



## **Cristina Battaglia,**

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*Member of PhD program of Translational and Molecular Medicine*

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### **Education and training**

1989: Master Degree in Biology at the University of Milan, Italy

1997: Abilitazione alla Professione di biologo ( Esame di stato)

1990-1991: Research fellowship, Department of Connective Tissue Research, Max Planck Institute for Biochemistry, Martinsried, Munich, Germany

1992 -1994: Research fellowship, Mario Negri Institute for Pharmacological Research, Laboratory of Kidney Disease and Bio-engineering, Bergamo

1996-1997: position as biomedical technician, Istituto Nazionale dei tumori (INT), Milano

1998-2015: Assistant Professor/ricercatore confermato, Faculty of Medicine, University of Milan;

From 2000-curr: Faculty Member of PhD program of Molecular and Translational Medicine, University of Milan

**March 2015-curr: Associate Professor of Biochemistry, Faculty of Medicine, University of Milan**

### **Research and Professional experience**

Research activities from 1989-1994, her scientific training has been carried out on different aspects of biomedical research, cell biology, biochemistry of proteins of extracellular matrix and nucleic acid (DNA, RNA). From 1995, research activity is focused to develop new analytical methods in the field of nucleic acids biochemistry and to improve strategies to screen genetic mutation by using DNA microarray technology and sequencing. From 2005, she is involved in research programs for genes expression profiling, high-density SNP genotyping and copy number profiling in normal and tumor samples ( renal carcinoma, multiple myeloma and leukemia) and genetic diseases using microarray and ultra-deep sequencing technology and bioinformatics tools.

### **Post-Degree education**

2016 Poli OPEN Knowledge: Education - OER101, Using open educational resources in teaching, November 24, 2016, corso online, Politecnico di Milano

2015, Soft Skills - GestConf101, Gestione del Conflitto Apr 12, 2015, Poli OPEN Knowledge, corso online, Politecnico di Milano

2014: MEDX202-01: Genomic Medicine Gets Personal, August 14, 2014, Georgetown University, Online courses

2014: Corso di public speaking, May, 9/11, 2014, Crusm, Università di Milano

2013: Critical thinking in global challenges, , March 11, 2013 University of Edinburgh , corso-online, Coursera.org

2012: Writing in the sciences, November 21, 2012 • Stanford University, corso-online, Coursera.org,

2007: Basic gene mapping & linkage analysis course, Certificate of completion, 16-20 Luglio 2007 , Max-delbruck centrum fur molekulare medizin / Baylor College of Medicine, Berlin; Germany

2006: 19th Course in Medical Genetics, 26 aprile-2 maggio 2006, Bertinoro di Romagna, ITALY European School of Genetic Medicine

2005: 7th Course in Molecular Cytogenetics and DNA Microarrays, 12-17 Novembre 2005 , Bertinoro di Romagna, ITALY, European School of Genetic Medicine

2003: Fondamenti di inferenza statistica per le applicazioni della medicina e alla bioingegneria, 12,13, 19,20, 26, 27 Febbraio 2003 , Milano, ITALY, Politecnico di Milano

2001: Apex on DNA microarrays: applications in SNP analysis, mutation detection and DNA resequencing, 26 Agosto- 1 Settembre , 2001; Tartu, Estonia, Department of Biotechnology, University of Tartu, Estonia

### **WEB profiling**

Research GATE: [https://www.researchgate.net/profile/Cristina\\_Battaglia](https://www.researchgate.net/profile/Cristina_Battaglia)

Scopus: <http://www.scopus.com/authid/detail.url?authorId=7103265586>

Orcid: <http://orcid.org/0000-0003-3025-9657>

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### **Scientific Publications ( 2013-2016)**

