

Seminars in Microbiology

Monday, May 26, 2014

Salle de séminaire 7172, CMU

11:30 – 12:30

Marie Soulière

Journal Manager, *Frontiers*, Parc scientifique EPFL, Switzerland
EMBO and Lise-Meitner Post-doctoral fellowship, University of Innsbruck, Austria



Gene regulation by bacterial riboswitches

Marie Soulière is interested in the regulation of gene expression by secondary and tertiary structures of RNA. In a recent report, Marie was analysing the effect of a secondary structure on the function of an adjacent pseudoknot. This secondary structure element acts as a riboswitch by binding a ligand involved in the synthesis of queuosine, a modified nucleotide present in the wobble position of tRNAs. Using a variety of methods she was following dynamic changes in the pseudoknot structure

Soulière et al. (2013) *PNAS*. 110(35):E3256-64. Tuning a riboswitch response through structural extension of a pseudoknot.

Soulière et al. (2013) *Angew. Chem.* 52(7):1874-7. New insights into gene regulation--high-resolution structures of cobalamin riboswitches.

Soulière et al. (2011) *JACS*. 133(40):16161-7. A powerful approach for the selection of 2-aminopurine substitution sites to investigate RNA folding.

Contact: P. Viollier

Sandwiches will be offered after the seminar