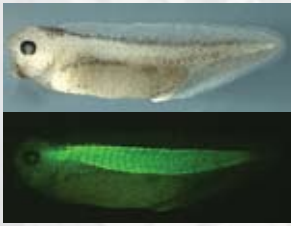


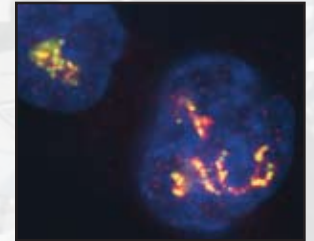
Postdoctoral Studies

in molecular biology of vertebrate development and growth regulation

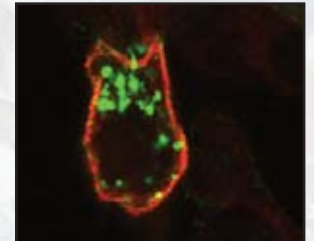
To better understand cancer, our laboratory is interested in two quite distinct aspects of growth regulation, the development of the early vertebrate embryo and the role of ribosome biogenesis in determining cell size and proliferation rate. On the one hand, we are studying the molecular mechanisms of signal transduction through the Wnt,



FGF and Eph pathways during early development, using both *Xenopus* and mouse. On the other hand, our laboratory is very well known for its studies of the molecular mechanisms regulating ribosome biogenesis and their relationship with cell growth.



We are applying the most advanced techniques of molecular biology to these problems as well as taking advantage of proteomics, transgenics and "Gene-Knockout".



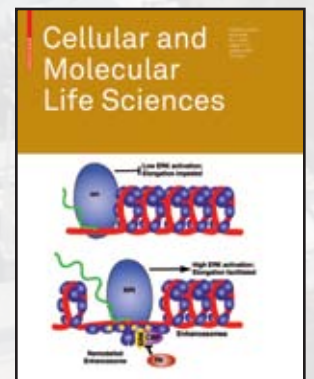
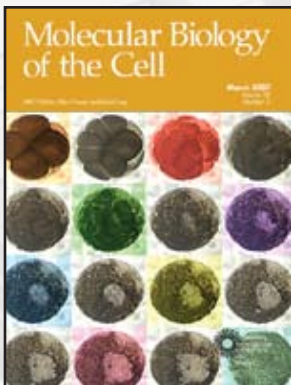
We have an opening for a Postdoc. student to join our group. If chosen, you will work within a modern, well equipped laboratory situated in the majority French speaking and very attractive centre of old Québec City. Those interested should send a curriculum vitae and two letters of recommendation:-

Tom Moss, PhD

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Some recent publications:

- EphA4 signaling regulates blastomere adhesion in the *Xenopus* embryo by recruiting Pak1 to suppress Cdc42 function. Bisson N, Poitras L, Mikryukov A, Tremblay M, Moss T. *Mol Biol Cell*. 2007 Mar;18(3):1030-43.
- A housekeeper with power of attorney: the rRNA genes in ribosome biogenesis. Moss T, Langlois F, Gagnon-Kugler T, Stefanovsky V. *Cell Mol Life Sci*. 2007 Jan;64(1):29-49. Review.
- Growth factor signaling regulates elongation of RNA polymerase I transcription in mammals via UBF phosphorylation and r-chromatin remodeling. Stefanovsky V, Langlois F, Gagnon-Kugler T, Rothblum LI, Moss T. *Mol Cell*. 2006 Mar 3;21(5):629-39.
- ERK modulates DNA bending and enhancesome structure by phosphorylating HMG1-boxes 1 and 2 of the RNA polymerase I transcription factor UBF. Stefanovsky VY, Langlois F, Bazett-Jones D, Pelletier G, Moss T. *Biochemistry*. 2006 Mar 21;45(11):3626-34.
- At the center of eukaryotic life. Moss T, Stefanovsky VY. *Cell*. 2002 May 31;109(5):545-8. Review.

