Inspired by **Charles Franklin Kettering**
9. Sì, abbiamo un'anima. Ma è fatta di tanti piccolissimi robot (Yes, we have a soul, but it's made of lots of tiny robots). **Giulio Giorelli**
10. The most erroneous stories are those we think we know best - and therefore never scrutinize or question. **Stephen Jay Gould**
11. There are some things so serious you have to laugh at them. **Niels Henrik David Bohr**

Jeffrey van Haren, 10 juni 2009