1. Di Stefano V, Torsello B, Bianchi C, Cifola I, Mangano E, Bovo G, Cassina V, De Marco S, Corti R, Meregalli C, Bombelli S, Viganò P, Battaglia C, Strada G, Perego RA. Major Action of Endogenous Lysyl Oxidase in Clear Cell Renal Cell Carcinoma Progression and Collagen Stiffness Revealed by Primary Cell Cultures. *Am J Pathol.* 2016 Sep;186(9):2473-85. doi: 10.1016/j.ajpath.2016.05.019. PubMed, PMID: 27449199.
2. Motta V, Favero C, Dioni L, Iodice S, Battaglia C, Angelici L, Vigna L, Pesatori AC, Bollati V. MicroRNAs are associated with blood-pressure effects of exposure to particulate matter: Results from a mediated moderation analysis. *Environ Res.* 2016 Apr;146:274-81. doi: 10.1016/j.envres.2016.01.010. PubMed PMID:26775008.
3. Longhin E, Capasso L, Battaglia C, Proverbio MC, Cosentino C, Cifola I, Mangano E, Camatini M, Gualtieri M\*. Integrative transcriptomic and protein analysis of human bronchial BEAS-2B exposed to seasonal urban particulate matter. *Environ Pollut.* 2015;186:87-98. doi: 10.1016/j.envpol.2015.11.013. PMID: 26647171.
4. Cifola I, Lionetti M, Pinatel E, Todoerti K, Mangano E, Pietrelli A, Fabris S, Mosca L, Simeon V, Petrucci MT, Morabito F, Offidani M, Di Raimondo F, Falcone A, Caravita T, Battaglia C, De Bellis G, Palumbo A, Musto P, Neri A. Whole-exome sequencing of primary plasma cell leukemia discloses heterogeneous mutational patterns. *Oncotarget.* 2015;6(19):17543-58. PMID: 26046463;
5. Sancini G, Farina F, Battaglia C, Cifola I, Mangano E, Mantecca P, Camatini M, Palestini P. Health risk assessment for air pollutants: alterations in lung and cardiac gene expression in mice exposed to Milano winter fine particulate matter (PM2.5). *PLoS One.* 2014;9(10):e109685. doi:10.1371/journal.pone.0109685. eCollection 2014. PMID: 25296036;
6. Italiani P, Mazza EM, Lucchesi D, Cifola I, Gemelli C, Grande A, Battaglia C, Bicciato S, Boraschi D. Transcriptomic profiling of the development of the inflammatory response in human monocytes in vitro. *PLoS One.* 2014 9(2):e87680. doi:10.1371/journal.pone.0087680. eCollection 2014. PMID: 24498352;
7. Magi A, Tattini L, Cifola I, D'Aurizio R, Benelli M, Mangano E, Battaglia C, Bonora E, Kurg A, Seri M, Magini P, Giusti B, Romeo G, Pippucci T, De Bellis G, Abbate R, Gensini GF. EXCAVATOR: detecting copy number variants from whole-exome sequencing data. *Genome Biol.* 2013;14(10):R120. PMID: 24172663.

### **Grants**

**Project Leader PI** : PRIN 2007 - prot. 2007Y84HTJ Approccio integrato di biologia sistemica per la ricostruzione dei processi di segnalazione molecolari e di attivazione monocitaria/macrofagica in risposta a stimoli infiammatori in condizioni fisiologiche mediante tecnologie omiche

**Unit PI** : 2014-2016 Biological effects and human health impacts of ultrafine particles source” ( Ente Cariplo) Capofila Università Milano Bicocca

**Unit PI** 2010-2013; Progetto TOSCA ( Ente Cariplo) Capofila Università Milano Bicocca Contributo del Comune di Milano per il progetto PROLIFE ; decorrenza 1/09/ 2007-31/09/2009

**Unit PI** PRIN-2005 - prot. 2005053144 Modelli di invecchiamento di cellule eucariote: studi di genomica funzionale sugli effetti del resveratrolo

**Unit PI** FIRB2004-internazionale ProgettoRBIN04SSBC\_00, Italia Israele: Un efficiente strategia per l' identificazione di geni coinvolti nell' espressione di malattie comuni: applicazione alla schizofrenia

**Unit PI** FISR prot. n. 1798/Ric/2004 Metodi e sistemi per aumentare la sicurezza nella catena agro-alimentare e nell'ambiente (Progetto Safe-eat)

**Unit PI** PNR 2001-2003, protocolloN°RBNE01HCKF: Identificazione di nuovi marcatori molecolare per la diagnosi e la prognosi del carcinoma renale con tecniche genomiche e proteomiche.

**Unit PI** PNR 2001-2003 protocollo RBNEO1TZZ8: Sviluppo e messa a punto di tecnologie per la sintesi e la manipolazione della materia su scala nanometrica