

Serena Maria Luisa Ghisletti



INFORMAZIONI PERSONALI

Nazionalità italiana

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Professore Associato di Biochimica,
Università degli Studi di Milano

FORMAZIONE E PERCORSO PROFESSIONALE

1/03/2024 ad oggi	Professore Associato, Dipartimento di Scienze Farmacologiche e Biomolecolari, Università degli Studi di Milano.
01/01/2020 ad oggi	Scientist, Dipartimento di Oncologia Sperimentale, Istituto Europeo di Oncologia, Milano.
2019-2020	Adjunct Teaching Professor Humanitas University, Milano.
01/2017-12/2019	Ricercatore, Humanitas Research Hospital, Milano.
07/2010-12/2016	Scientist presso il Dipartimento di Oncologia Sperimentale, Istituto Europeo di Oncologia, Milano.
07/2008-06/2010	Postdoctoral Fellow, Structured International Post Doc Program (SIPOD), SEMM-European School of Molecular Medicine, IEO, Milano.
05/2005-06/2008	Postdoctoral Fellow, Department of Cellular and Molecular Medicine, University of California San Diego (UCSD), La Jolla, USA.
03/12/2004	PhD in Physiopathology of Menopause, Università degli Studi di Milano.
02/2001	Laurea (MSc) in Pharmaceutical Biotechnology, Università degli Studi di Milano.

PUBBLICAZIONI SCIENTIFICHE

La dottoressa Ghisletti è autrice di 42 pubblicazioni scientifiche (ORCID ID [0000-0002-7087-5553](https://orcid.org/0000-0002-7087-5553) e Scopus Author ID 6507666651).

H-INDEX: 30.

Selected Publications:

PU.1-Activated Genomic Regions Define Low-risk MDS Subsets Characterized by Immune Dysregulation and Disease Progression.

Vallelonga V, Gandolfi F, Zampini M, Riva E, Maggioni G, Ventura D, Saba E, Termanini A, Polletti S, Prosperini E, Crisafulli L, Campagna A, Ferrari I, Pinocchio N, Todisco G, Pedretti S, Calvi M, Di Vito C, Mavilio D, Mitro N, Ficara F, Della Porta MG, **Ghisletti S.**

Blood 2026, May 14;147(20):2358-2374

TCA-cycle metabolites in the nucleus: drivers of chromatin and epigenetic control.

Ghisletti S, Russo M.

BMC Biol. 2025 Oct 21;23(1):316.

Acetyl-CoA production by Mediator-bound 2-ketoacid dehydrogenases boosts de novo histone acetylation and is regulated by nitric oxide.

Russo M, Gualdrini F, Vallelonga V, Prosperini E, Noberini R, Pedretti S, Borriero C, Di Chiaro P, Polletti S, Imperato G, Marenda M, Ghirardi C, Bedin F, Cuomo A, Rodighiero S, Bonaldi T, Mitro N, **Ghisletti S***, Natoli G. * co-last and co-corresponding author

Mol Cell. 2024 Mar 7;84(5):967-980.e10.

Emerging Insights into Molecular Mechanisms of Inflammation in Myelodysplastic Syndromes.

Vallelonga V, Gandolfi F, Ficara F, Della Porta MG, **Ghisletti S.**

Biomedicines. 2023 Sep 23;11(10):2613.

Novel insights into the role of acetyl-CoA producing enzymes in epigenetic regulation.

Russo M, Pileri F, **Ghisletti S.**

Front Endocrinol (Lausanne). 2023 Sep 29;14:1272646.

Integration of transcriptional and metabolic control in macrophage activation.

Natoli G, Pileri F, Gualdrini F, **Ghisletti S**.

EMBO Rep. 2021 Sep 6;22(9)

A first exon termination checkpoint preferentially suppresses extragenic transcription.

Austena LMI, Piccolo V, Russo M, Prosperini E, Polletti S, Polizzese D, **Ghisletti S**, Barozzi I, Diaferia GR, Natoli G
Nat Struct Mol Biol. 2021 Apr;28(4):337-346.

Sustained activation of detoxification pathways promotes liver carcinogenesis in response to chronic bile acid-mediated damage.

Collino A, Termanini A, Nicoli P, Diaferia G, Polletti S, Recordati C, Castiglioni V, Caruso D, Mitro N, Natoli G, **Ghisletti S**.

PLoS Genetics 2018 May 7;14(5)

High constitutive activity of a broad panel of housekeeping and tissue-specific cis-regulatory elements depends on a subset of ETS proteins.

Curina A, Termanini A, Barozzi I, Prosperini E, Simonatto M, Polletti S, Silvola A, Soldi M, LAustena L, Bonaldi T, **Ghisletti S*** and Natoli G. *** co-last and co-corresponding author**

Genes & Development. 2017 Feb 15;31(4):399-412.

