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## Establishment of single-cell readouts for the study of TORC1 signaling dynamics in budding yeast

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## **Propositions**

Accompanying the thesis

### **Establishment of single-cell readouts for the study of TORC1 signaling dynamics in budding yeast**

Luc-Alban Vuillemenot, X X 2024

- 1 – TORC1 and PKA-dependent inputs regulate Sfp1 subcellular localization independently of each other (chapter 2).
- 2 – The C-terminal zinc finger domains of Sfp1 are involved in a parallel localization mechanism that is responsive to TORC1 and PKA activity (chapter 2).
- 3 – TORC1 and PKA differentially regulate the subcellular localization of Sfp1 across the cell cycle (chapter 3).
- 4 – Mammalian TORC1 substrates offer a viable alternative to endogenous substrates as the basis of single-cell TORC1 readouts in budding yeast (chapter 4).
- 5 – The development of single-cell readouts is crucial for uncovering the temporal and spatial aspects of TORC1 signaling activity (this thesis).
- 6 – “Nothing in life is to be feared, it is only to be understood. Now is the time to understand more, so that we may fear less.” Attributed to Marie Skłodowska-Curie