

Positions in Developmental Systems Biology and Comparative Genomics

Our team is seeking to understand the control of morphogenesis by genomic information, focusing on the reconstruction of the gene regulatory networks (GRN) driving early development in close relatives of the vertebrates, the ascidians. These networks will then be compared to those of other deuterostomes. Approaches include genome sequencing and comparative genomics, molecular embryology, imaging, database integration and computational simulations. Our international multidisciplinary team includes bench and computer scientists.

We are looking for two new colleagues (All nationalities welcome, understanding of French not required). Positions start from January 2011 at the new location of the team in the new building of the CRBM in Montpellier, Southern France.

- A Post-doctoral Scientist, with a background in Cell biology and Imaging, to link transcriptional regulation to the cell biology of cell shape changes during gastrulation.
- A Post-doctoral Scientist or Research associate, with experience in the assembly and annotation of eukaryotic genomes, who will be responsible for the short-read shotgun sequencing of several tunicate genomes, and the comparative analysis of their non-coding sequences.

Enthusiastic candidates with a strong track record of published work are encouraged to send a CV, a short letter of motivation and e-mail addresses of 2 referees to Patrick Lemaire (lemaire@ibdml.univ-mrs.fr).

Recent publications of the team:

Sherrard, K, Robin, F. et al. (2010) Sequential activation of apical and basolateral myosin drives endoderm invagination during ascidian gastrulation, **Current Biology**, In press, September 14 issue.

Tassy, O., Dauga, D., Daian, F., Sobral, D., et al. (2010). The ANISEED database: digital representation, formalization and elucidation of a chordate developmental program. **Genome Research**, in press. (http://www.genome.org/cgi/doi/10.1101/gr.108175.110)

Khoueiry, P., et al. (2010) A cis-regulatory signature in ascidians and flies, independent of transcription factor binding sites. **Current Biology**, 20(9):792-802.

Sobral, D., Tassy, O., and Lemaire, P. (2009). Highly divergent gene expression programs can lead to similar chordate larval body plans. **Current Biology** 19, 2014-2019.