

Marica Eoli BIOGRAPHICAL SKETCH:

Name	Position Title
Marica Eoli	Neurologist at Istituto Neurologico Carlo Besta in charge of experimental neuro.oncology Unit

EDUCATION:			
Institution and Location	Degree	Year Conferred	Field of Study
University of Milan, ITALY	Degree in Medicine and Surgery 110/110 (<i>cum laude</i>)	13/10/1987	Medicine
University of Pavia, ITALY	Diploma-Post Lauream Specialization in Neurology 50/50 (<i>cum laude</i>)	19/07/1991	Neurology
University of Milan, ITALY	Postgraduate Degree	1994	Scientific Journalism

RESEARCH AND PROFESSIONAL EXPERIENCE:

<p>AFFILIATIONS IRCCS Neurological Institute C. Besta Milan, ITALY</p> <p>EMPLOYMENT AND EXPERIENCE 1995-present - IRCCS Neurological Institute C. Besta Milan, ITALY neurologist at Neuro-oncology Dept 1992- 2016 Scientific journalist and editor in several Italian newspaper, such as "Il sole 24 ore" and "Tempo medico" 1996 - Immunogenetic laboratory Genethon Evry, France - Research fellow on molecular aspects of neurological diseases 1994 – Clinical biological and genetic laboratory University of Torino ITALY- Research fellow on immunogenetic aspects of neurological diseases 1992- Neurological Department Addenbrook Hospital, Cambridge, GB Research fellow on molecular aspects of neurological diseases</p> <p>FELLOWSHIPS 1987-1991 Fellow in Neurology IRCCS Neurological Institute C. Besta Milan, ITALY 1991–1995 Post Doctoral Fellow in Neurology IRCCS Neurological Institute C. Besta Milan, ITALY</p> <p>HONOURS I worked as a member of the Commission for Rare Diseases at Regione Lombardia, collaborating on the preparation of diagnostic and therapeutic guidelines for Neurofibromatosis 1 and Schwannomatosis NF2 related. In 2008 I was designated by AIFA to responsible for the writing of the chapter on Neurology in the book entitled "Guida all'uso dei farmaci". In 2008 I got a research project on neurofibromatosis (NF1) funded by the Italian Ministry of Health. "Imatinib for the treatment of plexiform neurofibromas in NF1 patients (RF-INN-2008-1204836). The project focused on the use of Imatinib for the treatment of plexiform neurofibromas in NF1 patients (Principal Investigator). In 2017 I got a research project as principal investigator on spinal form of neurofibromatosis 1 (RF-2016-02361293): Unsolved challenges in neurofibromatosis type 1: the search for novel clinical and molecular predictors for spinal neurofibromatosis diagnosis and management (Principal Investigator).</p>
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In 2018 I got a research projects PHRC-K 2018 Programme hospitalier de recherche clinique en Cancérologie OPTIMUM: Oxidative Phosphorylation Targeting In Malignant glioma Using Metformin plus radiotherapy–temozolomide” (Collaborator).

In 2020 I got a research project funded by the Italian Ministry of Health. “Radiomics, circulating biomarkers and transcriptomics to dissect immune responses to radiotherapy and immunotherapy of glioblastoma (RF-2019-12371008)” (Collaborator).

In 2023 I got a project Horizon Europe project GLIOMATCH “The malignant **G**lioma immuno-**o**ncology **m**atchmaker: towards data-driven precision medicine using spatially resolved radio-multiomics” HORIZON-MISS-2023-CANCER-01-01(Collaborator).

In 2023 I got a project research project “Multiomic integration to identify schwannomatosis predisposition genes and tumorigenesis” founded by Children Tumor foundation (Collaborator).

