



CURRICULUM VITAE



Personal Information

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| Name, Surname | Giancarlo Gialanella |
| Gender | male |
| Date and Place of Birth | 9 November 1935 - Roma |
| Nationality | Italiana |
| Title / Discipline | Professor Emeritus University Federico II |
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| Education & Training | 1959 Degree in Physics, University of Rome (field: high energy Physics) |
| Summary of Academic Career | 1965 Libera docenza in Physics, University of Rome 1967 Research Assistant in Physics, University of Rome 1973 Full Professor in Physics, University of Naples 2012 Professor Emeritus |
| Teaching activity | Laboratory of Physics 1, 2. 3 General Physics I General Physics II Biophysics |
| Research Fields & Projects | <p>With a background in subnuclear physics, he works from 1976 in the field of biological effects of ionizing radiation in viruses and mammalian cells.</p> <p>1959-1974: Investigation of elementary particle physics 1975-1984: Investigation of radiation damage of DNA in T4 phage</p> <p>1982-1992: Investigation of Trace Element role in living beings 1984-1992: Investigation of radiation response of murine cells 1992-2010: Investigation of high-LET radiation induced damage in human cells and advanced single-cell dosimetry.</p> <p>PI of many research projects funded by Italian and European Institutes. He has recently chaired the co-ordinated research project "Health Physics in biomedical imaging: operational support and new developments" and "A new laboratory for the development of techniques and methods in morphofunctional diagnostic imaging" in the framework of the project "Research and development of imaging techniques" funded by the Italian Ministry for Scientific Research.</p> |

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| Membership and office held in Scientific Societies | Società Italiana di Fisica (SIF) Società Italiana Fisica Medica (AIFM) Società Italiana Ricerca sulle Radiazioni (SIRR) Associazione Italia Studio Elementi in Traccia in Organismi viventi (AISETOV) Associazione Italiana Fisica e Applicazioni (ANFeA) |
| Editorial activities in Journals and Monographs Series | |
| Offices held in the University | <ul style="list-style-type: none"> - Head of Radiation Biophysics Group and coordinator of the Accelerator Laboratory at the Department of Physics, University Federico II (since 1974). - In the past years he was Director of the Department of Physics, Director of the INFN (National Institute of Nuclear Physics) Section of Naples, President of the Computer Department of the University of Naples, and President of the Council of Physics Professors at the University of Naples. - Vice-President of Health Physics School of the University Federico II and chair of the National Board of Directors of Health Physics Schools. |
| Other Activities | PI of many research projects funded by Italian and European Institutes. He has recently chaired the co-ordinated research project "Health Physics in biomedical imaging: operational support and new developments" and "A new laboratory for the development of techniques and methods in morphofunctional diagnostic imaging" in the framework techniques" funded by the Italian Ministry for Scientific Research of the project "Research and development of imaging techniques" funded by the Italian Ministry for Scientific Research. |

