

**SILVIA MASCIARELLI**  
**Curriculum Vitae ai fini della pubblicazione**

**Part I – General Information**

Full Name	Silvia Masciarelli
Place of Birth	Rome
Citizenship	Italian

**Part II – Education**

Type	Year	Institution	Notes
University graduation	2000	Sapienza University of Rome	Degree in Biological Sciences, 110/110 with honors
Dottorato di Ricerca/PhD	2008	Università Vita-Salute San Raffaele (Milan, Italy) / Open University (Milton Keynes, UK)	Dottorato di Ricerca in Biologia Cellulare e Molecolare / PhD degree in Cellular and Molecular Biology
abilitazione scientifica nazionale alle funzioni di professore di II fascia di cui all'articolo 16 della legge 30 dicembre 2010, n. 240 per il Settore concorsuale 05/H2	2021		Tornata ASN 2018-2020

**Part III – Appointments**

IIIA – Academic Appointments

Start	End	Institution	Position
01/08/2022	31/07/2023	Sapienza University of Rome Dpt. of Anatomical, Histological, Forensic and Orthopedic Sciences. Section of Histology and Medical Embryology.	Incarico di lavoratore autonomo

01/01/2019	31/12/2021	Catholic University of the Sacred Heart, Dpt. of Life Sciences and Public Health, Section of Histology and Embryology.	Assistant professor (fixed term researcher, type A)
06/06/2018	31/12/2018	Sapienza University of Rome, Dpt. of Anatomical, Histological, Forensic and Orthopedic Sciences. Section of Histology and Medical Embryology.	Post-doc (assegno di ricerca).
01/04/2017	31/03/2018	Sapienza University of Rome Dpt. of Anatomical, Histological, Forensic and Orthopedic Sciences. Section of Histology and Medical Embryology.	Post-doc (assegno di ricerca).
01/03/2016	28/02/2017	Sapienza University of Rome, Dpt. of Biochemical Sciences.	Post-doc (assegno di ricerca).
01/09/2012	31/08/2015	Sapienza University of Rome, Dpt. of Medico-Surgical Sciences	Post-doc (assegno di ricerca).
01/01/1998	31/03/2001	Sapienza University of Rome, Dpt. of Public Health Sciences	Internship

### IIIB – Other Appointments

Start	End	Institution	Position
01/12/2009 (01/02/2011- 31/07/2011 maternity leaves)	31/08/2012	Translational Oncogenomic Unit, Regina Elena Cancer Institute, Rome,	Post-doc

01/08/2008	31/12/2008	Protein Transport and Secretion Unit, DiBiT-Vita Salute University S. Raffaele, Milan	Post-doc
01/06/2006	15/10/2006	Genetics/Tumor Cell Biology, St. Jude Children's Research Hospital, Memphis, USA	Visiting PhD student
01/01/2004	05/08/2008	Vita Salute University S. Raffaele, Milan/ Open University, Milton Keynes, UK)	PhD/Dottorato di ricerca
01/12/2001	31/04/2003	Pulmonary Critical Care Medicine Branch, National Institutes of Health, Bethesda, MD, USA	Post-doc

#### Part IV – Teaching experience

Year	Institution	Lecture/Course
2020-2022	Università Cattolica del Sacro Cuore, Facoltà di Medicina e Chirurgia, Corso di Laurea in Tecniche audioprotesiche	Corso integrato di Scienze Morfo-funzionali: Istologia (13 ore/anno)
2019-2022	Università Cattolica del Sacro Cuore, Facoltà di Medicina e Chirurgia, Corso di Laurea in Terapia Occupazionale (Scuola Provinciale Superiore di Sanità - (Bolzano)	Corso integrato di basi anatomo-fisiologiche del corpo umano: Istologia (13 ore/anno)
2019-2022	Università Cattolica del Sacro Cuore, Facoltà di Medicina e Chirurgia, Corso di Laurea in Medicina e Chirurgia	Istologia, attività professionalizzante (50 ore/anno)
2019-2022	Università Cattolica del Sacro Cuore, Facoltà di Medicina e Chirurgia, Corso di Laurea Medicine and Surgery	Corso integrato Biological Sciences I: histology and general embryology practicals (24 ore/anno)
2019-2022	Università Cattolica del Sacro Cuore, Facoltà di Medicina e Chirurgia, Corso di Laurea Medicine and Surgery	Corso integrato Organic and Functional Systems III (Nervous system): histology and general embryology practicals (4 ore/anno)
2020-2022	Università Cattolica del Sacro Cuore, Facoltà di Medicina e Chirurgia, Corso di Laurea Medicine and Surgery	Corso integrato Organic and Functional Systems I (Bones and Muscle): histology and general embryology practicals (4 ore/anno)
2020	Università Cattolica del Sacro Cuore, Facoltà di Medicina e Chirurgia, Corso di Laurea in Medicina e Chirurgia	importanza delle colture in vitro in biomedicina (2 ore/anno)

