Research project for a postdoctoral fellow in reproductive toxicology and development

Title: Impact of xenobiotics on male germ cell development during perinatal life

Where: Centre INRS-Institut Armand-Frappier, situé au 531, boul. des Prairies, Laval (Québec) CANADA

Project: Germ cell development in mammals represents a unique and complex process. The fetal and early postnatal windows of development are particularly critical as male germ cell fate is programmed and the spermatogonial stem cell pool is established. During this time window, immature male germ cells undergo proliferation, epigenetic reprogramming and differentiation. Recent evidence strongly suggests that exposure to chemicals during this specific period of development can be the cause of male reproductive issues, including testicular cancer and poor semen quality in adulthood. Yet, we lack good diagnostic and predictive tools, as well as an understanding of the mechanisms relating early exposure to chronic disease such as infertility. The proposed research program focuses on understanding how exposure to xenobiotics during perinatal life affect male germ cells. Using in vitro and in vivo models in rodents and mammals, the candidate will investigate the mechanism involved.

Research themes: Reproduction, toxicology, development, physiology, cell biology, molecular biology.

Starting date: As soon as possible

Research director: Pre Géraldine Delbès
Adresse courriel: geraldine.delbes@iaf.inrs.ca
Site Web: http://www.inrs.ca/geraldine-delbes

Salary: 47,135$CAN for one year (This includes 13% social benefit)

Conditions: Hold a doctorate in biological sciences. Knowledge in the field of reproductive physiology, epigenetics and non-coding RNA.
Technical skills required: animal experiments, flow cytometry, cell culture, cell and molecular biology, bioinformatics

Apply: Interested candidates have to send their resume, transcript, a cover letter and contact information of at least two references to: geraldine.delbes@iaf.inrs.ca.