

Seminar in Microbiology

Monday, April 27, 2015

Salle de séminaire 7172, CMU

11:30 – 12:30



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Regulating the dynamics of RNA-protein complexes: RNA helicases and their friends

Ribosome biogenesis is a complex process that involves not only the components of the ribosome (rRNAs and r-proteins), but also a multitude of transacting factors that chaperone the biogenesis process and modify the rRNA. In eukaryotes, moreover the two pre-subunits need to be exported to the cytoplasm to be fully matured. The laboratory of Markus Bohnsack is studying the transacting factors in this dynamic process. He has developed powerful methods to study the interaction of these transacting factors with the pre-rRNA in yeast and in human cells.

References

Weis et al., 2015. atBRX1-1 and atBRX1-2 are involved in an alternative rRNA processing pathway in *Arabidopsis thaliana*. *RNA* 21:415-25.

Haag et al., 2015. WBSR22/Merm1 is required for late nuclear pre-ribosomal RNA processing and mediates N7-methylation of G1639 in human 18S rRNA. *RNA* 21:180-7.

Martin et al., 2014. A pre-ribosomal RNA interaction network involving snoRNAs and the Rok1 helicase. *RNA* 20:1173-82.

Bohnsack et al., 2009. Prp43 bound at different sites on the pre-rRNA performs distinct functions in ribosome synthesis. *Mol Cell* 36:583-92.