

## SERGIO COMINCINI-CV

### ACADEMIC CAREER

(1991) Graduated with honors in Biology, University of Pavia, Italy.

(1998) Ph.D. in Applied Biotechnology in Animal Veterinary Sciences, University of Milan, Italy.

(1998-2001) FAIR5 EC contract CT97-3311 "Molecular analysis of factors affecting BSE and scrapie susceptibility, IDVGA-CNR, Milan, Italy. Visiting scientist at the Norwegian School of Veterinary Oslo (Norway) and at Roslin Research Centre in Edinburgh (UK)

(2001-2002) Post-Doc Research Fellowship, University of Pavia, Italy.

(2002-present) Full time Researcher, Professor of "Neurogenetics" and "Molecular Genetics Methodologies" and Head of the Laboratory of Functional Oncogenomics, Department of Biology and Biotechnology, University of Pavia, Italy. Erasmus Traineeships University Coordinator.

National Scientific Habilitation (call 2016) as Associate Professor in the SSD BIO/18 Genetics

### SCIENTIFIC BACKGROUND

(1993-1998) Identification of molecular markers for genetic characterization of parasites, microorganisms of clinical interest and eukaryotes: development of Random Amplified Polymorphic DNA Analysis.

(1996-2003) Prion molecular genetics studies: identification of molecular factors that determine the susceptibility of animals to BSE and scrapie; first complete nucleotide characterization of bovine prion gene, identification and molecular characterization of two new genes, i.e. rasfadin and doppel; description of the mechanisms regulating the expression of the doppel gene in the bovine and ovine genome.

(1998-present) Molecular biology of human astrocytic tumor: expression studies of the doppel gene; involvement of the prion gene in the regulation of autophagic cell death in vitro and in vivo; identification of microRNAs modulating autophagy and radiation responses in glioblastoma; development of autophagy modulation strategies in glioblastoma cancer stem cells.

(2011-present) Studies of the autophagy process: the effect of low magnetic fields on autophagy in an Alzheimer's disease cell model; identification of autophagy-related microRNAs in celiac disease; effect of gluten-digested peptides on the functionality of the autophagy process in celiac disease models.

### COORDINATION OF PROJECTS

(2003) Participant in the Research Program PRIN MIUR 2003 (Italian Ministry of University and Research) grant "Molecular study of doppel alterations in gliomas and search for protein partnerships".

(2005) National Coordinator in the Research Program PRIN MIUR 2005 "Molecular and Functional analysis of doppel protein in the progression of human astrocytic tumors".

(2008) National Coordinator in the Research Program PRIN MIUR 2008 "Role of Prion Protein and the BCL2 family in the induction of cancer death: development of experimental protocols, histopathological and molecular investigations in human astrocytic tumors".

(2009) Principal Investigator of a Project entitled "Identification of correlations between biological parameters involved in the process of autophagic and apoptotic cell death and radiobiological parameters of sensitivity in cell lines of high-grade gliomas" supported by Schering-Plough.

(2016) National Coordinator in the Research Program PRIN MIUR 2015 "Identification and functional characterization of autophagy regulatory sequences in celiac children: additional markers to improve diagnosis and to design novel therapeutic strategies".

(2017) Local Coordinator in the Research Project entitled "Study on the molecular players controlling glioblastoma stem cell reprogramming into differentiated non-tumorigenic cells as a novel

pharmacological therapeutic strategy” supported by Fondazione Giovanni Celegghin Contro I Tumori Cerebrali

#### AWARDS AND PATENTS

(2004) Inventor of an international patent (M12004A000991, University of Pavia, Italy).

(2008) Nomination for "Genomic Pioneer, HUGO 2008 for his outstanding contribution in the field of Genomics." HUGO HGM 2008, September 27-30 Hyderabad.

#### EDITORIAL BOARD MEMBER:

Journal of Biological Methods

Journal of Cancer Treatment & Diagnosis

#### PEER REVIEWER (last two years)

Autophagy

PLOS ONE

J Cell Physiol

Cell Death Dis

Neuroscience

#### SCIENTIFIC PUBLICATIONS

Author of 54 publications in international journals and 6 chapters for scientific books.

Production of 51 reports on national and international conferences, participating as "invited speaker".