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Francesco Fazi, Ph.D

ADDRESS: Department of Anatomical, Histological, Forensic & Orthopaedic Sciences, Section of Histology and Medical Embryology, Sapienza University of Rome, Via A. Scarpa, 14-16, 00161 Rome, Italy;

EDUCATION:
1998: Degree in Biology, with honors, Department of Cellular Biotechnology and Hematology, Sapienza University of Rome, with a dissertation entitled: "Molecular and Genetic Alteration of Acute Myeloid Leukemia".
2003: Ph.D. degree in Morphogenetic and Cytological Science, Department of Histology and Medical Embryology, Sapienza University of Rome, with a dissertation entitled: "Molecular Basis for Transcriptional Differentiation Therapy of Acute Myeloid Leukemia".

SCIENTIFIC EXPERIENCE:
1999-2003: Ph.D. program in Morphogenetic and Cytological Science. Department of Histology and Medical Embryology, Sapienza University of Rome, Rome, Italy;
2004-07: Post-doctoral Fellow with a project entitled: "Characterization of the biological role of the remodeling chromatin agents on normal and leukemic hematopoietic progenitors", Department of Histology and Medical Embryology, Sapienza University of Rome, Rome, Italy;
2007: University Researcher - SSD BIO/17 - Department of Histology and Medical Embryology, Facoltà di Medicina e Chirurgia, Sapienza University of Rome, Rome, Italy;
2010: University Researcher Confirmed - SSD BIO/17 - Department of Medico-Surgical Sciences and Biotechnologies, Sapienza University of Rome, Latina, Italy;
2014: University Researcher Confirmed - SSD BIO/17 - Department of Anatomical, Histological, Forensic & Orthopaedic Sciences, Section of Histology and Medical Embryology, Sapienza University of Rome, Rome, Italy;

2014: National Scientific Qualifications as Associate in the sectors: 05/H2 Histology and 05/E2 Molecular Biology;

TEACHING AND INSTITUTIONAL ACTIVITIES:
AA 2003/2004 - to date: Professor of Integrated Course of Histology and Embryology, School of Medicine CLM "E" - Polo Pontino - Sapienza University of Rome;
AA 2008/2009 - to date: Professor of Histology in the Integrated Course of Morphological and Functional Bases of the Human Body, School of Biomedical Laboratory Technicians "C" - Polo Pontino - Sapienza University of Rome;
AA 2014/2015 - to date: Coordinator of the Integrated Course of Morphological and Functional Bases of the Human Body, School of Biomedical Laboratory Technicians "C" - Polo Pontino - Sapienza University of Rome;
AA 2014/2015 -to date: Vice President of the School of Biomedical Laboratory Technicians "C" - Polo Pontino - Sapienza University of Rome;

AA 2011/2012 - to date: Coordinator and Professor of Histology in the Integrated Course of Anatomic and Physiological Bases of Human Body, School of Infermieristica "J" ASL RM/1 Ospedale G. Eastman, Sapienza University of Rome;
AA 2011/2012 - to date: Professor of Histology in the Integrated Course of Anatomic and Physiological Bases of Human Body, School of Infermieristica "W" Formia-Gaeta - Polo Pontino - Sapienza University of Rome;
AA 2017/2018 - to date: Professor of Histology in the Integrated Course of Anatomic and Physiological Bases of Human Body, School of Infermieristica "E" ASL RM/1 Ospedale Santo Spirito, Sapienza University of Rome;
AA 2015/2016 - to date: Professor of Histology in the Master of first level - Assistenza Infermieristica e Strumentazione in Sala Operatoria - Sapienza University of Rome;
2007 - to date: Professor at the PhD School in Morphogenetic and Cytological Science (2007-2010), Morphogenesis, Homeostasis and Tissue Engineering (2011) and Morphogenesis and Tissue Engineering (2012-to date), Sapienza University of Rome;

2012-2017: President of Room Committee - Concorso di Ammissione ai Corsi di Laurea Magistrale a ciclo unico in Medicina e Chirurgia ed Odontoiatria e Protesi Dentaria, Sapienza University of Rome;
2015-2017: President of Room Committee - Concorso di Ammissione ai Corsi di Laurea delle Professioni Sanitarie, Sapienza University of Rome;

2014-2015: Member of the Research Committee of Sapienza University of Rome.

