

CURRICULUM VITAE ET STUDIORUM

Personal Data

Name: Giusi Irma Forte

Current Position: Researcher

Institution: Institute of Molecular Bioimaging and Physiology (IBFM), Cefalù Secondary Site, CNR

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Education and career:

- Degree cum laude in Molecular Biology, 18/12/2000;
- Clinical Pathology graduation, 27/10/2005;
- Clinical Pathology Specialist at the Immunohematology and Transfusion Medicine Unit of "Policlinico Paolo Giaccone", Palermo (2006-2007);
- "Biopathology" PhD graduation, 07/04/2009;
- Researcher at the Pathology Department of the "Leiden University Medical Center (LUMC)", (Leiden, The Netheland), post-doc position. (2008-2009);
- Professor for Clinical Pathology courses at Palermo University (2004-2012);
- Holder of an Italian "Ministry of Education University and Research (MIUR)" grant (2009-2011);
- Current position from 16/09/2011: Researcher at the IBFM-CNR, Cefalù Support Unit (Italy).
- Head of "Genomics and Cell Methodologies" Laboratory of IBFM-CNR
- Member of editorial board for the journal "Translational Cancer Research". Special Guest Editor for the preparation of HIFU Special Issue" and "Radiobiological models towards a personalized radiation oncology" (2014-2017)
- Member of the EUROPEAN RADIATION RESEARCH SOCIETY (ERRS) (2015)
- Member of the Italian Society for Radiation Research (SIRR) (2018)
- Member of the Italian Society of Radiobiology (AIRB) (2018)
- Responsible of the IBFM activities for the following projects:
 - GeSeTON project (funded by Italian MISE grant n. 489 of 21/02/2018)
 - SeLAB project (funded by Sicilian grant 11/2017)

Fields of expertise: Cell and Molecular Biology, Oncobiology, Immunology, Radiobiology

Scientific career:

Since 2001 she was involved in research projects related to genetics and molecular processes involved in the immune-degenerative events occurring in aging, predisposing to the onset of age-related diseases, such as cardiovascular diseases, neurodegenerative diseases, and cancer. In particular, the studies regarded the role of polymorphisms conditioning the immunological balance and the mechanisms conditioning the production of cytokines mRNAs. The data obtained from these studies have been published in ISI journals and described in the final thesis of the postgraduate Clinical Pathology course (entitled "Effects of LPS stimulation on the production of IL-10: analysis of the 5'UTR region") and in that of PhD course (entitled "Genetic Bases of Inflammaging. Evidences and future tools"). Moreover, since 2008, she focuses her research on the genomics of cancer. From 2008 to 2009 she is a research post-doc, during a training period abroad at the Pathology Department of the "Leiden University Medical Center" (Leiden, The Netherland), where she worked to a research project concerning the study of gene polymorphisms, the chromosomal instability in colorectal cancer and the allele-specific gene expression in papillary thyroid cancer. Currently, she is researcher at the Institute of Bioimaging and Molecular Physiology (IBFM)-CNR, Cefalù Support

Unit, where she works in the contest of a translational diagnostics and research unit, with the overall objective of cancer studying and care. Main biological activities are focused on the biological effects of ionizing radiations using conventional and innovative beam types.

Current research: In vitro and in vivo studies on different radiobiological models (immortalized and primary cells of breast cancer and glioblastoma multiforme; preclinical models using mice or Zebrafish models), subjected to different types of beam (photons, protons or combined treatments with radiosensitizing drugs /molecules). Definition of dose-response curves, LQ model and derivation of the α / β parameters. Study of the genomic response to ionizing radiation associated with tumor histopathological profile. Use of animal models for the study of RBE, TCP / NTCP and molecular imaging studies. Current h-index according to Scopus: 19

List of publications:

1. V. Izzo, M.R. Asaro, **GI. Forte**, R. Barbieri, (2000) Journal of Chromatography A 890, 371-374. "Use of voltage gradient gel electrophoresis in apoptotic DNA analysis". [Impact Factor 4.194]
2. D. Lio, V. Marino, A. Serauto, V.Gioia, L. Scola, A. Crivello, **GI. Forte**, G. Colonna Romano, G. Candore, C. Caruso. (2002) European J. Immunogenetics, 29, 371-374. "Genotype frequencies of +874T→A single nucleotide polymorphism in the first intron of Interferon- γ gene in a sample of Sicilian patients affected by tuberculosis". [Impact Factor 1.713]
3. F. Cataldo, D. Lio; L. Scola, **GI. Forte**, and S. Accomando. Pediatric Gastroenterology: hepatology and nutrition, 2nd World Congress. Pag. 513-516, Paris 3/7/2004. "Analysis of functionally relevant single nucleotide polymorphisms of TNF α and of INF γ in celiac disease.
4. Lio D, Scola L, **Forte GI**, Accomando S, Giacalone A, Crivello A, Cataldo F. (2005) Dig Liver Dis. 37, 756-760. "TNF α , IFN γ and IL-10 gene polymorphisms in a sample of Sicilian patients with Celiac Disease". [Impact Factor 2.805]
5. Cataldo F, Scola L, Piccione M, Giuffrè M, Crivello A, **Forte GI**, Lio D, Corsello G. (2005) Dig Liver Dis 37(12), 923-927. "Evaluation of cytokine polymorphism (TNF α , IFN γ AND IL-10) in down patients with celiac disease" [Impact Factor 2.805]
6. Scola L, Candore G, Colonna-Romano G, Crivello A, **Forte GI**, Prolisso G, Franceschi C, Lio D, Caruso C. Biogerontology (2005) Dec6(6), 425-429 " Study of association with-330T/G IL2 in a population of centenarians from Centre and South Italy". [Impact Factor 3.411]
7. Lio D, Scola L, Crivello A, **Forte GI**, Caruso C. Diagnostic Knot. ASHI QUARTERLY. (2006) vol. 4 quarter 06, pp. 104-106. "Immunogenetic Markers and the Sporadic Alzheimer's Disease".
8. **Forte GI**, Ragonese P, Salemi G, Scola L, Candore G, D'Amelio M, Crivello A, Di Benedetto N, Nuzzo D, Giacalone A, Lio D, Caruso C. (2006) Ann. N.Y. Acad. Sci. 1067, 264-269. " Search for genetic factors associated with susceptibility to multiple sclerosis" [Impact Factor 0.964]
9. Crivello A, Giacalone A, Scola L, **Forte GI**, Nuzzo D, Giacconi R, Cipriano C, Candore G, Mocchegiani E, Colonna Romano G, Lio D, Caruso C. (2006) Ann. N.Y. Acad. Sci. 1067, 288-293. "Frequency of polymorphisms of signal peptide of TGF- β 1 and -1082G/A SNP at the promoter region of IL-10 gene in a group of patients with carotid stenosis". [Impact Factor 0.964]
10. Scola L, Lio D, Crivello A, Candore G, **Forte GI**, Colonna- Romano G, Pes MG, Carru C, Ferrucci L, Deiana L, Baggio G, Franceschi C, Caruso C. (2006) Rejuvenation Res. Spring 9(1), 157-160. " Analysis of HLA-DQA, HLA-DQB frequencies in a group of Sardinian centenarians". [Impact Factor 4.220]
11. Nuzzo D, Cataldo F, Scola L, **Forte GI**, Crivello A, Giacalone A, Accomando S, Barbieri R, Candore G, Caruso C, Lio D. (2006) Rejuvenation Res. Spring 9(1), 153-156. "Analysis of candidate genes in celiac disease: a tool to identify life-threatening associated genes?". [Impact Factor 4.220]
12. Lio D, Annoni G, Licastro F, Crivello A, **Forte GI**, Scola L, Colonna Romano G, Candore G, Arosio B, Galimberti L, Vergani C, Caruso C. (2006) Mech Ageing Dev. Jun; 127(6):567-71. Epub 2006 Mar 3. "Tumor

