

ANNOUNCEMENT for a MASTER PROJECT

in the interdisciplinary collaboration between *Petranovic Lab* and *Westerlund Lab*

Duration: min 6-12 max months

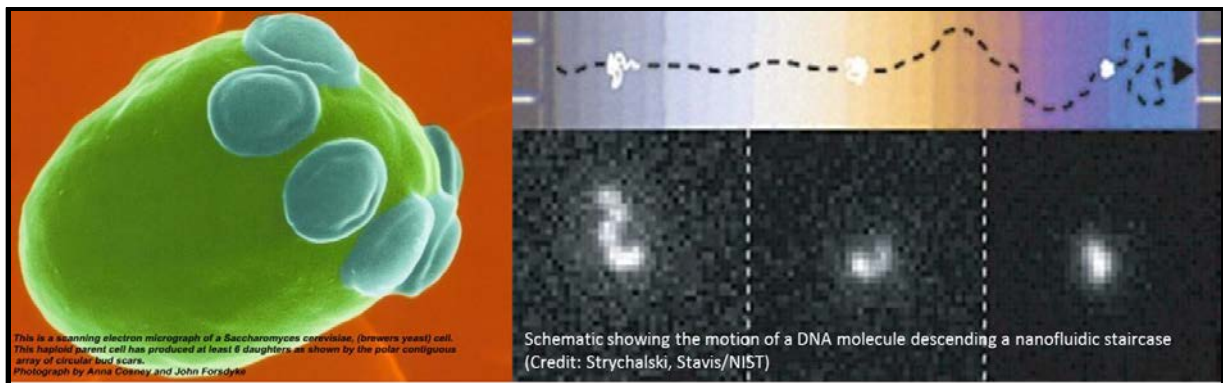
Start: anytime in 2015

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Use of nanofluidic channels to study DNA damage during stress, aging and induction of death

The Petranovic Lab is studying how different types of stresses (external or internal) damage the cell, and how the cell copes with these events. The stresses can be environmental or can be due to changed metabolism or protein folding. The exact mechanisms that trigger stress responses, regulation of aging and induction of death pathways are not well studied in many of these cases. The Westerlund Lab has developed advanced analytical techniques to study DNA damage using nanofluidic channels.

In this project the two labs combine their skills, **implementing nanofluidics to study when and how DNA damage occurs during different stresses, aging and induction of death.**



References

1. Mirisola MG, Braun RJ, Petranovic D. *FEMS Yeast Res.* **2013** Oct 24. doi: 10.1111/1567-1364.12112.
2. S. Zirkin, S. Fishman, H. Sharim, Y. Michaeli, J. Don, Y. Ebenstein, *J. Am. Chem. Soc.* **2014**, *136*, 7771–7776.