Recent publications

Peer-reviewed scientific articles

1. **Tollis, S.** †,*, Singh, J.*, Thattikota, Y., Palou, R., Ghazal, G., Coulombe-Huntington, J., Tang, X., Moore, S., Blake, D., Bonneil, E., Royer, C.A., Thibault, P., and Tyers, M.†, Nsr1, a nitrogen source-regulated microprotein, confers an alternative mechanism of G1/S transcriptional activation in budding yeast. *In press, PLoS Biology. (*): equivalent contributions. (†):co-corresponding authors.* **2021**
2. Black, L.*, **Tollis, S.***,†, Fu, G., Fiche, J.-B., Dorsey, S., Cheng, J., Ghazal, G., Notley, S., Crevier, B., Bigness, J., Nollmann, M., Tyers, M. †, and Royer, C.A. †, G1/S transcription factors assemble in increasing numbers of discrete clusters through G1 phase. *J. Cell Biol.* **219** (9): e202003041. *(*):equivalent contributions.(†):co-corresponding authors.* **2020**
3. Jacques, S., van der Sloot, A.M., Huard, C., Coulombe-Huntington, J., Tsao, S., **Tollis, S.,** Bertomeu, T., Culp, E.J., Pallant, D., Cook, M., Bonneil, E., Thibault, P., Wright, G.D., and Tyers, M., Imipridones cause cellular toxicity in human cells and bacteria by ectopic activation of the ClpP protease. *Genetics* **214** (4): 1103-1120. **2020**
4. Dorsey, S.*, **Tollis, S.***, Cheng, J., Black, L., Notley, S., Tyers, M., and Royer, C.A., G1/S Transcription Factor Abundance Reveals Growth-Dependent Determinants of Cell Cycle Commitment in Yeast. *Cell Systems* **6**: 1-16. *(*): equivalent contributions.* **2018**
5. Thattikota, Y., **Tollis, S.**, Palou, R., Vinet, J., Tyers, M., and D'Amours, D., Cdc48/VCP promotes chromosome morphogenesis by releasing condensin from self-entrapment in chromatin. *Mol. Cell* **69***:* 1-13. **2018**
6. Laporte, D., Courtout, F., **Tollis, S.,** and Sagot, I. (2016) Quiescent Saccharomyces cerevisiae forms telomere hyperclusters at the nuclear membrane vicinity through a multifaceted mechanism involving Esc1, the Sir complex, and chromatin condensation. *Mol. Biol. Cell* **27** (12): 1875-1884. **2016**
7. **Tollis, S.**, A Jump Distance-based Bayesian analysis method to unveil fine single molecule transport features. *http://arxiv.org/abs/1506.01112*. **2015**
8. Jose, M., **Tollis, S.**, Nair, D., Mitteau, R., Velours, C., Massoni-Laporte, A., Sibarita, J.B., and McCusker, D., A quantitative imaging-based screen reveals the exocyst as a network hub connecting endo- and exocytosis. *Mol. Biol. Cell* **26** (13): 2519-2534, **2015**
9. Jose, M.*, **Tollis, S.***, Nair, D., Sibarita, J.B., and McCusker, D.**,** Robust polarity establishment occurs via an endocytosis-based cortical corralling mechanism. *J. Cell Biol.* **200(4),** 407-418. *(*): equivalent contributions.* **2013**
10. **Tollis, S.,** Gopaldass, N., Soldati, T., and Endres, R.G., How one cell eats another: principles of phagocytosis. Chapter of the book "Systems microbiology: current topics and applications" by B. Robertson and B. Wren, Caister Academic Press 2012 (ISBN-13: 978-1-908230-02-7). **2012**
11. Dart, A.E., **Tollis, S.**, Bright, M.D., Frankel, G.M., and Endres, R.G., The motor protein Myosin 1G functions in FcγR-mediated phagocytosis. *J. Cell Sci.* **125**, 6020-6029. **2012**
12. Aquino, G., Clausznitzer, D., **Tollis, S.,** and Endres, R.G., Optimal receptor-cluster size determined by intrinsic and extrinsic noise. *Phys. Rev. E.* **83**: 021914. **2011**
13. **Tollis, S.,** Dart, A.E., Tzircotis, G., and Endres, R.G, The zipper mechanism in phagocytosis: energetic requirements and variability in phagocytic cup shape. *BMC Sys. Biol. **4:** 149*. **2010**