- necrosis factor-alpha -308A/G polymorphism is associated with age at onset of Alzheimer's disease". [**Impact Factor** 1.788]
13. Scola L, Vaglica M, Crivello A, Palmeri L, **Forte GI**, Macaluso MC, Giacolone A, Di Noto L, Bongiovanni A, Raimondi C, Accardo A, Verna R, Candore Giuseppina, Caruso C, Lio D, Palmeri S. (2006) Ann. N.Y. Acad. Sci. Nov;1089: 104-109 "Cytokine Gene Polymorphisms and Breast Cancer Susceptibility". [**Impact Factor** 0.964]
 14. Crivello A, Giacolone A, Vaglica M, Scola L, **Forte GI**, Macaluso MC, Raimondi C, Di Noto L, Bongiovanni A, Accardo A, Candore G, Palmeri L, Verna R, Caruso C, Lio D, Palmeri S. (2006) Ann. N.Y. Acad. Sci. Nov;1089: 98-103 "Regulatory Cytokine Gene Polymorphisms and Risk of Colorectal Carcinoma" [**Impact Factor** 0.964]
 15. **Forte GI**, Piccione M, Scola L, Crivello A, Galfano C, Corsi M, Chiappelli M, Candore G, Giuffrè M, Verna R, Licastro F, Corsello G, Caruso C, Lio D. (2007) Rejuvenation Res. Sep;10(3):293-9. "ApoE genotypic frequencies among Down's syndrome patients imply early unsuccessful ageing for ApoE4 carriers". [**Impact Factor** 4.220]
 16. Crivello A, **Forte GI**, Mirabile M, Lio D, Scola L. (2007) Il Patologo Clinico 1, 21-27. "Inflammation genes and Alzheimer's Disease"
 17. **Forte GI**, Calà C, Scola L, Crivello A, Gullo A, Marasà A, Giacalone A, Bonura C, Caruso C, Lio D, Giammanco A. (2008) Rejuvenation Res. Apr;11(2):509-12. "Role of environmental and genetic factor interaction in the age-related disease development: The gastric cancer paradigm. [**Impact Factor** 4.220]
 18. Scola L, Lio D, Candore G, **Forte GI**, Crivello A, Colonna-Romano G, Pes MG, Carru C, Ferruci L, Deiana L, Baggio G, Franceschi C, Caruso C. (2008). Exp Gerontol. Feb;43(2):114-8. "Analysis of HLA-DRB1,DQA1,DQB1 haplotypes in Sardinian centenarians". [**Impact Factor** 3.804]
 19. Bellavia D, **Forte GI**, Sisino G, Sisino G, Barbieri R. (2008) Anal Biochem. Jul 1;378(1):113-4. "A new method for the mapping of 5' ends of RNAs". [**Impact Factor** 2.146]
 20. Scola L, Giacalone A, Marasà L, Mirabile M, Vaccarino L, **Forte GI**, Giannitrapani L, Caruso C, Montalto G, Lio D. (2009) Ann N Y Acad Sci. Feb; 1155:284-8. "Genetic determined downregulation of both type 1 and type 2 cytokine pathways might be protective against pancreatic cancer". [**Impact Factor** 0.964]
 21. Bellavia D, Sisino G, Papadopoulos GL, **Forte GI**, Barbieri R. (2009) Immun Ageing. May 21;6:6."Mung bean nuclease mapping of RNAs 3' end". [**Impact Factor** 3.00]
 22. Caruso C, Balistreri CR, Candore G, Carruba G, Colonna-Romano G, Di Bona D, **Forte GI**, Lio D, Listì F, Scola L, Vasto S. (2009) Cancer Immunol Immunother. Dec;58(12):1919-33. "Polymorphisms of pro-inflammatory genes and prostate cancer risk: a pharmacogenomic approach." [**Impact Factor** 3,791]
 23. **Forte GI**, Scola L, Misiano G, Milano S, Mansueto P, Vitale G, Bellanca F, Sanacore M, Vaccarino L, Rini GB, Caruso C, Cillari E, Lio D, Mansueto S. (2009) Clin Vaccine Immunol. Jun;16(6):811-5 "Relevance of Interferon-gamma, Tumor Necrosis Factor-alpha and Interleukin 10 gene polymorphisms for Mediterranean Spotted Fever susceptibility". [**Impact Factor** 2,505]
 24. **Forte GI**, Scola L, Bellavia D, Vaccarino L, Sanacore M, Sisino G, Scazzone C, Caruso C, Barbieri R, Lio D. (2009) Molecular Immunology Jul;46(11-12):2161-6 "Characterization of two alternative Interleukin(IL)-10 5'UTR mRNA sequences, induced by Lipopolysaccharid (LPS) stimulation of peripheral blood mononuclear cells". [**Impact Factor** 3,202]
 25. Candore G, Balistreri CR, Bulati M, Colonna-Romano G, Di Bona D, **Forte GI**, Lio D, Listì F, Pellicanò V, Scola L, Vasto S, Caruso C. (2009) G. Gerontol. 57 145-152. "Immune Inflammatory response in succesful and unsuccessful ageing".
 26. **Forte GI**, Pilato G, Vaccarino L, Sanacore M, Candore G, Romano GC, Testa R, Franceschi C, Capri M, Marra M, Bonfigli AR, Caruso C, Scola L, Lio D. (2010) Curr Pharm Des. 16(7):898-903. "Risk profiles in type 2 diabetes (metabolic syndrome): integration of IL-10 polymorphisms and laboratory parameters to identify vascular damages related complications". [**Impact Factor** 4,414]

