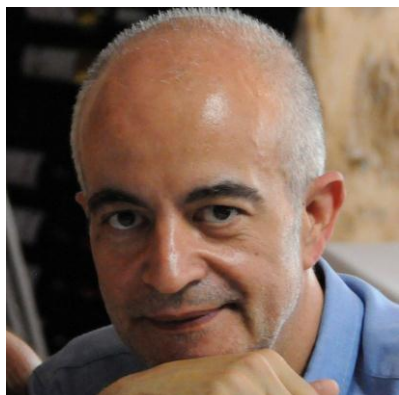


BiolSI Research Seminar

Non-coding RNAs: architects of eukaryotic genomic complexity



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When: June 26, Tuesday - 11h30

Where: Building C1 Room 1.3.20

Pervasive transcription from eukaryotic genomes is responsible for the biosynthesis of a wide range of non-coding RNA molecules that act as functional regulators of genomic expression. The dynamic transcriptomic output of the human genome composed by coding and non-coding RNA (ncRNA) transcripts constitutes a molecular fingerprint of the physiological state and characteristics of a particular cell or tissue. Coding transcripts or messenger RNAs (mRNAs) are devoted to the production of proteins by ribosome translation, whereas ncRNAs are untranslated RNAs that usually perform regulatory functions controlling the flow of information from the genome. NcRNAs have been described as “architects” of eukaryotic genomic complexity since they are responsible for the establishment of an additional layer of regulation of the genomic output that enables the integration of complex suites of genomic expression at the cellular level. NcRNAs can be classified into small (<200 nt) or large (>200 nt) families. In this seminar we will discuss about the biogenesis and function of the different families of ncRNAs in the context of cell physiology and human disease.