## Part V - Society memberships

Year	Title
2022-today	Società Italiana di Anatomia ed Istologia
2019-today	Collegio dei Docenti di Istologia ed Embriologia
2017-today	Associazione di Biologia Cellulare e del Differenziamento

## Part VI - Funding Information [grants as PI-principal investigator or I-investigator]

Year	Title	Program
2014-2017	Disclosing ID4-dependent cross-talk between basal-like breast cancer cells and tumor associated macrophages	Partecipante: Progetto del Ministero della Salute "giovani ricercatori"
2016-2018	Epigenetic regulation and functional characterization of miR-145-5p in thymic epithelial tumors	Partecipante: Progetto Ateneo 2016
2018-2019	Identification of HDAC4 direct targets in satellite cells	Partecipante: Progetto Ateneo 2017
2019-2020	Impact of circulating miRNAs uptake and internalization on EGFR signaling pathway in neoplastic cells	Partecipante: Progetto Ateneo 2018
2018-2020	Development of a combination strategy based on ER and oxidative stress in Acute Myeloid Leukemia	Partecipante: Istituto Pasteur Italia - Fondazione Cenci Bolognetti, Roma
2019-oggi	Development of a therapeutic strategy based on ER and oxidative stress to target Acute Myeloid Leukemia	Responsabilità scientifica della linea di ricerca relativa allo stress cellulare nell'ambito del progetto AIRC IG-21406 (Investigator Grant) "Call for Proposals 2018
2023-2026	Proteotoxic stress in combination with FLT3 or bcl-2 inhibitors as a therapeutic strategy to target FLT3-ITD <sup>+</sup> acute myeloid leukemia cells.	Principal Investigator GIMEMA- Fondo per le Idee 2022

## Part VI – Technology Transfer

01/02/2022	Brevetto per invenzione industriale nazionale, ottenuto a seguito di	Composizione per uso nel trattamento della leucemia
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	domanda n° 10202000001732 a nome di Università degli studi di Roma “La Sapienza”. Inventori: Silvia Masciarelli e Francesco Fazi	
2021	Estensione internazionale del deposito di brevetto: International Application under the patent cooperation treaty (PCT) n°PCT/IB2021/050674	Compounds for use in the treatment of Leukemia

### Part VII – Invited talks at national and international congresses

Year	Congress	Lecture
2021	<b>74° Congresso Nazionale della Società Italiana di Anatomia ed Istologia</b> , Bologna, Italy	Retinoic Acid synergizes with proteotoxic stress to induce cell death of FLT3-ITD+ Acute Myeloid Leukemia cells
2018	<b>XV Congresso Nazionale Società Italiana Ematologia Sperimentale</b> , Rimini, Italy	Retinoic acid synergizes with the unfolded protein response and oxidative stress to induce cell death in FLT3-ITD+ AML
2018	<b>72° Congresso Nazionale della Società Italiana di Anatomia ed Istologia</b> , Parma, Italy	Retinoic acid synergizes with the unfolded protein response and oxidative stress to induce cell death in FLT3-ITD+ AML
2017	<b>7th International symposium on Acute Promyelocytic Leukemia</b> , Rome, Italy	Retinoic acid and arsenic trioxide sensitize acute promyelocytic leukemia cells to ER stress.
2007	<b>Cells as protein factories meeting</b> , Durham University, Durham, UK	Coping with ER stress in the antibody factory
2007	<b>ABCD meeting</b> , Membrane traffic and organelle biogenesis, Certosa di Pontignano (SI), Italy	Coping with proteotoxic and redox stress in the antibody factory
2003	<b>Gordon Research Conference</b> , Holderness School, Plymouth, NH, USA	Cyclic nucleotide phosphodiesterase3A (PDE3A) is essential for mouse oocyte maturation, fertilization and activation of development
2000	<b>Workshop Cortona</b> , Cortona, Italy	Antisense oligonucleotides to the EBV oncogene LMP1: effects on viral and cellular gene expression