SUPERVISOR FOR THESIS:
- Tesi di Laurea Specialistica in Biotecnologie Mediche, Facoltà di Farmacia e Medicina, Sapienza Università di Roma, candidato Roberto Quaranta (aa 2011-2012); titolo della tesi sperimentale: "La proteina Argonauta 2 nella mielopoiesi: un potenziale target per lo sviluppo di nuovi agenti terapeutici nella leucemia acuta mieloide";
- Tesi di Laurea Specialistica in Biotecnologie Mediche, Facoltà di Farmacia e Medicina, Sapienza Università di Roma, candidato Ernestina Capuano (aa 2014-2015); titolo della tesi sperimentale: "Il differenziamento indotto da acido retinoico sensibilizza le cellule di Leucemia Acuta Promielocitica all' ER-stress";
- Tesi di Laurea Specialistica in Genetica e Biologia Molecolare nella Ricerca di Base e Biomedica, Facoltà di SMFN, candidato Claudia Tito (aa 2015-2016); titolo della tesi sperimentale: "Ruolo della regolazione epigenetica del miR-145-5p nel tumore epiteliale timico";
- Tesi di Laurea in Tecniche di Laboratorio Biomedico, Facoltà di Farmacia e Medicina, Sapienza Università di Roma, candidato Giuseppe Di Martino (aa 2015-2016); titolo della tesi sperimentale: "Espressione delle proteine della famiglia Argonauta nei tumori epiteliali maligni della ghiandola mammaria";

TUTOR FOR PhD THESIS:
- Dottorato di Ricerca in Genetica e Biologia Molecolare XXIV ciclo (aa 2010/2011) Sapienza Università di Roma, Coordinatore Prof.ssa Irene Bozzoni; titolo della tesi sperimentale: "A new molecular circuitry mediated by miR-26a regulates cell cycle progression and differentiation of Acute Myeloid Leukemia cells through inhibition of E2F7 protein";
- Dottorato di Ricerca in Morfogenesi, Omeostasi ed Ingegneria Tissutale XXV ciclo (aa 2011/2012) Sapienza Università di Roma, Coordinatore Prof. Sergio Adamo; titolo della tesi sperimentale: "Critical role of microRNA biogenesis pathway during myeloid cell fate determination";

- Dottorato di Ricerca in Morfogenesi, Omeostasi ed Ingegneria Tissutale XXVII ciclo (aa 2013/2014) Sapienza Università di Roma, Coordinatore Prof. Sergio Adamo; titolo della tesi sperimentale: "MicroRNAs as molecular biomarkers in human thymic epithelial tumors and in forensics"
- Dottorato in Morfogenesi, Omeostasi ed Igegneria Tissutale XXIX ciclo (aa 2015/2016) Sapienza Università di Roma, Coordinatore Prof. Sergio Adamo; titolo della tesi sperimentale: "Impact of miR-145-5p expression on Thymic Epithelial Tumors and Breast Cancer phenotype";

SOCIETY MEMBERBERSHIPS, ACADEMIC AWARDS AND HONORS:
2003: Ph.D. degree award for the doctoral dissertation assigned by the Italian Cell Biology and Differentiation Association, Italy;
2008: "Silvia Fiocco" award for young investigator involved in research on leukemia and lymphoma assigned by National Academy of Lincei, Italy;

2007- to date: Member of Collegio dei Docenti di Istologia ed Embriologia;
2012- to date: Member of Accademia Medica di Roma;
2013- to date: Member of Società Italiana di Anatomia ed Istologia;