Selected Publications

1. - L. Perrone, G. Gialanella, V. Giordano, A. La Manna, R. Moro and R. Di Toro. Impaired Zinc Metabolic Status in Children Affected by Idiopathic Nephrotic Syndrome. *Eur. J. Pediat.* 149, (1990) 438.
2. M.Durante, G.F.Grossi, M.Napolitano, and G.Gianella. Repair of potentially lethal damages by introduction of T4 DNA ligase in eucaryotyc cells. *Int. J. Radiat. Biol.*, 59, 963-971, (1991)
3. M.Napolitano, M.Durante, G.Grossi, M.Pugliese and G.Gianella "Inactivation of C3H 10T1/2 cells by monoenergetic high-LET a-particles" *International Journal of Radiation Biology* 61 (1992) 813-820.
4. - L. Perrone, G. Gialanella, V. Giordano, A. La Manna, R. Moro and R. Di Toro. Impaired Zinc Metabolic Status in Children Affected by Idiopathic Nephrotic Syndrome. *Eur. J. Pediat.* 149, (1990) 438.
5. M.Durante, G.F.Grossi, M.Napolitano, and G.Gianella. Repair of potentially lethal damages by introduction of T4 DNA ligase in eucaryotyc cells. *Int. J. Radiat. Biol.*, 59, 963-971, (1991)
6. M.Napolitano, M.Durante, G.Grossi, M.Pugliese and G.Gianella "Inactivation of C3H 10T1/2 cells by monoenergetic high-LET a-particles" *International Journal of Radiation Biology* 61 (1992) 813-820.
7. M.Durante, G.F.Grossi, M.Napolitano, M.Pugliese and G.Gianella "Chromosome damage induced by high-LET a-particles in plateau-phase C3H 10T1/2 cells" *International Journal of Radiation Biology* 62 (1992) 571-580.
8. M.Durante, G.Gianella, G.F.Grossi and M.Pugliese "Thickness measurements on living cell monolayers by nuclear methods" *Nuclear Instruments and Methods in Physics Research* B73 (1993) 543-549.
9. M.Durante, G.Gianella, G.F.Grossi, M.Nappo and M.Pugliese "The induction of Robertsonian translocations by X-rays and mitomycin C in mouse cells" *Mutation Research* 323 (1994) 189-196.
10. M.Durante, G.Gianella, G.F.Grossi, M.Nappo, M.Pugliese, D.Bettenga, P.Calzolari, G.Noris Chioda, A.Ottolenghi and L.Tallone Lombardi "Radiation-induced chromosomal aberrations in mouse 10T1/2 cells: dependence on the cell-cycle stage at the time of irradiation" *International Journal of Radiation Biology* 65 (1994) 437-447.
11. - L. Perrone, G. Gialanella, V. Giordano, A. La Manna, R. Moro and R. Di Toro. Impaired Zinc Metabolic Status in Children Affected by Idiopathic Nephrotic Syndrome. *Eur. J. Pediat.* 149, (1990) 438.
12. - L. Perrone, G. Gialanella, V. Giordano, A. La Manna, R. Moro and R. Di Toro. Impaired Zinc Metabolic Status in Children Affected by Idiopathic Nephrotic Syndrome. *Eur. J. Pediat.* 149, (1990) 438.
13. M.Durante, G.F.Grossi, M.Napolitano, and G.Gianella. Repair of potentially lethal damages by introduction of T4 DNA ligase in eucaryotyc cells. *Int. J. Radiat. Biol.*, 59, 963-971, (1991)
14. M.Napolitano, M.Durante, G.Grossi, M.Pugliese and G.Gianella "Inactivation of C3H 10T1/2 cells by monoenergetic high-LET a-particles" *International Journal of Radiation Biology* 61 (1992) 813-820.
15. M.Durante, G.F.Grossi, M.Napolitano, M.Pugliese and G.Gianella "Chromosome damage induced by high-LET a-particles in plateau-phase C3H 10T1/2 cells" *International Journal of Radiation Biology* 62 (1992) 571-580.
16. M.Durante, G.Gianella, G.F.Grossi and M.Pugliese "Thickness measurements on living cell monolayers by nuclear methods" *Nuclear Instruments and Methods in Physics Research* B73 (1993) 543-549.
17. M.Durante, G.Gianella, G.F.Grossi, M.Nappo and M.Pugliese "The induction of Robertsonian translocations by X-rays and mitomycin C in mouse cells" *Mutation Research* 323 (1994) 189-196.
18. M.Durante, G.Gianella, G.F.Grossi, M.Nappo, M.Pugliese, D.Bettenga, P.Calzolari, G.Noris Chioda, A.Ottolenghi and L.Tallone Lombardi "Radiation-induced chromosomal aberrations in mouse 10T1/2 cells: dependence on the cell-cycle stage at the time of irradiation" *International Journal of Radiation Biology* 65 (1994) 437-447.
19. M. Pugliese, M. Durante, G.F. Grossi, F. Monforti, D. Orlando, A. Ottolenghi, P. Scampoli, and G. Gialanella. Inactivation of individual mammalian cells by single a-particles. *Int. J. Rad. Biol.* 72 (1997) 397-407
20. M.Durante, Y.Furusawa, K.George, G.Gianella, O.Greco, G.Grossi, N.Matsuufuji, M.Pugliese and T.C.Yang. Rejoining and misrejoining of radiation-induced chromatin breaks. IV. Charged particles. *Radiat. Res.* 149 (1998) 446-454.
21. F. Ballarini, M. Merzagora, F. Monforti, M. Durante, G. Gialanella, G.F. Grossi, M. Pugliese, A. Ottolenghi. Chromosome aberrations induced by light ions: Monte Carlo simulations based on a mechanistic model, *Int J Radiat Biol.* 75, (1999), 35-46
22. P. Scampoli, M. Casale, M. Durante, G. F. Grossi, M. Pugliese, G. Gialanella Low-energy light ion irradiation beam-line for radiobiological studies. *Nucl. Instr. Meth.* 164, 337-343, 2001
23. C. Loguercio, V. De Girolamo, A. Federico, S.L. Feng, E. Carafa, V. Cataldi, G. Gialanella, R. Moro and C. Del Vecchio Blanco. "The relationship of blood Trace Elements to liver damage, nutritional status and oxidative stress in chronic non-alcoholic liver disease". *Biol. Trace Element Res.* 81 (2001) 245-254
24. M. Durante, G. Gialanella, G. Grossi, M. Pugliese, P. Scampoli, T. Kawata, N. Yasuda and Y. Furusawa, Influence of the shielding on the induction of chromosomal aberrations in human lymphocytes exposed to high-energy iron ions. *J. Radiat. Res.* 43 (2002) S107-111.
25. O. Greco, M. Durante, , G. Gialanella, G. Grossi, M. Pugliese, P. Scampoli, G. Snigiryova and G. Obe, Biological dosimetry in Russian and Italian astronauts. *Adv. Space Res.*, 31 (2003) 1495-1503.
26. V. d'Alesio, R. Pacelli, M. Durante, G. Canale Cama, L. Cellia, G. Gialanella, G. Grossi, M. Pugliese, G. Punzo, I. Sardi, P. Scampoli, R. Solla and M. Salvatore, Lymph nodes in the irradiated field influence the yield of radiation-induced chromosomal aberrations in lymphocytes from breast cancer patients. *Int. J. Radiat. Oncol. Biol. Phys.* 57 (2003) 732-

