



WatchFrog is recruiting a PhD student

WatchFrog designs, produces and markets solutions for detecting and identifying the effects of pharmaceutical, cosmetic and chemical substances on whole vertebrate organisms.

We provide low-cost diagnosis of the interaction of a pharmaceutical, chemical compound or an industrial effluent with a complete complex organism. This test methodology combines the advantages of *in vivo* with the flexibility of *in vitro*. It rapidly and simply furnishes accurate information of high sensitivity and specificity, together with low cost and the potential for automatisation.

The new generation of tests offered by WatchFrog is allied to the development of amphibian models that "light up" (through emission of fluorescence) when a biological function is activated.

PhD position

WatchFrog is recruiting a PhD student, to help complete the development of new models dedicated to the endocrine system in the frame of a 7th Framework Programme Project: "Innovative biodiagnosis meets chemical structure elucidation – Novel tools in effect-directed analysis to support the identification and monitoring of emerging toxicants on a European scale" – EDA-EMERGE.

The successful candidate will develop innovative biological tools based on the use of aquatic vertebrate animal models (*Xenopus* and *Medaka*) that fluoresce when a biological function is activated. In addition to tests on existing estrogenic and thyroid hormone models, new models will be developed to cover androgenic and corticosteroid effects. For androgenic effects, *Medaka* is a unique model to study the impact of pollutants on sex-reversal as it is one of few fish combining phenotypic and genetic determination (Y chromosome) of sex. To address endocrine chemicals disruption of the corticosteroid axis, the student will develop new tests based on early stages of amphibian tadpoles, as the role of corticosteroid hormones has been well documented to affect thyroid regulation of amphibian development and metamorphosis.

To comply with Marie Curie ITN rules of the European Commission, eligible candidates can be of any nationality but must not have resided or carried out their main activity (work, studies, etc) in the country of their host organisation for more than 12 months in the 3 years immediately prior to the starting date of the fellowship. PhD candidates should have an MSc degree or equivalent and less than 4 years of equivalent research experience from the date of the award of the degree that allows them to undertake doctoral studies. Salaries will be in accordance with Marie Curie rules of the European Commission.

Competence with *in vivo* models, preferentially aquatic organisms, with know-how in micro-injection or transgenesis, as well as an excellent background in molecular biology and gene regulation aspects is necessary. The successful candidate will work independently but in close contact with in-house staff in order to take charge of the development of new models.

We offer a stimulating research and development environment and opportunities for external collaborations. Good written and oral communication skills in English are required.

Please address applications to: Lemkine@watchfrog.fr