### Part IX – Editorial responsibilities

Year	Title
2022	Associate Editor Frontiers in Cell and Developmental Biology (IF 6.081)
2021	Guest Editor per lo special topic “Protein Homeostasis in growth, development and disease” nella rivista Frontiers in Cell and Developmental Biology (IF 6.081).
2020	Membro della Review Board della rivista Cancers (MDPI, IF 6.162), per le tematiche: Leucemia Mieloide Acuta, ER stress, UPR, stress ossidativo, inibitori del proteosoma, inibitori TK

2017	Co-autore di un capitolo nel testo Methods Mol Biol. Poser E, Genovese I, Masciarelli S, Bellissimo T, Fazi F, Colotti G. Surface Plasmon Resonance: A Useful Strategy for the Identification of Small Molecule Argonaute 2 Protein Binders. 2017;1517:223-237. Indicizzato da PubMed con codice 27924486, Scopus con codice 2-s2.0-85005993281i
2017	Co-autore di un capitolo nel testo Methods Mol Biol., Bellissimo T, Masciarelli S, Poser E, Genovese I, Del Rio A, Colotti G, Fazi F. Small Molecules Targeting the miRNA-Binding Domain of Argonaute 2: From Computer-Aided Molecular Design to RNA Immunoprecipitation. 2017;1517:211-221. Indicizzato da PubMed con codice 27924485, Scopus con codice 2-s2.0-85005949345
2016	Co-autore di un capitolo nel testo Methods Mol Biol., Masciarelli S, Bellissimo T, Iosue I, Fazi F. The Methylated DNA Immunoprecipitation [MeDIP] to Investigate the Epigenetic Remodeling in Cell Fate Determination and Cancer Development. 2016;1379:69-76. Indicizzato da PubMed con codice 26608290, Scopus con codice 2-s2.0-84948780941
2003	Co-autore di un capitolo nel testo “Diabetes Mellitus, a clinical and fundamental text, 3rd edition, Lippincott-Raven Publishers, Philadelphia, PA. 2003, ISBN:0-7817-4097-5