27. van Eijk R, Licht J, Schrupf M, Yazdi MT, **Forte GI**, Nederlof P, Rabe KF, Annema JT, Smit V, Morreau H, van Wezel T. (2011). PLoS ONE, Mar 8;6(3):e17791. "Accurate and rapid KRAS, EGFR, BRAF and PIK3CA hotspot mutation and deletion analysis of fine needle cytological aspirates from non-small cell lung cancer (NSCLC) patients using allele specific qPCR analysis" [**Impact Factor** 4,351]
28. **Forte GI**, Vaccarino L, Palmeri M, Branzi A, Caldarella CM, Scola L, Caruso C, Licastro F, Lio D. (2011). Biogerontology. Oct;12(5):485-90. "Analysis of polymorphisms G1691A of Factor V and 20210GA of Factor II as risk factors for acute myocardial infarction" [**Impact Factor** 3.411]
29. Vaccarino L, **Forte GI**, Palmeri M, Misiano G, Porcellini E, Chiappelli M, Scola L, Caruso C, Licastro F, Lio D. (2011) Biogerontology. Oct;12(5):445-50 "Role of prothrombotic polymorphisms in successful or unsuccessful aging" [**Impact Factor** 3.411]
30. Middeldorp A, van Eijk R, Oosting J, **Forte GI**, van Puijenbroek M, van Nieuwenhuizen M, Corver ME, Ruano D, Caldes T, Wijnen J, Morreau H, van Wezel T. (2011) Int J Cancer. "Increased frequency of 20q gain and copy-neutral loss of heterozygosity in mismatch repair proficient familial colorectal carcinomas". Int J Cancer. 2012 Feb 15;130(4):837-46 [**Impact Factor** 4,722]
31. Palmeri M, Misiano G, Malaguarnera M, **Forte GI**, Vaccarino L, Milano S, Scola L, Caruso C, Motta M, Maugeri D, Lio D. (2011) "Cytokine serum profile in a group of Sicilian Centenarians". J Immunoassay Immunochem. 2012 Jan;33(1):82-90. [**Impact Factor** 0.862]
32. Accardo Palumbo A, **Forte GI**, Pileri D, Vaccarino L, Conte F, D'Amelio L, Palmeri M, Triolo A, D'Arpa N, Scola L, Misiano G, Milano S, Lio D. (2011) "Analysis of IL-6, IL-10 and IL-17 genetic polymorphisms as risk factors for sepsis development in burned patients". Burns. 2012 Mar;38(2):208-13. [**Impact Factor** 1.718]
33. Tuttolomondo A, Di Raimondo D, **Forte GI**, Casuccio A, Vaccarino L, Scola L, Pecoraro R, Serio A, Clemente G, Arnao V, Palmeri M, Misiano G, Lio D, Pinto A, Licata G. (2012) Single nucleotide polymorphisms (SNPs) of pro-inflammatory/anti-inflammatory and thrombotic/fibrinolytic genes in patients with acute ischemic stroke in relation to TOAST subtype. Cytokine. 2012 Jun;58(3):398-405. [**Impact Factor** 3.537]
34. Balistreri CR, Candore G, Accardi G, Bova M, Buffa S, Bulati M, **Forte GI**, Listi F, Martorana A, Palmeri M, Pellicano M, Vaccarino L, Scola L, Lio D, Colonna-Romano G. "Genetics of longevity. Data from the studies on Sicilian centenarians." Immun Ageing. 2012 Apr 23;9(1):8. [**Impact Factor** 3.00]
35. Allegra A, Marino A, Peregrin PC, Lama A, García-Segovia A, **Forte GI**, Núñez-Calonge R, Agueli C, Mazzola S, Volpes A. "Endometrial expression of selected genes in patients achieving pregnancy spontaneously or after ICSI and patients failing at least two ICSI cycles". Reprod Biomed Online. 2012 Aug 8. [Epub ahead of print]
36. Vaccarino L, Vitale S, Caruso M, Palmeri M, Scola L, Bova M, Caruso C, Massenti MF, Vitale F, Novo S, Lio D, **Forte GI**. Myocardial infarction marker levels are influenced by prothrombin and tumor necrosis factor- α gene polymorphisms in young patients. Cytokine. 2012 Oct 19.
37. Bravatà V, Cammarata FP, **Forte GI**, Minafra L. "Omics" of HER2-Positive Breast Cancer. OMICS. 2013 Feb 19. In press [**Impact Factor** 2.44]
38. **Forte GI**. APOBEC3B spreads somatic mutations in breast cancer genome. Transl Cancer Res 2013;2(2):97-99.
39. Sarasqueta AF, **Forte GI**, Corver WE, de Miranda NF, Ruano D, van Eijk R, Oosting J, Tollenaar RA, van Wezel T, Morreau H. Integral analysis of p53 and its value as prognostic factor in sporadic colon cancer. BMC Cancer. 2013 Jun 5;13:277
40. Scola L, Di Maggio FM, Vaccarino L, Bova M, **Forte GI**, Pisano C, Candore G, Colonna-Romano G, Lio D, Ruvolo G, Balistreri CR. Role of TGF- β Pathway Polymorphisms in Sporadic Thoracic Aortic Aneurysm: rs900 TGF- β 2 Is a Marker of Differential Gender Susceptibility. Mediators Inflamm. 2014;2014:165758.
41. Minafra L, Bravatà V, Saporito M, Cammarata FP, **Forte GI**, Caldarella S, D'Arienzo M, Gilardi MC, Messa C, Boniforti F. Genetic, clinical and radiographic signs in knee osteoarthritis susceptibility. Arthritis Res Ther. 2014 Apr 9;16(2):R91

