

## University of Groningen

### Poor old pores

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## Stellingen

behorende bij het proefschrift

### **Poor old pores - The cell's challenge to make and maintain nuclear pore complexes in aging**

van Irina Lucia Rempel, 9 juli 2019

1. Mitotically aged yeast cells have a decreased abundance of specific Nuclear Pore Complex (NPC) components and NPC assembly factors and accumulate faulty NPCs in herniations. (Chapter 2)
2. The exchange between the nucleus and cytosol is impaired in mitotically aged yeast cells. (Chapter 2)
3. The age-related decline in NPC function impinges on multiple hallmarks of aging.
4. The transport mechanism of Heh2 fulfills several criteria that qualify it as a potential sensor for NPC integrity. (Chapter 3)
5. The most pure forms of replicative and chronological aging are found in yeast. (Chapter 5)
6. Yeast is a good model organism to study age-related changes of NPCs, despite the fact that yeast has closed mitosis. (Chapter 5)
7. Cells that undergo open mitosis probably have an opportunity to clear up substoichiometric amounts of Nucleoporins. (Chapter 5)
8. Working towards the PhD degree is a humbling experience for most.
9. The most impressive adventures that we experience usually get us into situations that are difficult to solve and that require hard work. Life cannot be fulfilling, if it is only easy and convenient.
10. Current legislation aims too often at endorsing women instead of endorsing gender equality.