Institut universitaire romand de Santé au Travail
Institut für Arbeit und Gesundheit
Institute for Work and Health
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UNIL | Université de Lausanne
Institut universitaire romand de Santé au Travail

**POSTDOCTORAL POSITION**

**for 2 years, from November 2012**

at Institute for Work and Health (l'Institut universitaire romand de Santé au Travail, IST) and Infectious Diseases Service of the University Hospital of Vaud (CHUV) on the project:

**"Immune response to a combine exposure of microbial compounds: assessment of occupational health risk to complex bioaérosols"**

Affiliated to the University of Lausanne, the IST is the principal research institute devoted to occupational health in Switzerland. Its Biological Risks group (Dr H. Niculita-Hirzel) works in straight collaboration with the Laboratory of Innate Immunity and Sepsis of the Infectious Diseases Service (Dr T. Roger), a leading group in the innate immunity research against micro-organisms at CHUV (http://www.chuv.ch/min/en/min_home/min-recherche/min-axes-recherche.htm).

**PROJECT**

This interdisciplinary project wish to bring answers about how cells lining the respiratory tree ward off the threat by complex organic mixture and at which exposure level the innate immune system is defeated by mixed microbial compounds. The aims of the project are:

1. To identify the pattern recognition receptors involved in the sensing of grain dust micro-organisms (such as *Fusarium* spp., *Penicillium* spp.)
2. To characterize the cytotoxic effect of grain dust compounds (e.g. mycotoxins)
3. To define whether phagocytic cells respond similarly to occupational bioaerosols and pure microbial compounds

**PERSON SPECIFICATION**

**Essential**

- Preparation of fungal material for cell stimulation
- Strong experience in cell culture (cell lines and primary cells)
- Experience with molecular and cell biology (flow cytometry, quantitative RT-PCR, WB, ELISA)

**Desirable**

- Mouse manipulation
- Background on immune sensing pathways
- Practice of cell transfection or transduction (siRNA, shRNA lentiviruses)

**DEADLINE FOR APPLICATION: 31 August 2012**

Please send your application (letter of motivation, curriculum vitae, list of publications and names of 3 references per e-mail to **monique.nobel@hospvd.ch** or per mail to: IST – Mme Monique Nobel, Service du personnel – Rue du Bugnon 21 – 1011 Lausanne

Do not hesitate to contact **Helene.Hirzel@hospvd.ch** for further information