Opposing macrophage polarization programs show extensive epigenomic and transcriptional cross-talk.

Piccolo V, Curina A, Genua M, **Ghisletti S**, Simonatto M, Sabò A, Amati B, Ostuni R, Natoli G.

Nature Immunology 2017 May;18(5):530-540.

Massive gene amplification drives paediatric hepatocellular carcinoma caused by bile salt export pump deficiency.

Iannelli F, Collino A, Sinha S, Radaelli E, Nicoli P, D'Antiga L, Sonzogni A, Faivre J, Buendia M A, Sturm E, Thompson R J, Knisely A S, Natoli G, **Ghisletti S***, Ciccarelli F D. *** co-last and co-corresponding author**

Nature Communications 2014 May 13;5:3850.

Coregulation of transcription factor binding and nucleosome occupancy through DNA features of mammalian enhancers.

Barozzi I, Simonatto M, Bonifacio S, Yang L, Rohs R, **Ghisletti S**, Natoli G.

Molecular Cell 2014 Jun 5;54(5):844-57.

Endogenous retrotransposition activates oncogenic pathways in hepatocellular carcinoma.

Shukla R, Upton KR, Muñoz-Lopez M, Gerhardt DJ, Fisher ME, Nguyen T, Brennan PM, Baillie JK, Collino A, **Ghisletti S**, Sinha S, Iannelli F, Radaelli E, Dos Santos A, Rapoud D, Guettier C, Samuel D, Natoli G, Carninci P, Ciccarelli FD, Garcia-Perez JL, Faivre J, Faulkner GJ.

Cell 2013 Mar 28; 153: 101-11.

Latent enhancers activated by stimulation in differentiated cells.

Ostuni R, Piccolo V, Barozzi I, Polletti S, Termanini A, Bonifacio S, Curina A, Prosperini E, **Ghisletti S**, Natoli G.

Cell 2013 Jan 17;152(1-2):157-71.

Coronin 2A mediates actin-dependent de-repression of inflammatory response genes.

Huang W, **Ghisletti S**, Saijo K, Gandhi M, Aouadi M, Tesz GJ, Zhang DX, Yao J, Czech MP, Goode BL, Rosenfeld MG, Glass CK.

Nature 2011 Feb 17;470(7334):414-8.

The genomic landscapes of inflammation.

Natoli G, **Ghisletti S**, Barozzi I.

Genes & Development 2011 Jan 15;25(2):101-6.

Identification and characterization of enhancers controlling the inflammatory gene expression program in macrophages.

Ghisletti S, Barozzi I, Mietton F, Polletti S, De Santa F, Venturini E, Gregory L, Lonie L, Chew A, Wei CL, Ragoussis J, Natoli G.

Immunity 2010 Mar 26;32(3):317-28.

Transcriptional integration of TLR2 and TLR4 signaling at the NCoR derepression checkpoint.

Huang W, **Ghisletti S**, Perissi V, Rosenfeld MG, Glass CK.

Molecular Cell 2009 Jul 10;35(1):48-57.

Cooperative NCoR/SMRT interactions establish a corepressor-based strategy for integration of inflammatory and anti-inflammatory signaling pathways.

Ghisletti S, Huang W, Jepsen K, Benner C, Hardiman G, Rosenfeld MG, Glass CK.

Genes & Development 2009 Mar 15;23(6):681-93.

Parallel SUMOylation-dependent pathways mediate gene- and signal-specific transrepression by LXRs and PPARgamma.

Ghisletti S, Huang W, Ogawa S, Pascual G, Lin ME, Willson TM, Rosenfeld MG, Glass CK.

Molecular Cell 2007 Jan 12;25(1):57-70.

ATTIVITA' PROGETTUALE (DA PRINCIPAL INVESTIGATOR)

selected projects:

2026-2029: EP PerMed, EU, *"Precision Medicine for Therapy-Related Myeloid Neoplasias"*
<https://www.eppermed.eu/funding-projects/projects-results/project-database/precision-tmn/>

2020-2025 Associazione Italiana Ricerca sul Cancro (AIRC) - Investigator Grant 2020, codice progetto: 24506. *"Characterization of genomic regulatory elements in MDSs and secondary AML by integrated genomic and proteomic approaches"*.

2011-2014 Ministero della Salute (Bando GR-Giovani Ricercatori 2009) Ricerca Finalizzata-IRCCS, codice progetto: GR2009-1566807. *"Reorganization of the macrophage epigenome during sustained inflammation and its functional implications"*.

2009-2012. Associazione Italiana Ricerca sul Cancro (AIRC) - My first AIRC GRANT (MFAG), codice progetto: 8941; *"Defining the interplay between genetic and epigenetic events in inflammation associated cancer"*.