# Giuliana Pelicci, MD, PhD

# **Curriculum Vitae**

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### **Education:**

1984 Medical Doctor, Summa cum laude, University of Perugia, Italy.1989 Internal Medicine Specialist, Summa cum laude, University of Perugia, Italy.1994 Ph.D. in Molecular and Cellular Biology, University of Perugia, Italy.

#### Awards:

1984 Italian Prize "Raffaele Silvestrini" for the degree thesis. 1993-1996 Fellowship A.I.D.S. from the "Istituto Superiore di Sanita".

# **Brief chronology of employment:**

1983-1987 Pre- and postdoctoral fellow in Clinical Endocrinology at the "Istituto di Clinica Medica I", School of Medicine, University of Perugia, Italy.
1987-1995 Post-doctoral fellow in Cellular and Molecular Biology, University of Perugia.
1996- 2002 Staff Scientist, Dpt of Experimental Oncology, IEO, Milan, Italy.
2005-2009 Scientific consultant of Congenia Srl Genextra Group

2002-2004 Senior Staff Scientist, Dpt of Experimental Oncology, IEO, Milan, Italy. 2005-2015 Group Leader, Dpt of Experimental Oncology, IEO, Milan, Italy Since 2015- Unit Director, "Biology of Glioblastomas and Brain Metastases and potential therapeutic targets" Dpt of Experimental Oncology, IEO, Milan, Italy.

# Academic Position held:

1993 – 1997 Reader in Experimental Oncology, University of Perugia, Medical School, Italy.

2002-2003 Reader in Molecular Biology, University of Perugia, Biotechnology, Italy. Since 2005 Faculty member of European School of Molecular Medicine, Molecular Medicine P.h.D. Program. Milan, Italy.

2011/2012 Professor in Molecular and Cellular Biology, University of L.U.de.S, Lugano, Switzerland.

2013 Associate Professor of Molecular Biology University of Piemonte Orientale, Novara, Italy **Scientific Achievements:** Dr. G. Pelicci worked for a long period on the role of the Shc family of adaptor proteins (Shc, Rai) in signal transduction.

She cloned the SHC gene (Pelicci G, Cell 1992) and defined the role of Shc proteins in signal transduction from activated tyrosine kinases to Ras (Rozakis-Adcock, Nature 1992). She contributed to the definition of the role of the p66shc splice variant in the control of life-span in mammals (Migliaccio E, Nature 1999).

**Current Research:** Biology of cancer stem cells focusing on basic and translational cancer research in the fields of brain tumors and brain metastases.

Using CSCs isolated from human GBM samples she studied the function of proteins (CD133, Rai, CLIC1) involved in glioblastoma generation and progression that could be used in clinical applications.

She identified a completely new role for RAI/SHC C adaptor protein as regulator of progenitor migration in normal and glioblastoma-derived stem cells, through activation of different signaling pathways (Ortensi B, Stem Cells 2012). She developed a profound expertise in cancer stem cell field and, thanks to a tight collaboration with Neurological Besta Institute, she was able to establish a large cohort of glioblastoma patient-derived cancers stem cells, fully characterized in term of stem cell related features (Richichi C. Neoplasia 2013; Richichi C Oncotarget 2016). In her recent studies she was able to identify novel molecular determinants involved in glioblastoma maintenance and progression. She demonstrated that CD133 could be used as a therapeutic target, regardless of its expression on cancer stem cell surface (Brescia P, Stem cells 2013). She identified in Chloride Intracellular Channel-1 (CLIC1) a novel regulator of GBM progression by targeting GBM CSCs properties: importantly, the CLIC1 pro-tumorigenic phenotype relied on both CLIC1 intracellular protein (Setti M, JNCI 2013) and CLIC1 circulating fraction (Setti M, Oncotarget 2015).

The other line of her research is on brain metastasis with the aim to identify specific molecular alterations and to understand the mechanisms of organ-specific metastatic program. She identified mutations targeting the coagulation pathway enriched in brain metastases (Richichi C et al. Scientific Reports 2017). She recently demonstrated that plasma-EVs concentration represents *per se* a solid biomarker of GBM presence therefore allowing to follow response to treatment and tumor progression (Osti D et al. Clin Cancer Res 2018).

Her group combines cell and molecular biology approaches together with next generation sequencing methods and xenograft models.

#### Metrics (as of April 2019)

PubMed listed papers: 64 Book Chapters: 3 Citations (source Web of Knowledge – all years): 6943. H--index (source Web of Knowledge– all years): 31.