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

Position	**Post-doc position at Institut Curie in Systems Biology Group** **Machine learning and statistical analysis of multi-level cancer omics data**
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)

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	We expect a candidate with a strong background in statistics, machine learning, computational systems biology or physics. The successful candidate should have experience in high-throughput data analysis in biology. Ideally, the candidate should be able to demonstrate some knowledge of basic biological mechanisms involved in cancer and have experience of collaboration with biologists for solving concrete biological problems. He/she will have to understand the biological and clinical questions related to cell fate decision, tumor heterogeneity, interaction with microenvironment, drug response; define the most appropriate statistical and/or machine learning approaches; carry out the analyses and discuss the results with biologists or clinicians.		
Candidate profil (technical, langues skills …)	The candidate must have a good knowledge in multidimensional data analysis in biology, and be proficient in high-level languages like R, Java, Python or Perl. Familiarity and experience with existing systems biology methods and software would represent a strong advantage. Excellent communication skills and team spirit, and a capacity to work in autonomy are essential. Fluent English both spoken and written is required.		
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 : **Machine learning and statistical analysis of multi-level cancer omics data**		

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