



The Institut Curie is a major player in the research and fight against cancer. It consists of a hospital and a Research Center of more than 1000 employees with a strong international representativeness.

The objective of the Curie Institute Research Center is to develop basic research and to use the knowledge produced to improve the diagnosis, prognosis, and therapeutics of cancers as part of the continuum between basic research and innovation serving the patient. http://curie.fr

	Post-doc position at Institut Curie in Systems Biology Group		
Position	Development of computational methods for multiscale modeling of tumor microenvironment		
Domain / Research Unit	Domain 3 – U900 – Cancer and Genome: Bioinformatics, Biostatistics, Epidemiology of Complex Systems The "Bioinformatics and Computational Systems Biology of Cancer" Unit (U900 INSERM, Mines ParisTech, Institut Curie) involves about 90 researchers and students. It is a very active and growing interdisciplinary team of biologists, physicians, mathematicians, statisticians, physicists and computer scientists (http://u900.curie.fr). Our research group focuses on deciphering determinants of tumorigenesis and tumor progression and proposing new strategies to combat cancer. The domains of expertise are big data analysis; signaling network construction and mathematical modeling; study of synthetic interactions in cancer mechanisms, drug response prediction, patient stratification and many others (http://sysbio.curie.fr). The group has long term experience in implementing scientific methodology of data and biological network analysis into user-friendly software packages, currently used by other researchers world-wide (the list of developed software can be found at http://sysbio.curie.fr/software).		
Unit Director, Manager or team leader	Director of U900 : Emmanuel BARILLOT, Research Team Leader "Computational Systems Biology of Cancer" : Emmanuel BARILLOT, Coordinator of the Team : Andrei ZINOVYEV		
Location of the position	Institut Curie, Research Center – U900, 26 rue d'Ulm 75248 Paris cedex 05 (BDD – Biologie du Développement building)		



	1			
Contract type	COD	Starting date and duration	Starting immediately and duration: 18-36 months with possibility of extension	
Main missions of the position Description of the project	The mission is focused on creating and implementing a computational simulator of the processes taking place in tumoral microenvironment, integrating the levels of intracellular and intercellular signalling and biophysical interactions between cells and environment such as extracellular matrix.			
Candidate profil (technical, langues skills)	We expect the candidate to have experience in mathematical modelling of biophysical and biochemical processes taking place within the cell and between the cells. The candidate must be able to participate in the development of a software tool for multi-scale simulation. The project will require programming in C++. Fluent English both spoken and written is required. Experience in systems biology projects, knowledge of the methods for modelling biological networks and knowledge of molecular and cellular biology or biophysics are an advantage.			
Experience level / degrees required	Degree required: PhD level in computer science, bioinformatics, biophysics or systems biology			
How to apply	Please send CV, motivation letter and contact details of 3 references to recruitment.u900-sysbio@curie.fr COMPULSORY MENTION IN YOUR APPLICATION: Development of computational methods for multiscale modeling of tumor microenvironment			

Institut Curie is an inclusive, equal opportunity employer and is dedicated to the highest standards of research integrity.