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Born in Milano 28/01/1964

**ACADEMIC QUALIFICATIONS :**

from 2007 : Professore Associato in Genetica.

1997 : Ricercatore in Genetica

1992: Specialization in Biotechnology (PhD equivalent)

1988: Degree in Biological Sciences, Universita' di Milano.

**RESEARCH ACTIVITY :**

2000 to present: at Dipartimento di Biotecnologie e Bioscienze, Universita' di Milano-Bicocca.

1989-2000: at Dipartimento di Genetica e di Biologia dei Microrganismi, Universita' di Milano.

1992-1993: National Institute for Medical Research, London (EMBO fellowship program), Prof. Frank Grosveld laboratory, to work on the molecular mechanisms controlling globins genes expression.

**RESEARCH INTERESTS:**

Mechanisms controlling cell specification and differentiation in hematopoiesis.

Molecular control of erythropoiesis:

- mechanisms of Hereditary Persistence of Fetal Hemoglobin: research on globin gene activity and function (mRNA translation, inherited structural and regulatory defects, transcriptional control).
- transcriptional control of the expression of genes encoding erythroid transcription factors, in particular GATA 1 (and its transcriptional and post-transcriptional regulation), Sox6 and NR2F2.
- study of the transcriptional regulation of the "stem cell" gene c-Kit
- identification and functional analysis of genes differentially expressed during erythropoiesis
- signal transduction mechanisms controlling cell commitment and differentiation in normal and pathological (leukemias, myelodysplastic syndromes) erythropoiesis
- development of high-content high throughput assays to identify drugs reactivating fetal globins genes.

**EXPERIMENTAL APPROACHES:**

In vitro molecular biology and biochemical assays, cell culture, transfections, lentiviral-mediated transduction, CRISPR/Cas9-mediated knockout and mouse models are employed in these studies.

H-Index 23. Coordinator of the Marie Curie project HEM-ID: hematopoietic cell identity: genetic and epigenetic regulation in normal and malignant hematopoiesis (HEM-ID PITN-GA-2011-289611, 11 partners, from 7 european countries).