INVITED SPEAKER IN SCIENTIFIC CONFERENCES:
2012: L'Accademia Medica e i Giovani Ricercatori - 29 Marzo 2012 entitled: "MicroRNA: dallo stato dell'arte alle prospettive terapeutiche" with a talk entitled: "Ruolo dei microRNA e del complesso RISC nell'ematopoiesi patologica";
2013: Lettura Magistrale al 67° Congresso Nazionale della Società Italiana di Anatomia ed Istologia, Brescia, 22 Settembre 2013 with a talk entitled: "MicroRNA pathways as new functional axes in cell fate determination";

MEMBER OF EDITORIAL BOARDS:
2012-2013: Guest Editor for MicroRNA Journal, - Bentham Science - for the Thematic Issue entitled: "MicroRNAs: Non Coding Pleiotropic Factors in Development, Cancer Prevention and Treatment", MicroRNA. 2013;2(2):81.

REVIEWER FOR SCIENTIFIC JOURNALS AND NATIONAL AND INTERNATIONAL FUNDING AGENCIES:
- Reviewer for several International Scientific Journals as: Blood, Leukemia, Oncogene, Cell Death and Differentiation, Cell Death and Disease and Cancer Research.
- Reviewer for National and International Founding Agencies as: the Bloodwise UK Foundation, UK (February 2016); the National Science Center, Poland (April 2016); Regina Elena National Cancer Institute, Italy (Ricerca Finalizzata 2010-2011).

ACTIVITY IN NATIONAL AND INTERNATIONAL RESEARCH INSITUTES:
- European Institute of Oncology - IEO - Milan, laboratory of Molecular Mechanisms of Cancer headed by Prof. Pier Giuseppe Pelicci, during PhD program (period 09/2000 - 12/2000);
- San Raffaele Bio-Medical Park Foundation of Rome, laboratory of Neoplastic cell Differentiation headed by Prof.ssa Clara Nervi (period 2002-2010);

RESEARCH FUNDING:
- Project AIRC-NUSUG 2007-2012 (New Unit Start-Up Grant) dell'Associazione Italiana per la Ricerca sul Cancro (AIRC) entitled: "Regolazione trascrizionale e caratterizzazione funzionale dei microRNAs nell'ematopoiesi patologica". Months: 60; role: Responsabile Scientifico;

- Project Facoltà 2008 - Sapienza Università di Roma entitled: "Regolazione trascrizionale e caratterizzazione funzionale dei microRNA nell'ematopoiesi patologica". Months: 12; role: Responsabile Scientifico;
- Project Grandi Attrezzature 2009 - Sapienza Università di Roma entitled: "Generazione ed utilizzo di vettori virali per lo studio dell'omeostasi e della rigenerazione tissutale". Responsabile Scientifico;
- Project Facoltà 2009 - Sapienza Università di Roma entitled: "Regolazione trascrizionale e caratterizzazione funzionale dei microRNA nell'ematopoiesi patologica". Months: 12; role: Responsabile Scientifico;
- Project FARI 2010 - Sapienza Università di Roma. Months: 12; role: Responsabile Scientifico;
- Project FARI 2011 - Sapienza Università di Roma. Months: 12; role: Responsabile Scientifico;
- Project Ateneo 2012 - Sapienza Università di Roma entitled: "Identificazione e caratterizzazione dei microRNA come marcatori terapeutici innovativi per i tumori umani del tessuto epiteliale timico". Months: 12; role: Responsabile Scientifico;
- Project FILAS-RU-2014-1020 - Regione Lazio entitled: "Piattaforma di Sistemi Cellulari Eucarioti per l'Espressione di Proteine Eterologhe e per lo Screening Tossicologico di Interferenti Alimentari, Microambientali e Bioattivi". Month: 24; role: Componente;
- Project Ateneo 2016 - Sapienza Università di Roma entitled: "Epigenetic regulation and functional characterization of miR-145-5p in thymic epithelial tumors". Months: 12; role: Responsabile Scientifico;
- Project Fondo di Finanziamento per le Attività Base di Ricerca 2017. Months: 12; role: Responsabile Scientifico;
- Project Fondazione Cenci-Bolognetti Call 2018 "Under 45" entitled: "Development of a combination strategy based on ER and oxidative stress in Acute Myeloid Leukemia". Months: 24; role: Responsabile Scientifico;