42. Minafra L, Bravatà V, **Forte GI**, Cammarata FP, Gilardi MC, Messa C. Gene expression profiling of epithelial-mesenchymal transition in primary breast cancer cell culture. *Anticancer Res.* 2014 May;34(5):2173-83.
43. Camarda M, Fisicaro G, Anzalone R, Scalese S, Alberti A, La Via F, La Magna A, Ballo A, Giustolisi G, Minafra L, Cammarata FP, Bravatà V, **Forte GI**, Russo G, Gilardi MC. Theoretical and experimental study of the role of cell-cell dipole interaction in dielectrophoretic devices: application to polynomial electrodes. *Biomed Eng Online.* 2014 Jun 5;13:71.
44. Vicari F, Russo G, Cammarata FP, Cirincione R, **Forte GI**, Borasi G, Gilardi MC. A daily quality assurance routine for ultrasounds in vitro experiments. *Translational Cancer Research Vol 3, No 5 (October 2014).*
45. Cammarata FP, **Forte GI**. Opportunities from modulating ultrasound, from tissue ablation to tissue regeneration. *Translational Cancer Research Vol 3, No 5 (October 2014).*
46. Bravatà V, Minafra L, **Forte GI**, Cammarata FP, Saporito M, Boniforti F, Lio D, Gilardi MC, Messa C. DVWA gene polymorphisms and osteoarthritis. *BMC Res Notes.* 2015 Feb 4;8:30.
47. Di Maggio FM, Minafra L, **Forte GI**, Cammarata FP, Lio D, Messa C, Gilardi MC, Bravatà V. Portrait of inflammatory response to ionizing radiation treatment. *J Inflamm (Lond).* 2015 Feb 18;12:14.
48. Bravatà V, Minafra L, Russo G, **Forte GI**, Cammarata FP, Ripamonti M, Casarino C, Augello G, Costantini F, Barbieri G, Messa C, Gilardi MC. High-dose Ionizing Radiation Regulates Gene Expression Changes in the MCF7 Breast Cancer Cell Line. *Anticancer Res.* 2015 May;35(5):2577-91.
49. Pucci M, Bravatà V, **Forte GI**, Cammarata FP, Messa C, Gilardi MC, Minafra L. Caveolin-1, breast cancer and ionizing radiation. *Cancer Genomics Proteomics.* 2015 May-Jun;12(3):143-52. Review.
50. Minafra L, Bravatà V, Russo G, **Forte GI**, Cammarata FP, Ripamonti M, Candiano G, Cervello M, Giallongo A, Perconti G, Messa C, Gilardi MC. Gene Expression Profiling of MCF10A Breast Epithelial Cells Exposed to IOERT. *Anticancer Res.* 2015 Jun;35(6):3223-34.
51. Borasi G, Russo G, Paulides MM, Powatil G, Nahum AE, Fariselli L, Lamia D, Cirincione R, **Forte GI**, Borrazzo C, Caccia B, Di Castro E, Pozzi S, Gilardi MC. Fast and High temperature hyperthermia coupled with Radiotherapy as a possible new treatment for glioblastoma. *Journal of Therapeutic Ultrasound.* 16 Dec 8;4:32. eCollection 2016.
52. Cirincione R, Di Maggio FM, **Forte GI**, Minafra L, Bravatà V, Castiglia L, Borasi G, Russo G, Lio D, Messa C, Gilardi MC and Cammarata FP. HIFU- and RT-induced immunomodulation: comparison and potential opportunities. *Ultrasound Med Biol.* 2017 Feb;43(2):398-411
53. Russo G, Pisciotta P, Cirrone GAP, Romano F, Cammarata FP, Marchese V, **Forte GI**, Lamia D, Minafra L, Bravatà V, Acquaviva R, Gilardi MC, Cuttone G. Preliminary study for small animal preclinical hadrontherapy facility. *Nuclear Inst. and Methods in Physics Research, A.* 2017; 846: 126-134.
54. Bravatà V, Minafra L, **Forte GI**, Cammarata FP, Russo G, Di Maggio FM, Augello G, Lio D, Gilardi MC. Cytokine profile of breast cell lines after different radiation doses. *Int J Radiat Biol.* 2017 Aug 1:1-24.
55. **Forte GI**, Minafra L, Bravatà V, Cammarata FP, Lamia D, Pisciotta P, Cirrone GAP, Cuttone G, Gilardi MC, Russo G. Radiogenomics: the utility in patient selection. *Transl Cancer Res* 2017;6 (Suppl 5):S852-S874
56. Gieri S, Di Pietro C, Vento M, Scandurra G, **Forte GI**, Russo, G, Scollo P. "MicroRNA in follicular fluid: New molecular markers of oocyte quality in cancer patients" *Italian Journal of Gynaecology and Obstetrics* Volume 29, Issue 2, June 2017, Pages 41-43; ISSN: 11218339;