## Part X – Research Activities

### Keywords

### Brief Description

Acute Myeloid Leukemia (AML); RA-induced differentiation; bone marrow microenvironment crosstalk; ER stress; oxidative stress; proteasome inhibition; proteotoxic stress	<p>1) Investigation of the crosstalk between acute myeloid leukemia cells and the bone marrow stromal cells. AML bearing the mutation FLT3-ITD still present a dismal overall survival rate. Protective effects of the bone marrow stromal cells play a main role in inducing resistance of AML cells to therapeutic drugs. Understanding the mechanisms of communication between the different cell types populating the bone marrow is of paramount importance to improving therapeutic efficacy.</p> <p>2) Design of a novel therapeutic strategy, based on the exacerbation of proteotoxic stresses, by a combination of stress-inducing drugs with the differentiating agent retinoic acid (RA) in AML cells, in order to induce apoptotic cell death in a specific manner. AML cells result particularly sensitive to low amounts of pharmacologically induced proteotoxic stress, especially when induced to differentiate by RA, mainly because of the expression of oncogenic chimeric proteins. Thus, the combination of low doses of drugs inducing these types of stress leads to an efficient, specific strategy to target AML cells (especially those with the worst prognosis, like FLT3-ITD+ AML), showing low general toxicity. In the last years, the combination of drugs has been modified by using only compounds already in use in therapies, at equal or lower concentrations. The most recent data obtained <i>in vivo</i>, in an orthotopic murine model of human AML, point to a possible clinical translation. Indeed, with the Sapienza University technology transfer office we obtained a patent in Italy and filed an international patent application, opening to the possibility of collaborations with pharmaceutical companies and real-life application of the combination of drugs.</p>
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Non-coding RNA in normal and pathological cell fate determination	Study of the role of different non-coding RNA in myeloid cell differentiation and in cancer. 1) Identification of miR-223 oncogenic activity downstream of the main oncogene mutant p53 in colon and breast cancer cells; 2) Characterization of miR-145p as an oncosuppressor gene, epigenetically regulated, in thymic and breast cancer; 3) Identification and description of the role of long non-coding RNAs linc-223 and UCA1 in myeloid cells; 3) Identification and characterization of LINC00174 in thymic tumor as regulator of cell migration and lipid metabolism; 4) Study of the role of m6A RNA methylation in tumor cells.
Tumor targeted drug delivery	Identification of ferritin-based nanoparticles as efficient and non-toxic vehicle to deliver small peptides or small non-coding RNA to AML and solid tumor cells, in order to induce cancer cell death.
Plasma cell differentiation; ER stress; oxidative stress	Study of the ER stress response (Unfolded Protein Response, UPR) during physiological and pathological plasma cell differentiation. 1) Definition of the importance of the UPR gene CHOP to achieve proper maturation of isotype M immunoglobulins by analysis of differentiation of primary plasma cells isolated from CHOP knock out mice; 2) Investigation of the relation between the UPR and proteasomal activity during plasma cell differentiation in order to exploit proteasome inhibition to specifically target multiple myeloma cells; 3) Role of the oxidative stress response in plasma cell differentiation.
Oocyte differentiation; Phosphodiesterase 3A (PDE3A)	Assessment of the essential role of PDE3A in mammalian oocyte meiotic maturation by analysis of PDE3A knock out mice.

## Part XI – Summary of Scientific Achievements

Authors, title, reference data from **PubMed**

Impact factor (IF) referred to the year of publication from **InCites Journal Citation Reports-ISI Web of Science**

Number of citations (cit) from **Scopus**

Product type	Number	Data Base	Start	End
Papers [international]	39	PubMed	2002	today

Total Impact factor	250
Average Impact factor per Product	6.41
Total Citations	1262
Average Citations per Product	32.4
Hirsch (H) index	19
Normalized H index*	0.9

\*H index divided by the academic seniority.