PERSONAL SKILLS AND COMPETENCES:

Francesco Fazi has a long experience in the field of molecular mechanisms regulating growth and differentiation on a variety of normal and neoplastic cell systems and has been involved in studies showing novel oncogenic mechanisms for the leukaemia-associated fusion proteins and the role of epigenetic mechanisms in the differentiation block and therapy response of Acute Myeloid Leukemia. More recently Francesco Fazi has started multidisciplinary collaborations investigating the transcriptional regulation and the functional characterization of different microRNAs in normal and pathological cell fate determination.

RESEARCH ACTIVITY:

Francesco Fazi is currently a University Researcher at the Department of Anatomical, Histological, Forensic & Orthopaedic Sciences, Section of Histology and Medical Embryology of Sapienza University of Rome.

He has a long-standing experience in the field of molecular mechanisms regulating growth and differentiation on a variety of normal and neoplastic cell systems. Since 2001, after his experience at the European Institute of Oncology, Francesco Fazi has been involved in several studies showing novel oncogenic mechanism for the leukaemia-associated fusion proteins and the role of histone deacetylases and DNA methyltransferases in the differentiation block and Retinoic Acid-response and -resistance of a variety of Acute Myeloid Leukemia (AML) cell lines and of primary AML blasts.

More recently, Francesco Fazi was involved in a project investigating the transcriptional regulation of microRNA-223 in normal and pathological granulocytopoiesis. He also identified that the

expression of AML1/ETO, the most common AML-associated fusion protein, triggers the heterochromatic silencing of genomic regions generating microRNA-223. These findings linked the activity of lineage-specific transcription factors, leukaemia-associated fusion proteins, chromatin remodeling and regulation of miRNAs expression to the differentiation block of myeloid precursors.

Thanks to these results Francesco Fazi obtained the attribution of “Silvia Fiocco" Prize for young italian scientist who obtained relevant results in leukemia and lymphoma fields assigned by the National Academy of Lincei.

Thanks to the attribution of the Italian Association for Cancer Research (AIRC) New-Unit-Start-Up Grant (2007-2013), Francesco Fazi started his research activity as an independent scientist with his own group. The activity of his lab has been mainly focused on the characterization of the contribution of microRNA/Argonaute-2 (Ago-2) complex during myeloid cell fate determination and leukemogenesis. His research highlighted the relevance of Ago-2 for the differentiation of leukemia cells. Importantly, he recently identified small-molecules able to inhibit Ago-2 function and favoring myeloid differentiation of leukemic cells. This opened new possibilities for therapeutic strategies, currently under investigation in his lab.

Thanks to the scientific collaboration with Prof. Federico Venuta, chief of Thoracic Surgery Unit Policlinico Umberto I Sapienza University of Rome, Francesco Fazi is also involved in the identification of miRNAs relevant for the development of thymic epithelial tumor, a rare solid tumor for which the clarification of the molecular basis of pathogenesis and new therapeutic strategies are strongly needed.

Recently, in collaboration with Prof. Vincenzo Petrozza of the Pathology Unit, ICOT, Department of Medico-Surgical Sciences and Biotechnologies, Sapienza University of Rome, Francesco Fazi has started a biomedical research focused to the identification of microRNA as molecular biomarkers for the management of the Clear Cell Renal Cell Carcinoma (ccRCC).

