## The EPIcx lab at INSERM U707 offers a postdoctoral position in multiscale modeling of influenza spread



## POSTDOCTORAL POSITION IN MULTISCALE MODELING OF INFLUENZA SPREAD:

A 1+1 years postdoctoral position is available at the EPIcx lab within the Unit U707 'Epidemiology, Information Systems, Modeling' of the INSERM. The candidate is expected to work within the framework of the ANR project HARMS-flu (Harmonizing multiple scales for data-driven computational approaches to the modeling of influenza spread) with the aim of analyzing and modeling the spread of influenza at different scales.

We are looking for a strongly motivated person with excellent skills in theoretical modeling, computing, data collection and analysis, and a keen interest in multidisciplinary research. The candidate should have a PhD (or expect to have one for the starting date) in physics, applied mathematics, computer science, epidemiology or any close related discipline. Proven ability to work independently and to quickly adapt to new scientific environments are essential for this position. Good communicative skills to successfully collaborate with the other members of the group, and a good knowledge of both oral and written English are required.

The selected candidate will join the EPIcx lab at INSERM U707 in Paris, France and will work in collaboration with Dr. Vittoria Colizza. The topics of the work will be marked by the objectives of HARMS-flu, which include the modeling of spatial spread of influenza by harmonizing different spatial scales, i.e. from local social interactions to human movements and spatial spread. The work will be conducted in collaboration with the Surveillance Network team at U707 (responsible for GP influenza surveillance in France), and the other partners of the project, including Alain Barrat's group at CNRS in Marseille and the InVS (French National Institute of Health Surveillance) in Paris. The research study will be both computational (development of computational intensive data-driven models, agent-based approaches) and theoretical (use of network physics approaches for a theoretical characterization of spreading processes). Experience with data-intensive computational modeling and agent-based approaches is highly desirable.

The position is available starting December 2012. Applications will be continuously received and evaluated until the position is filled.

Applications should be submitted to Dr. Vittoria Colizza via email (vittoria.colizza@inserm.fr) and must include:

- letter of motivation;
- CV including the list of publications;
- up to 3 selected preprints/publications most relevant for this position;
- 2 letters of reference.