

Curriculum Vitae

Education and PHD/Masters/Courses

- 1987** PhD Degree in Molecular Biology, University of Perugia, Italy.
1987 Specialty Degree, Board of Internal Medicine, Summa cum laude, University of Perugia, Italy.
1981 Medical Degree, Summa cum laude, University of Perugia, Italy.

Current positions

- 2010-today** Scientific Co-Director of the European Institute of Oncology (IEO), Milan, Italy.
1995-today Chairman of the Department of Experimental Oncology, IEO, Milan, Italy.
2004-today Full Professor of Pathology, University of Milan, Italy.
2000-today Scientific Director of the SEMM Foundation (European School of Molecular Medicine), Milan, Italy.
2010-today President of TTFactor Srl, the technology transfer company of IEO and IFOM (FIRC Institute for Molecular Oncology).

Previous appointments

- 2000-2003** Full Professor of Pathology, San Raffaele University, Milan, Italy.
2000-2002 Visiting Professor, New York Medical College, New York, USA.
1994-2000 Associate Professor of Oncology, University of Parma, Italy.
1987-1994 Chief of the Laboratory of Molecular Biology, "Istituto di Clinica Medica I", Perugia, Italy.
1983-1986 Post Doctoral Fellow in Molecular Biology, New York University Medical Center, Department of Pathology, New York, USA.
1982 Post Doctoral Fellow in Experimental Haematology, "Institut National de la Sante et de la Recherche Medicale", Unite de Recherches en Genetique Moleculaire et Hematologie, I.N.S.E.R.M.-U.91, Creteil, France.

Research Activities carried out at IEO

Research investigations into the molecular changes that lead to cancer, strategies for the development of targeted therapies, genomic/epigenetic deregulation in cancer, aging, including the characterization of normal and cancer stem cells, DNA damage responses in stem cells, roles of oncogenes such as PML-RAR, AML1-ETO, NPMmut, Myc, genetic/epigenetic mutations associated with chemoresistance, genomic instability, reprogramming, replication stress, links between aging, metabolism and cancer risks.

Scientific achievements

- Cloning of the human T-cell receptor T-gamma locus and first demonstration of the usage of immunoglobulin and T-cell receptor gene rearrangements for diagnosis of lineage and clonality in lymphoproliferative disorders.
- First demonstration of myc mutations and myb amplification in haematopoietic tumours.
- Cloning of the Acute Promyelocytic Leukaemia 15;17 translocation breakpoints and molecular and biological characterization of their abnormal products (PML/RARa and RARa/PML fusion proteins).
- First demonstration of a mechanistic connection between oncogene expression (PML/RARa) and chromatin changes (modification of acetylation and DNA methylation).
- Definition of the molecular basis of retinoic acid treatment in Acute Promyelocytic Leukaemia and standardization of molecular assays for the monitoring of APL residual disease during treatment.
- Cloning of the Shc gene and definition of the role of Shc proteins in signal transduction from activated tyrosine kinases to Ras.
- Identification of the p66shc splice variant as a critical determinant of the life span control mechanisms in mammals.
- Definition of the role of the cell cycle inhibitor p21 in the self-renewal regulation of normal and leukemic stem cells
- Definition of the role of the tumour suppressor p53 in the regulation of polarity of self-renewing divisions in mammary stem cells.

Awards and other Recognitions

- 2012** Premio Città di Firenze, Firenze, Italy
2012 Premio Cartagine, Roma, Italy
2010 Premio Casentino, Arezzo, Italy.
2009 Premio Stella di Tabor, Amalfi (SA), Italy.
2009 Premio San Valentino d'Oro, Terni, Italy.
2008 Premio Bontà, Gubbio (PG), Italy.
2007 Swiss Bridge Award, Zurich, Switzerland.
2007 Premio Bandiera, Gubbio (PG), Italy.
2006 Premio Angelo dell'Anno by SolidArte ONLUS, Milan, Italy.
2001 Premio Ospedale San Raffaele, Milan, Italy.
2000 Associazione Nuova Spoleto Award for Medical Research, Spoleto (PG), Italy.
2000 Ercole Pisello Award for Excellence in Medicine, Deruta (PG), Italy.
1998 American-Italian Foundation for Cancer Research Award for Excellence in Medicine, New York, USA.
1998 Premio Guido Venosta (Italian Cancer Research Foundation - FIRC), Milan, Italy.
1996 Premio Cassa di Risparmio di Asti Foundation, Asti, Italy.
1996 Premio Chiara d'Onofrio Foundation, Pomezia (RM), Italy.
1992 Cecilia Cioffrese Award for Cancer Research (Carlo Erba Foundation), Milan, Italy.
1989 Fellowship from the Anna Villa Rusconi Foundation, Varese, Italy.
1988 Favretto Foundation Award for oncologists, Turin, Italy.
1987 Fellowship from the Associazione Umbra Lotta Leucemie e Linfomi, Perugia, Italy.
1986 Senior Fellowship for AIDS research from the Kaplan Cancer Center, New York University, New York, USA.
1985 Fellowship from the American-Italian Foundation for Cancer Research, New York, USA.

- 1984** Fellowship from the "Ministero Italiano della Pubblica Istruzione per il perfezionamento presso istituzioni estere di livello universitario", Rome, Italy.
- 1983** Fellowship from Fidia spa, Abano Terme (PD), Italy.
- 1982** Gatti Foundation Award for young haematologists, Bologna, Italy.
- 1981** International Award for medical students, Ascona, Switzerland.

Publications and patents

Author of 431 peer-reviewed manuscripts, including 367 original research papers, 64 invited reviews and 29 book chapters, and holder of 10 granted patents.