## Part XII- Selected Publications 12

Authors, title, reference data from **PubMed**

Impact factor (IF) from **InCites Journal Citation Reports-ISI Web of Science**

Number of citations (cit) from **Scopus**

\*co-corresponding author #co-first author

1. Śniegocka M, Liccardo F, Fazi F, **Masciarelli S**. Understanding ER homeostasis and the UPR to enhance treatment efficacy of acute myeloid leukemia. *Drug Resist Updat*. 2022 Jul 8;64:100853. doi: 10.1016/j.drup.2022.100853. **IF anno di pubblicazione: 22.84 IF 2021: 22.84 cit: 2**
2. Travaglini S, Ottone T, Angelini DF, Fiori V, Dominici S, Noguera NI, Śniegocka M, Antonelli S, Irno Consalvo MA, De Bardi M, Banella C, Divona M, Marchesi F, **Masciarelli S.**, Fazi F, Pieraccioli M, Palmieri R, De Angelis G, Buccisano F, Venditti A, Battistini L, Magnani M, Voso MT. CD99 as a novel therapeutic target on leukemic progenitor cells in FLT3-ITDmut AML. *Leukemia* 2022 Apr 14. doi: 10.1038/s41375-022-01566-5 **IF anno di pubblicazione: 12.9 IF 2021: 12.9 cit: 2**
3. F. Palombarini#, **S. Masciarelli#**, A. Incocciati 1 , F. Liccardo, E. Di Fabio, A. Iazzetti, G. Fabrizi, F. Fazi, A. Macone, A. Bonamore, A. Boffi. Self-assembling ferritin-dendrimer nanoparticles for targeted delivery of nucleic acids to myeloid leukemia cells. *J. Nanobiotechnology* **2021 Jun** 9;19(1):172. doi: 10.1186/s12951-021-00921-5 **IF anno di pubblicazione: 10.435 IF 2021: 10.435 cit: 19**
4. Tito C., Ganci F, Sacconi A, **Masciarelli S.**, Giulia Fontemaggi et al. LINC00174 is a novel prognostic factor in thymic epithelial tumors involved in cell migration and lipid metabolism. *Cell Death Dis.* **2020 Nov** 7;11(11):959. doi: 10.1038/s41419-020-03171-9 **IF anno di pubblicazione: 8.469 IF 2021: 9.69 cit: 13**
5. Banella C, Catalano G, Travaglini S, Divona M, **Masciarelli S**, Guerrera G, Fazi F, Lo Coco F, Voso MT, Noguera N. PML/RARα Interferes with NRF2 Transcriptional Activity Increasing the Sensitivity to Ascorbate of Acute Promyelocytic Leukemia Cells. *Cancers* (Basel). **2019 Dec** 30;12(1). 12(1):95. doi: 10.3390/cancers12010095. **IF anno di pubblicazione: 6.126 IF 2021: 6.58 cit: 9**
6. **Masciarelli S\***, Capuano E, Ottone T, Divona M, Lavorgna S, Liccardo F, Śniegocka M, Travaglini S, Noguera NI, Picardi A, Petrozza V, Fatica A, Tamagnone L, Voso MT, Lo Coco F, Fazi F.\* Retinoic acid synergizes with the unfolded protein response and oxidative stress to induce cell death in FLT3-ITD+ AML. *Blood Adv.* **2019 Dec** 23;3(24):4155-4160. Doi:10.1182/bloodadvances.2019000540. **IF anno di pubblicazione: 4.910 IF 2021: 7.64 cit: 17**
7. Donzelli S, Milano E, Pruszek M, Sacconi A, **Masciarelli S**, Iosue I, Melucci E, Gallo E, Terrenato I, Mottolese M, Zylicz M, Zylicz A, Fazi F, Blandino G. Expression of ID4 protein in breast cancer cells induces reprogramming of tumour-associated macrophages. **2018 Jun** 19 *Breast Cancer Res.* 20(1):59 **IF anno di pubblicazione: 5.676 IF 2021: 12.89 cit: 35**
8. **Masciarelli S\***, Capuano E, Ottone T, Divona M, De Panfilis S, Banella C, Noguera NI, Picardi A, Fontemaggi G, Blandino G, Lo-Coco F, Fazi F. Retinoic acid and arsenic trioxide sensitize acute promyelocytic leukemia cells to ER stress. **2018 Feb** *Leukemia* 32(2):285-294 **IF anno di pubblicazione: 9.94 IF 2021: 12.9 cit: 28**
9. Bellissimo T, Ganci F, Gallo E, Sacconi A, Tito C, De Angelis L, Pulito C, **Masciarelli S**, Diso D, Anile M, Petrozza V, Giangaspero F, Pescarmona E Thymic Epithelial Tumors phenotype relies on miR-145-5p epigenetic regulation. **2017 May** 10 *Mol Cancer* 16(1):88 **IF anno di pubblicazione: 7,78 IF 2021: 41.44 cit: 21**
10. Hughes JM, Legnini I, Salvatori B, **Masciarelli S**, Marchioni M, Fazi F, Morlando M, Bozzoni I, Fatica A. C/EBPα-p30 protein induces expression of the oncogenic long non-coding RNA



UCA1 in acute myeloid leukemia. 2015 Jul 30 **Oncotarget** 6(21):18534-44 **IF anno di pubblicazione: 5,01 IF 2021: N/A cit: 66**

11. **Masciarelli S**, Quaranta R, Iosue I, Colotti G, Padula F, Varchi G, Fazi F, Del Rio A A small-molecule targeting the microRNA binding domain of argonaute 2 improves the retinoic acid differentiation response of the acute promyelocytic leukemia cell line NB4. 2014 Aug 15 **ACS Chem. Biol** 9(8):1674-9 **IF anno di pubblicazione: 5,33 IF 2021: 4.63 cit: 29**
12. **Masciarelli S**, Fontemaggi G, Di Agostino S, Donzelli S, Carcarino E, Strano S, Blandino G. Gain-of-function mutant p53 downregulates miR-223 contributing to chemoresistance of cultured tumor cells. 2014 Mar 20 **Oncogene** 33(12):1601-8 **IF anno di pubblicazione: 8,46 IF 2021: 8,76 cit: 100**