At the present am in charge of neurofibromatosis and schwannomatosis adult outpatient clinic and experimental neuro.oncology Unit at Fondazione IRCCS Neurological Institute C. Besta in Milan, Italy

I am Health Care Representative of ERN GENTURIS and of ERN EURACAN for Fondazione IRCCS Neurological Institute C. Besta

I am Member of scientific committee of ANF a neurofibromatosis patient association

EXPERTISE

I started to study genetic susceptibility to Multiple Sclerosis thank to a collaboration with Prof. Alastair Compston at Addenbrook Hospital in Cambridge. I acquired extend expertise molecular biology, in particular in the area of immune system. My major contribution in those years has been devoted to analysing the role of T cell receptor and major histocompatibility complex genes to multiple sclerosis susceptibility. Studying multiple sclerosis families I became expert in linkage analysis and I acquired extended expertise on statistical analysis of genetic traits.

From 1995 central nervous system tumours became my major scientific interest. I have set up techniques for loss of heterozygosity studies based on microsatellite analysis after PCR amplification and on methylation specific PCR. Thanks to this experience it was possible to propose a reclassification of oligoastrocytoma based on their genetic signature. I conducted studies evaluating on MGMT methylation in brain tumors, in particular in glioblastomas suggesting that methylated MGMT may be part of a genetic signature of secondary as promoter methylation coincided with losses of heterozygosity on 17p and 19q.

I devoted myself also to evaluate correlation between genetic characterization of gliomas and Magnetic resonance Imaging features.

Furthermore I have conducted studies on prognostic factors and effectiveness of chemotherapy in brain tumors. Since 1994 I have worked as scientific journalist and editor for several Italian newspaper as "Il sole 24 ore" and "Tempo medico". In collaboration with Fondazione Umberto Veronesi I wrote a book on tumor prevention.

I have joined some programs on health care education of the Italian Ministry of Health and Mario Negri Institute of Milan.

In recent years my research has expanded to include genetic tumor syndromes involving the central nervous system, I am in charge for the molecular diagnosis of neurofibromatosis 1 and Schwannomatosis at Besta and of neurofibromatosis and schwannomatosis adult outpatient clinic. I investigate specific features of cancers associated to genetic tumor syndromes and I conduct clinical trials on those tumors.

I was scientific coordinator and responsible for a research project founded by the Italian Ministry of Health on the experimental treatment with Imatinib of plexiform neurofibromas in NF1 patients (Project Code RF-INN-2008-1204836). The project involves three different Italian Centers for enrolment and treatment of patients, as well as collection of data on pathological tissues and DNAs.

I was scientific coordinator and responsible for a research project founded by the Italian Ministry of Health on the spinal form of Neurofibromatosis 1 RF-2016-02361293): Unsolved challenges in neurofibromatosis type 1: the search for novel clinical and molecular predictors for spinal neurofibromatosis diagnosis and management.

I have pioneered the use of dendritic cells for the immunotherapy of glioblastoma in Italy.

I acted as principal investigator in three clinical studies for innovative therapy in brain tumors, including Abbvie study M14). I contributed for Neurological Institute C.Besta to TCGA study on glioblastoma.

I act as principal investigator to the genetic therapy trial A phase I/IIa dose escalation study evaluating the safety and efficacy of autologous CD34+-enriched hematopoietic progenitor cells genetically modified with a lentiviral vector encoding for the human interferon- α 2 in patients with glioblastoma multiforme who have an unmethylated O-6-methylguanine-DNA methyltransferase gene promoter EudraCT n.2018-001404-11

I act as principal investigator for Neurological Institute C.Besta in the research project the Landing consortium coordinated by Prof. A. Iavarone, The goal of the project is to comprehensively identify the genomic and molecular features of glioma occurring in patients diagnosed with NF1 and compare them with those arising sporadically.

I have authored more than 130 papers in peer reviewed journals including Nature genetic, Clinical Cancer Research, Brain. See

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Source: Scopus **Scopus Author Id:** 7003718899 **ORCID ID:** 0000-0003-4744-9377 **RESEARCH ID:** K-7748-2016

Milan, 26 January 2025

Dott. Marica Eoli