Currently, Francesco Fazi is coordinating a multidisciplinary study highlighting that RA-induced differentiation of human APL cell lines and primary blasts dramatically increases their sensitivity to doses of ER stress-inducing drugs not toxic in the absence of RA, and that the PERK pathway, plays a main protective role. This study evidenced also that low amounts of pharmacologically induced ER stress are sufficient to strongly increase arsenic trioxide (ATO) toxicity in RA-sensitive and RA-resistant APL cell lines, at doses ineffective in the absence of ER stress. Thus, the ER stress-related pathways could be interesting targets to design novel combination therapies in non-APL AML cells.

The impact of Francesco Fazi contribution to his own research field is evidenced by the quality of the scientific publications in which these results have been published and the considerable attention that received from the scientific community.

PUBLICATIONS

1. 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. *Leukemia.* 2018 Feb; 32(2): 285-294. ***IF 2016: 11.70; Citations: 0***

2. Genovese I, Ilari A, Assaraf YG, **Fazi F**, Colotti G. Not only P-glycoprotein: Amplification of the ABCB1-containing chromosome region 7q21 confers multidrug resistance upon cancer cells by coordinated overexpression of an assortment of resistance-related proteins. *Drug Resist Updat*. 2017 May; 32: 23-46. ***IF 2016: 10.90; Citations: 1***
3. Petrozza V, Pastore AL, Palleschi G, Tito C, Porta N, Ricci S, Marigliano C, Costantini M, Simone G, Di Carlo A, Gallucci M, Carbone A, **Fazi F**. Secreted miR-210-3p as non-invasive biomarker in clear cell renal cell carcinoma. *Oncotarget.* 2017 Jun 13;8(41):69551-69558. ***IF 2016: 5.16; Citations: 1***
4. Genovese I, Fiorillo A, Ilari A, Masciarelli S, **Fazi F**, Colotti G. Binding of doxorubicin to Sorcin impairs cell death and increases drug resistance in cancer cells. *Cell Death Dis*. 2017 Jul 20;8(7):e2950. ***IF 2016: 5.96; Citations: 1***
5. Pruszko M, Milano E, Forcato M, Donzelli S, Ganci F, Di Agostino S, De Panfilis S, **Fazi F**, Bates DO, Bicciato S, Zylicz M, Zylicz A, Blandino G, Fontemaggi G. The mutant p53-ID4 complex controls VEGFA isoforms by recruiting lncRNA MALAT1. *EMBO Rep*. 2017 Aug;18(8):1331-1351. ***IF 2016: 8.56; Citations: 1***
6. 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, Facciolo F, Venuta F, Marino M, Blandino G, **Fazi F.** Thymic Epithelial Tumors phenotype relies on miR-145-5p epigenetic regulation. *Mol Cancer.* 2017 May 10;16(1):88. ***IF 2016: 6.20; Citations: 0***
7. 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. *Methods Mol Biol*. 2017;1517:223-237.
8. 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. *Methods Mol Biol*. 2017;1517:211-221.
9. Mangiavacchi A, Sorci M, Masciarelli S, Larivera S, Legnini I, Iosue I, Bozzoni I, **Fazi F**, Fatica A. The miR-223 host non-coding transcript linc-223 induces IRF4 expression in acute myeloid leukemia by acting as a competing endogenous RNA. *Oncotarget*. 2016 Sep 13;7(37):60155-60168. ***IF 2016: 5.16; Citations: 8***
10. Fracasso G, Falvo E, Colotti G, **Fazi F,** Ingegnere T, Amalfitano A, Doglietto GB, Alfieri S, Boffi A, Morea V, Conti G, Tremante E, Giacomini P, Arcovito A, Ceci P. Selective delivery of doxorubicin by novel stimuli-sensitive nano-ferritins overcomes tumor refractoriness. *J Control Release*. 2016 Oct 10;239:10-18. ***IF 2016: 7.78; Citations: 7***
11. Bellissimo T, Russo E, Ganci F, Vico C, Sacconi A, Longo F, Vitolo D, Anile M, Disio D, Marino M, Blandino G, Venuta F, **Fazi F**. Circulating miR-21-5p and miR-148a-3p as emerging non-invasive biomarkers in thymic epithelial tumors. *Cancer Biol Ther*. 2016; 17(1): 79-82. ***IF 2016: 3.29; Citations: 5***
12. Smeriglio P, Alonso-Martin S, Masciarelli S, Madaro L, Iosue I, Marrocco V, Relaix F, **Fazi F**, Marazzi G, Sassoon DA, Bouché M. Phosphotyrosine phosphatase inhibitor bisperoxovanadium endows myogenic cells with enhanced muscle stem cell functions via epigenetic modulation of Sca-1 and Pw1 promoters *FASEB J.* 2016 Apr; 30(4): 1404-15. ***IF 2016: 5.49; Citations: 0***
13. 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. *Methods Mol Biol*. 2016; 1379: 69-76.
14. Petrozza V, Carbone A, Bellissimo T, Porta N, Palleschi G, Pastore AL, Di Carlo A, Della Rocca C, **Fazi F**. Oncogenic MicroRNAs Characterization in Clear Cell Renal Cell