numero complessivo di articoli riportati nella domanda e pubblicati su riviste scientifiche contenute nella banca dati internazionali "Pub Med" 2014-oggi	12
numero di citazioni ricevute dalla produzione scientifica contenuta nella domanda, pubblicata e rilevata dalla banca dati internazionali «Scopus»	341
Citazioni medie per prodotto con riferimento alle pubblicazioni selezionate	28.4
Impact factor totale con riferimento alle pubblicazioni selezionate (IF anno di pubblicazione)	108
Impact factor medio con riferimento alle pubblicazioni selezionate (IF anno di pubblicazione)	9
Impact factor totale con riferimento alle pubblicazioni selezionate (IF 2021)	146
Impact factor medio con riferimento alle pubblicazioni selezionate (IF 2021)	12
indice h di Hirsch, calcolato sulla base delle citazioni rilevate dalla banca dati internazionale «Scopus» con riferimento alle pubblicazioni selezionate.	9
*Normalized H index con riferimento alle pubblicazioni selezionate *	0.43

\*H index divided by the academic seniority

### Part XIII– Total Publications

\*co-corresponding author #co-first author

1. Fard D, Testa E, Panzeri V, Rizzolio S, Bianchetti G, Napolitano V, **Masciarelli S**, Fazi F, Maulucci G, Scicchitano BM, Sette C, Viscomi MT, Tamagnone L. SEMA6C: a novel adhesion-independent FAK and YAP activator, required for cancer cell viability and growth. *Cell Mol Life Sci*. 2023 Mar 31;80(4):111. doi: 10.1007/s00018-023-04756-1.
2. **Masciarelli S**, Fazi F, Hendershot LM Editorial: Protein homeostasis in growth, development and disease. *Front Cell Dev Biol*. 2023 Feb 6;11:1150158. doi: 10.3389/fcell.2023.1150158.