57. Minafra L, Bravatà V, Cammarata FP, Di Maggio FM, **Forte GI**. “SASPECTs of Radiation Induced Senescence”. *Ann. Radiat. Ther. Oncol.* 2017; 1(2): 1006. ISSN: 2577-8757.
58. Bravatà V, Cava C, Minafra L, Cammarata FP, Russo G, Gilardi MC, Castiglioni I, **Forte GI**. Radiation-induced gene expression changes in high and low grade breast cancer cell types. *Int J Mol Sci.* 2018 Apr 4;19(4).
59. Minafra L, Bravatà V, Cammarata FP, Russo G, Gilardi MC, **Forte GI**. Radiation Gene-expression Signatures in Primary Breast Cancer Cells. *Anticancer Res.* 2018 May;38(5):2707-2715.
60. Bravatà V, Minafra L, Cammarata FP, Pisciotta P, Lamia D, Marchese V, Manti L, Cirrone GA, Gilardi MC, Cuttone G, **Forte GI**, Russo G. Gene expression profiling of breast cancer cell lines treated with proton and electron radiations. *Br J Radiol.* 2018 Jun 11:20170934
61. Pisciotta P, Cammarata FP, Stefano A, Romano F, Marchese V, Torrisi F, **Forte GI**, Cella L, Cirrone GAP, Petringa G, Gilardi MC, Cuttone G, Russo G. Monte Carlo GEANT4-based application for in vivo RBE study using small animals at LNS-INFN preclinical hadrontherapy facility. *Phys Med.* 2018 Oct; 54:173-178
62. Petringa G, Romano F, Manti L, Pandola L, Attili A, Cammarata FP, Cuttone G, **Forte GI**, Manganaro L, Pipekg J, Pisciotta P, Russo G, Cirrone GAP, “Radiobiological quantities in proton-therapy: Estimation and validation using Geant4-based Monte Carlo simulation.” *Phys Med.* 2019 58:72-80
63. Bravatà V, Cammarata FP, Minafra L, Pisciotta P, Scazzone C, Manti L, Petringa G, Cirrone GAP, Cuttone G, Gilardi MC, **Forte GI**, Russo G. “Proton-irradiated breast cells: molecular points of view”. *IJ Radiat Res.* 2019 May 28.
64. Bravatà V, Cammarata FP, Minafra L, Musso R, Pucci G, Spada M, Fazio I, Russo G and **Forte GI**. Gene Expression Profiles Induced by High-dose Ionizing Radiation in MDA-MB-231 Triple Negative Breast Cancer Cell Line”. *Cancer Genomics Proteomics.* 2019 Jul-Aug;16(4):257-266
65. Minafra L, Porcino N, Bravatà V, Gaglio D, Bonanomi M, Amore E, Cammarata FP, Russo G, Militello C, Savoca G, Baglio M, Abbate B, Iacoviello G, Evangelista G, Gilardi MC, Bondi ML, **Forte GI**. “Radiosensitizing effect of curcumin-loaded lipid nanoparticles in breast cancer cells”. *Sci Rep.* 2019 Jul 31;9(1):11134