Carcinoma. *Int J Mol Sci*. 2015 Dec 8; 16(12): 29219-25. ***IF 2015: 3.25; Citations: 7***

15. 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. *Oncotarget*. 2015 Jul 30; 6(21): 18534-44. ***IF 2015: 5.00; Citations: 21***
16. Fontemaggi G, Bellissimo T, Donzelli S, Iosue I, Benassi B, Bellotti G, Blandino G, **Fazi F**. Identification of post-transcriptional regulatory networks during myeloblast-to-monocyte differentiation transition. *RNA Biol*. 2015; 12(7): 690-700. ***IF 2015: 4.07; Citations: 4***
17. Venneri MA, Giannetta E, Panio G, De Gaetano R, Gianfrilli D, Pofi R, Masciarelli S, **Fazi F**, Pellegrini M, Lenzi A, Naro F, Isidori AM. Chronic Inhibition of PDE5 Limits Pro-Inflammatory Monocyte-Macrophage Polarization in Streptozotocin-Induced Diabetic Mice. *PLoS One*. 2015 May; 10(5): e0126580. ***IF 2015: 3.05; Citations: 21***
18. Muciaccia B, Vico C, Aromatario M, **Fazi F**, Cecchi R. Molecular analysis of different classes of RNA molecules from formalin-fixed paraffin-embedded autoptic tissues: a pilot study. *Int J Legal Med*. 2015 Jan; 129(1): 11-21. ***IF 2015: 2.86; Citations: 3***
19. 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. *ACS Chem Biol*. 2014 Aug 15; 9(8): 1674-9. ***IF 2014: 5.33; Citations: 10***
20. Ganci F, Vico C, Korita E, Sacconi A, Gallo E, Mori F, Cambria A, Russo E, Anile M, Vitolo D, Pescarmona E, Blandino R, Facciolo F, Venuta F, Blandino G, Marino M, **Fazi F**. MicroRNA expression profiling of thymic epithelial tumors. *Lung Cancer 2014 Aug*; 85(2): 197-204. ***IF 2014: 3.95; Citations: 14***
21. Blandino G, **Fazi F**, Donzelli S, Kedmi M, Sas-Chen A, Muti P, Strano S, Yarden Y. Tumor suppressor microRNAs: a novel non-coding alliance against cancer. *FEBS Lett*. 2014 Aug 19; 588(16): 2639-52. ***IF 2014: 3.16; Citations: 38***
22. Vian L, Di Carlo M, Pelosi E, **Fazi F**, Santoro S, Cerio AM, Boe A, Rotilio V, Billi M, Racanicchi S, Testa U, Grignani F, Nervi C. Transcriptional fine-tuning of microRNA-223 levels directs lineage choice of human hematopoietic progenitors. *Cell Death Differ*. 2014 Feb; 21(2): 290-301. ***IF 2014: 8.18; Citations: 19***
23. De Santa F, Iosue I, Del Rio A, **Fazi F**. MicroRNA biogenesis pathway as therapeutic target for human disease and cancer. *Current Pharmaceutical Design* 2013; 19(4): 745-64. ***IF 2013: 3.28; Citations: 26***
24. Iosue I, Quaranta R, Masciarelli S, Fontemaggi G, Batassa EM, Bertolami C, Ottone T, Divona M, Salvatori B, Padula F, Fatica A, Lo-Coco F, Nervi C, **Fazi F**. Argonaute 2 sustains the gene expression program driving human monocytic differentiation of acute myeloid leukemia cells. *Cell Death Dis*. 2013 Nov 21; 4: e926. ***IF 2013: 5.17; Citations: 14***
25. Fatica A, **Fazi F.** MicroRNA-regulated pathways in hematological malignancies: how to avoid cells playing out of tune. *Int J Mol Sci*. 2013 Oct 18; 14(10): 20930-53. ***IF 2013: 2.33; Citations: 12***
26. Salvatori B, Iosue I, Mangiavacchi A, Loddo G, Padula F, Chiaretti S, Peragine N, Bozzoni I, **Fazi F**, Fatica A. The microRNA-26a target E2F7 sustains cell proliferation and inhibits monocytic differentiation of acute myeloid leukemia cells. *Cell Death Dis*. 2012 Oct 25; 3: e413. ***IF 2012: 6.04; Citations: 29***
27. Faraoni I, Laterza S, Ardiri D, Ciardi C, **Fazi F**, Lo-Coco F. MiR-424 and miR-155 deregulated expression in cytogenetically normal acute myeloid leukaemia: correlation with NPM1 and FLT3 mutation status. *J Hematol Oncol*. 2012 Jun 8; 5: 26. ***IF 2012: 4.45; Citations: 39***
28. **Fazi F**, Fontemaggi G. MicroRNAs and lymph node metastatic disease in lung cancer.