3. Śniegocka M, Liccardo F, Fazi F, **Masciarelli S**. Understanding ER homeostasis and the UPR to enhance treatment efficacy of acute myeloid leukemia. *Drug Resist Updat*. 2022 Jul 8;64:100853. doi: 10.1016/j.drup.2022.100853.
4. Liccardo F, Iaiza A, Śniegocka M, **Masciarelli S**, Fazi F. Circular RNAs Activity in the Leukemic Bone Marrow Microenvironment. *Noncoding RNA*. 2022 Jul 1;8(4):50. doi: 10.3390/ncrna8040050.
5. Iaiza A, Tito C, Ganci F, Sacconi A, Gallo E, **Masciarelli S**, Fontemaggi G, Fatica A, Melis E, Petrozza V, Venuta F, Marino M, Blandino G, Fazi F. Long Non-Coding RNAs in the Cell Fate Determination of Neoplastic Thymic Epithelial Cells. *Front Immunol*. 2022 Apr 22;13:867181. doi: 10.3389/fimmu.2022.867181.
6. Travaglini S, Ottone T, Angelini DF, Fiori V, Dominici S, Noguera NI, Śniegocka M, Antonelli S, Irno Consalvo MA, De Bardi M, Banella C, Divona M, Marchesi F, **Masciarelli S**, Fazi F, Pieraccioli M, Palmieri R, De Angelis G, Buccisano F, Venditti A, Battistini L, Magnani M, Voso MT. CD99 as a novel therapeutic target on leukemic progenitor cells in FLT3-ITD mut AML. *2022 Leukemia*. 2022 Apr 14. doi: 10.1038/s41375-022-01566-5. Online ahead of print.
7. A. Iaiza, C. Tito, Z. Ianniello, F. Ganci, V. Laquintana, E. Gallo, A. Sacconi, **S. Masciarelli**, L. De Angelis, S. Aversa, D. Diso, M. Anile, V. Petrozza, F. Facciolo, E. Melis, E. Pescarmona, F. Venuta, M. Marino, G. Blandino, G. Fontemaggi, A. Fatica, F. Fazi. METTL3-dependent MALAT1 delocalization drives c-Myc induction in Thymic Epithelial Tumors. *Clin Epigenetics*. 2021 Sep 16;13(1):173. doi: 10.1186/s13148-021-01159-6.
8. Z. Ianniello, M. Sorci, L. Ceci Ginistrelli, A. Iaiza, M. Marchioni, C. Tito, E. Capuano, **S. Masciarelli**, T. Ottone, C. Attrotto, M. Rizzo, L. Franceschini, S. de Pretis, M.T. Voso, M. Pelizzola, F. Fazi, A. Fatica. New insight into the catalytic -dependent and -independent roles of METTL3 in sustaining aberrant translation in Chronic Myeloid Leukemia. *Cell Death Dis*. 2021 Sep 24;12(10):870. doi: 10.1038/s41419-021-04169-7.
9. **S. Masciarelli** F. Palombarini<sup>#</sup> A. Incocciati 1, F. Liccardo, E. Di Fabio, A. Iazzetti, G. Fabrizi, F. Fazi, A. Macone, A. Bonamore, A. Boffi. Self-assembling ferritin-dendrimer nanoparticles for targeted delivery of nucleic acids to myeloid leukemia cells. *J. Nanobiotechnology* 2021 Jun 9;19(1):172. doi: 10.1186/s12951-021-00921-5.
10. Tito C., Ganci F, Sacconi A, **Masciarelli S**, Giulia Fontemaggi et al. LINC00174 is a novel prognostic factor in thymic epithelial tumors involved in cell migration and lipid metabolism. *Cell Death Dis*. 2020 Nov 7;11(11):959. doi: 10.1038/s41419-020-03171-9.
11. Saracino R, Capponi C, Di Persio S, Boitani C, **Masciarelli S**, Fazi F, Fera S, Vicini E. Regulation of Gdnf expression by retinoic acid in Sertoli cells. *Mol Reprod Dev*. 2020 Feb 5. doi: 10.1002/mrd.23323. [Epub ahead of print]
12. Banella C, Catalano G, Travaglini S, Divona M, **Masciarelli S**, Guerrero G, Fazi F, Lo Coco F, Voso MT, Noguera N. PML/RARα Interferes with NRF2 Transcriptional Activity Increasing the Sensitivity to Ascorbate of Acute Promyelocytic Leukemia Cells. *Cancers (Basel)*. 2019 Dec 30;12(1). pii: E95. doi: 10.3390/cancers12010095.
13. **Masciarelli S**<sup>\*</sup>, Capuano E, Ottone T, Divona M, Lavorgna S, Liccardo F, Śniegocka M, Travaglini S, Noguera NI, Picardi A, Petrozza V, Fatica A, Tamagnone L, Voso MT, Lo Coco F, Fazi F. Retinoic acid synergizes with the unfolded protein response and oxidative stress to induce cell death in FLT3-ITD+ AML. *Blood Adv*. 2019 Dec 23;3(24):4155-4160. doi: 10.1182/bloodadvances.2019000540.
14. Macone A, **Masciarelli S**, Palombarini F, Quaglio D, Boffi A, Trabuco MC, Baiocco P, Fazi F, Bonamore A. Ferritin nanovehicle for targeted delivery of cytochrome C to cancer cells. *Sci Rep*. 2019 Aug 13;9(1):11749. doi: 10.1038/s41598-019-48037-z.
15. Bellissimo T, Tito C, Ganci F, Sacconi A, **Masciarelli S**, Di Martino G, Porta N, Cirenza M, Sorci M, De Angelis L, Rosa P, Calogero A, Fatica A, Petrozza V, Fontemaggi G, Blandino G, Fazi F. Argonaute 2 drives miR-145-5p-dependent gene expression program in breast cancer cells. *Cell Death Dis*. 2019 Jan 8;10(1):17. doi: 10.1038/s41419-018-1267-5.
16. Donzelli S, Milano E, Pruszko M, Sacconi A, **Masciarelli S**, Iosue I, Melucci E, Gallo E, Terrenato I, Mottolose M, Zylicz M, Zylicz A, Fazi F, Blandino G, Fontemaggi G. Expression of ID4 protein in breast cancer cells induces reprogramming of tumour-associated macrophages. *Breast Cancer Res*. 2018 Jun 19;20(1):59. doi: 10.1186/s13058-018-0990-2.
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