ISTITUTO ITALIANO DI TECNOLOGIA
CENTER FOR GENOMIC SCIENCE OF IIT@SEMM

Center for Genomic Science of IIT@SEMM, Italian Institute of Technology, Milan, Italy

Post-doctoral positions

The Center for Genomic Science of IIT@SEMM (http://genomics.iit.it) located in Milan, Italy, is an outstation of the Istituto Italiano di Tecnologia. The Center benefits from state-of-the art technological platforms including a high-throughput cell-based screening unit, next-generation DNA sequencing and others. The following post-doctoral positions are available:

Pos. 1, 2 - Cancer Biology: Genome, epigenome and transcriptome dynamics in mouse tumor models; forward and reverse genetic screens for modifiers of tumor progression. The projects will involve work with animal models and advanced molecular/cellular biology. PI: Stefano Campaner (Pos. 1), Bruno Amati (Pos. 2).

Pos. 3 - microRNA biology: miRNA-mediated regulatory loops and gene expression mechanisms controlling stem cell self-renewal and fate specification in the mouse mammary gland. The project will involve isolation of mouse primary cells, FACS-based cell purification, organoid culture and transplantation. PI: Francesco Nicassio.

Pos. 4 - Drug Development: Quantitative chemical proteomics applied to the identification of cellular proteins targeted by selected drugs. Collaborative project with the group of Dr. Tiziana Bonaldi at the European Institute of Oncology (IEO).

Pos. 5 - Computational Biology: Development of pipelines for the automatic analysis and integration of different genome-wide datasets (RNA-seq, ChIP-seq, DNA methylation, long-range DNA interactions, mutational analysis); development of statistical and visualization tools. Familiarity with the Linux environment, programming skills (especially in R) will be advantageous; previous experience in genomics is not mandatory. PI: Bruno Amati, with computational supervision by Mattia Pelizzola and Marco Morelli.

Pos. 6 - Computational Biology: Meta-analysis of somatic mutations in cancer with the goal of identifying driver mutations and specific mutation patterns. Proficiency in using JavaEE technology, mySQL databases, the Hibernate object relations management framework, statistics or grid computing will be advantageous. PI: Heiko Muller.

Pos. 7 - Computational Biology: Analysis of imaging data from genome-wide siRNA screens; bioinformatic analysis of an ubiquitin-dependent signaling pathway. Proficiency with statistics, programming (R, C++ or Python), automated image analysis or analysis of large datasets will be advantageous. PI: Mark Wade

The positions will be subject to Post-doctoral contracts and require a PhD degree with or without post-doctoral experience. Candidates should be proficient with the relevant methods and technologies. Applications should be e-mailed to **positions_semm@iit.it** and should include a CV, the e-mail addresses of 3 referees and a short statement on professional skills and interests (1 page max). Candidates should indicate in the title to which of the above position(s) they are applying, and should ask three referees to send their reference letters directly to the same e-mail address. Selected candidates will be initially interviewed by Skype.

Application deadline: July 9, 2012

In order to comply with the Italian law (art. 23 of Privacy Law of the Italian Legislative Decree n. 196/03), we kindly ask every candidate to provide his/her consent to allow IIT to process his/her personal data. We inform you that the information you provided will be used solely for the purpose of assessing your professional profile to meet the requirements of Istituto Italiano di Tecnologia. Your data will be processed by Istituto Italiano di Tecnologia, with headquarters in Genoa, Via Morego, 30, acting as the Data Holder, using computer and paper based means, observing the rules on protection of personal data, including those relating to the security of data. Please also note that, pursuant to art. 7 of Legislative Decree 196/2003, you may exercise your rights at any time as a party concerned by contacting the Data Manager. The Italian Institute of Technology is an Equal Opportunity Employer that actively seeks diversity in the workforce.