Thorac Surg Clin. 2012 May; 22(2): 167-75. ***Citations: 5***

29. Zardo G, Ciolfi A, Vian L, Starnes LM, Billi M, Racanicchi S, Maresca C, **Fazi F**, Travaglini L, Noguera N, Mancini M, Nanni M, Cimino G, Lo-Coco F, Grignani F, Nervi C. Polycombs and microRNA-223 regulate human granulopoiesis by transcriptional control of target gene expression. *Blood* 2012 Apr 26; 119(17): 4034-46. ***IF 2012: 9.06; Citations: 88***
30. Donzelli S, Fontemaggi G, **Fazi F**, Di Agostino S, Padula F, Biagioni F, Muti P, Strano S, Blandino G. MicroRNA-128-2 targets the transcriptional repressor E2F5 enhancing mutant p53 gain of function. *Cell Death Differ*. 2012 Jun; 19(6): 1038-48. ***IF 2012: 8.37; Citations: 76***
31. Salvatori B., Iosue I., Djodji Damas N., Mangiavacchi A., Chiaretti S., Messina M., Padula F., Guarini A., Bozzoni I., **Fazi F**. and Fatica A. Critical role of c-Myc in Acute Myeloid Leukemia involving direct regulation of miR-26a and histone methyltransferase EZH2. *Genes & Cancer* 2011 May; 2(5): 585-92. ***Citations: 37***
32. Fontemaggi G., Dell'Orso S., Trisciuoglio D., Shay T., Melucci E., **Fazi F**., Terrenato I., Mottolese M., Muti P., Domany E., Del Bufalo D., Strano S., Blandino G. The execution of the transcriptional axis mutant p53, E2F1 and ID4 promotes tumor neo-angiogenesis. *Nat Struct Mol Biol.* 2009 Oct; 16(10): 1086-93. ***IF 2009: 12.27; Citations: 98***
33. Morey L., Brenner C., **Fazi F**., Villa R., Gutierrez A., Buschbeck M., Nervi C., Minucci S., Fuks F., Di Croce L. MBD3, a component of the NuRD complex, facilitates chromatin alteration and deposition of epigenetic marks. *Mol Cell Biol*. 2008 Oct; 28(19): 5912-23. ***IF 2008: 5.94; Citations: 70***
34. **Fazi F**., Nervi C. MicroRNA: basic mechanisms and transcriptional regulatory networks for cell fate determination. *Cardiovasc Res.* 2008 Sep 1; 1; 79(4): 553-61. ***IF 2008: 5.94; Citations: 90***
35. Nervi C., **Fazi F**., Grignani F. Oncoproteins, heterochromatin silencing and microRNAs: a new link for leukemogenesis. *Epigenetics* 2008 Jan-Feb; 3(1): 1-4. ***Citations: 16***
36. **Fazi F**., Racanicchi S., Zardo G., Starnes LM., Mancini M., Travaglini L., Diverio D., Ammatuna E., Cimino G., Lo-Coco F., Grignani F., Nervi C. Epigenetic silencing of the myelopoiesis regulator microRNA-223 by the AML1/ETO oncoprotein. *Cancer Cell* 2007 Nov; 12(5): 457-66. ***IF 2007: 23.85; Citations: 264***