66. Cammarata FP, Torrisi F, **Forte GI**, Minafra L, Bravatà V, Pisciotta P, Savoca G, Calvaruso M, Petringa G, Cirrone GAP, Fallacara AL, Maccari L, Botta M, Schenone S, Parenti R, Cuttone G, Russo G. Proton Therapy and Src Family Kinase Inhibitor Combined Treatments on U87 Human Glioblastoma Multiforme Cell Line. *Int J Mol Sci.* 2019 Sep 24;20(19):4745.
67. Calvaruso M, Pucci G, Musso R, Bravatà V, Cammarata FP, Russo G, **Forte GI**, Minafra L. Nutraceutical Compounds as Sensitizers for Cancer Treatment in Radiation Therapy. *Int J Mol Sci.* 2019 Oct 23;20(21):5267.
68. Pisciotta P, Costantino A, Cammarata FP, Torrisi F, Marchese V, Cirrone GAP, Petringa G, Forte GI, Minafra L, Bravatà V, Gulisano M, Scopellit F, Cuttone G, Ippolito M, Parenti R, Russo G. Evaluation of proton beam radiation-induced skin injury in a murine model using a clinical SOBP. *Plos One (In press)*
69. Dusi V, Russo G, **Forte GI**, De Ferrari GM. Non-invasive ablation of cardiac arrhythmia. Is proton radiation therapy a step forward? *Int. J. of Cardiology. (In Press)*
70. Cammarata FP, **Forte GI**, Broggi G, Bravatà V, Minafra L, Pisciotta P, Calvaruso M, Tringali R, Tomasello B, Torrisi F, Petringa G, Cirrone GAP, Cuttone G, Acquaviva R, Caltabiano R, Russo G. Molecular investigation on a Triple Negative Breast Cancer xenograft model exposed to proton beams. *Cancer (Paper Submitted).*

Monographs and book chapter

1. Caruso C, Balistreri CR, Crivello A, **Forte GI**, Grimaldi MP, Listi F, Scola L, Vasto S, Candore G. (2007). "The Genetics of Innate Immunity and Inflammation in Ageing, Age-Related Diseases and Longevity. (cap.14)" In Immunoscience.
2. Minafra L, Bravatà V, Cammarata FP, **Forte GI**. (2016). "Radiation Therapy Towards Laser-Driven Particle Beams: An "OMICS" Approach in Radiobiology". In Laser-Driven Particle Acceleration Towards Radiobiology and Medicine Part of the series Biological and Medical Physics, Biomedical Engineering pp 67-98

Guest Editor of the Special Issue

1. "High intensity focused ultrasound" Translational Cancer Research Vol 3, No 5 (October 2014)
2. "Radiobiological models towards a personalized radiation oncology" Translational Cancer Research Vol 6, No 5 (June 2017)