Selected Publications

- Dellino GI, Cittaro D, Piccioni R, Luzi L, Banfi S, Segalla S, Cesaroni M, Mendoza-Maldonado R, Giacca M, **Pelicci PG**. Genome-wide mapping of human DNA-replication origins: Levels of transcription at ORC1 sites regulate origin selection and replication timing. *Genome Res* 23(1):1-11, 2013.
- Insinga A, Cicalese A, Faretta M, Gallo B, Albano L, Ronzoni S, Furia L, Viale A, **Pelicci PG**. DNA damage in stem cells activates p21, inhibits p53, and induces symmetric self-renewing divisions. *Proc Natl Acad Sci U S A* 110(10):3931-6, 2013.
- Cicalese A, Bonizzi G, Pasi CE, Faretta M, Ronzoni S, Giulini B, Briskin C, Minucci S, Di Fiore PP, **Pelicci PG**. The tumor suppressor p53 regulates polarity of self-renewing divisions in mammary stem cells. *Cell* 138:1083-95, 2009.
- Viale A, De Franco F, Orleth A, Cambiaghi V, Giuliani V, Bossi D, Ronchini C, Ronzoni S, Muradore I, Monestiroli S, Gobbi A, Alcalay M, Minucci S, **Pelicci PG**. Cell-cycle restriction limits DNA damage and maintains self-renewal of leukaemia stem cells. *Nature* 457(7225):51-6, 2009.
- Insinga A, Monestiroli S, Ronzoni S, Gelmetti V, Marchesi F, Viale A, Altucci L, Nervi C, Minucci S, **Pelicci PG**. Inhibitors of histone deacetylases induce tumor-selective apoptosis through activation of the death receptor pathway. *Nat Med* 11(1):71-6, 2005.
- Giorgio M, Migliaccio E, Orsini F, Paolucci D, Moroni M, Contursi C, Pelliccia P, Luzi L, Minucci S, Marcaccio M, Pinton P, Rizzuto R, Bernardi P, Paolucci F, **Pelicci PG**. Electron Transfer between Cytochrome c and p66Shc Generates Reactive Oxygen Species that Trigger Mitochondrial Apoptosis. *Cell* 122:1-13, 2005.
- Colombo E, Marine JC, Danovi D, Falini B, **Pelicci PG**. Nucleophosmin (NPM regulates stability and transcriptional activity of p53. *Nat Cell Biol* 4:529-533, 2002.
- Di Croce L, Raker V, Corsaro M, Fazi F, Fanelli M, Faretta M, Fuks F, Lo Coco F, Kouzarides T, Nervi C, Minucci S, **Pelicci PG**. Methyltransferase Recruitment and DNA Hypermethylation of Target promoters By an oncogenic Transcription Factor. *Science* 295(5557):1079-82, 2002.
- Pearson M, Carbone R, Sebastiani C, Ciocce M, Fagioli M, Saito S, Higashimoto Y, Appella E, Minucci S, Pandolfi PP, **Pelicci PG**. PML regulates p53 acetylation and premature senescence induced by oncogenic Ras. *Nature* 406:207-10, 2000.
- Migliaccio E, Giorgio M, Mele S, Pelicci G, Pandolfi PP, Lanfrancone L, **Pelicci PG**. The p66shc adaptor protein controls oxidative stress response and lifespan in mammals. *Nature* 402(6759):309-13, 1999.
- Grignani F, De Matteis S, Nervi C, Tomassoni L, Gelmetti V, Ciocce M, Fanelli M, Ruthardt M, Ferrara F, Zamir I, Seiser C, Grignani F, Lazar MA, Minucci S, **Pelicci PG**. Fusion proteins of the retinoic acid receptor- α recruit histone deacetylase in Promyelocytic Leukaemia. *Nature* 391:815-8, 1998.
- Grignani F, Ferrucci PF, Testa U, Talamo G, Fagioli M, Alcalay M, Mencarelli A, Grignani F, Peschle C, Nicoletti I, **Pelicci PG**. The acute promyelocytic leukaemia specific PML/RAR α fusion protein inhibits differentiation and promotes survival of myeloid precursor cells. *Cell* 74:423-31, 1993.
- Pelicci G, Lanfrancone L, Grignani F, McGlade J, Cavallo F, Forni G, Nicoletti I, Grignani F, Pawson T, **Pelicci PG**. A Novel Transforming Protein (SHC) with a SH2 Domain Is Implicated in Mitogenic Signal Transduction. *Cell* 70:93-104, 1992.
- Pelicci PG**, Subar M, Weiss A, Dalla Favera R, Littman D. Molecular diversity of the human T-gamma gene. *Science* 237:1051-5, 1987.
- Pelicci PG**, Lanfrancone L, Brathwaite MD, Wolman SR, Dalla Favera R. Amplification of the c-myc oncogene in a case of human acute myelogenous leukemia. *Science* 224:1117-21, 1984.

Congresses

- The Future of Science - 1st-8th World Conferences. Venice (Italy), September, 2005 - 2013. (Speaker and Organizer)
- Nature Ludwig Conference "Nuclear Reprogramming and the Cancer Genome". Oxford (United Kingdom) - September 2013 (Invited Speaker)
- ESMO 2012 - Special Symposium: "The impact of the cancer genome project and high-throughput analyses on personalised oncology: Today and tomorrow", Vienna (Austria) - September-October 2012 (Chairman)
- International Society for Stem Cell Research (ISSCR) 8th Annual Meeting. San Francisco (California, USA), Jun 16-19, 2010 (Invited speaker)
- Frontiers in Cancer Stem Cell Research. Oslo (Norway), December 2-4, 2009. (Organizer)