37. **Fazi F**., Zardo G., Gelmetti V., Travaglini L., Ciolfi A., Di Croce L., Rosa A., Bozzoni I., Grignani F., Lo Coco F., Pelicci PG., Nervi C. Heterochromatic gene repression of the retinoic acid pathway in acute myeloid leukemia. *Blood* 2007 May 15; 109(10): 4432-40. ***IF 2007: 10.89; Citations: 69***
38. Nervi C., **Fazi F**., Rosa A., Fatica A., Bozzoni I. Emerging role for microRNAs in acute promyelocitic leucemia. *Curr Top Microbiol Immunol.* 2007; 313: 73-84. ***IF 2007: 4.41; Citations: 15***
39. Fatica A., Rosa A., **Fazi F**., Ballarino M., Morlando M., De Angelis FG., Caffarelli E, Nervi C., Bozzoni I. MicroRNA and Hematopoietic Differentiation. *Cold Spring Harb Symp Quant Biol*. 2006; 71: 205-10. ***Citations: 13***
40. Cimino G., Lo-Coco F., Fenu S., Travaglini L., Finolezzi E., Mancini M., Nanni M., Careddu A., **Fazi F**., Padula F., Fiorini R., Aloe Spiriti MA., Petti MC., Venditti A., Amadori S., Mandelli F., Pelicci PG. and Nervi C. Sequential Valproic Acid/All-trans Retinoic Acid Treatment Reprograms Differentiation in Refractory and High-Risk Acute Myeloid Leukemia. *Cancer Research* 2006 Sep 1; 66 (17): 8903-11; ***IF 2006: 7.65; Citations: 100***
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SUMMARY OF SCIENTIFIC ACHIEVEMENTS

Product type	Number	Data Base	Start	End
Papers [international]	**48**	by Scopus	2000	2017
Papers [national]				
Books [scientific]				
Books [teaching]	**4**		2011	2018

Hirsch (H) index	**21** by Scopus
Normalized H index*	**1.16**
Total Citations	**3041** by Scopus
Normalized Citations*	**168.94**
Average Citations per Product	**63.35**
Total Impact Factor	**303.35** by Journal Citation Report
Normalized Impact Factor*	**16.85**
Average Impact factor per Product	**6.32**
Number of Publications as first author	**7**
Number of Publications as last author	**10**
Number of Publications as corresponding author	**17**

*H index or Citations or Impact Factor divided by the academic seniority.

SELECTED PUBLICATIONS

List of the publications selected for the evaluation. For each publication are reported title, authors, reference data, journal IF relative to the year of publication (by Journal Citation Report) and citations (by SCOPUS).

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Numero di Pubblicazioni selezionate per la valutazione di merito relative all'arco temporale di 10 anni antecedenti al bando.	**12** by Scopus
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