

Postdoctoral Position - The Institute of functional genomics, Montpellier, France

Post doctoral position (2yrs starting Oct 2018)

The impact of Pesticide exposure on neuro/cardiovascular development.

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The harmful effects of poisonous high-levels of environmental pollutants and intoxication to the central nervous (CNS) and cardiovascular systems are proven, *e.g.*, acute neurological symptoms, cognitive and psychomotor dysfunction, and cardiovascular diseases. Surprisingly, insufficient information is available concerning the impact of exposure to pesticide cocktails, as found in agricultural food products. Public relevance further grows when considering the effects that a cocktail of pollutants could have during development, in particular to forming brain and cardio-vascular structures.

We require a post-doctoral researcher to test the hypothesis that exposure to pesticide cocktails during development, in compositions and dosages pertinent to environmental contamination and to consumers, may result in neuro- and cardio-vascular defects. Primarily he/she will use the zebrafish that has proven to be an excellent vertebrate model for studying neuro-vascular and cardio-vascular development. In particular the researcher will develop i) a fast and effective *in vivo* screening of neuro- and cardio-vascular changes induced by environmental pollutants exposure, unveiling the pathological contribution of each of the cocktail components; ii) spatio-temporal 2-Photon reconstructions of the developing neuro- and cardio-vascular structures exploiting *ad hoc* transgenic zebrafish; iii) identify the genetic signature consequent to the exposure to pollutant cocktails during brain and cardiac development.

The ideal candidate will have experience working with zebrafish, and will be familiar with immunohistochemistry, 2 photon microscopy and basic molecular biology.

Deadline for applications- July 2018

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