

Curriculum vitae

Maria Teresa Valenti, BSc, PhD

Date of birth 02/02/1969, Vittoria (RG), Italy

Citizenship: Italian

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Maria Teresa Valenti graduated in Biological Science in 1993 and performed medical residency in Biochemistry and Clinical Chemistry in 1998 at the University of Padua, where she also received a financial grant (for a project related to molecular biology in muscle diseases) from the National Research Council (CNR) under the supervision of the Prof. Stefano Schiaffino. She earned her Ph.D. in "chronic and degenerative diseases" in 2006 at the University of Verona by studying the telomerase gene expression in degenerative diseases. From 1996 to 2006, the scientific activity was carried out at the Department of Oncology of Noale (VE) where she performed studies related to stem cells and stromal environment during cellular transformation. She performed her studies in molecular sciences in the Oncology Faculty of Bergen University directed by Prof. Dagfin Ogreid (Norway 1997- 1998) and attended a Postgraduate course in Cancer Gene Therapy at the Imperial College School of Medicine in London (1999).

Since 2006, the scientific activity was carried out at the Department of Medicine and she is leader of the research group for the gene expression studies on chronic and degenerative diseases.

National Academic Qualification (ASN)

24/11/2014: as Associate Professor in Applied Biology (05/F1; BIO 13)

24/03/2015: as Associate Professor in Molecular biology (05/E2; BIO 11)

10/04/2015: as Associate Professor in General Biochemistry and Clinical Biochemistry (05/E1; BIO 10, BIO12)

28/03/2017: as Associate Professor in General and Clinical Pathology" (06/A2; MED 04)

Education

2006 PhD in "Chronic and degenerative diseases" (University of Verona).

1998: Specialist in "Biochemistry and Clinic Chemistry" (University of Padova)

1995: Qualified to practice (University of Padova)

1993: Degree in Biologic Sciences (University of Padova).

1988: Classic Liceum Diploma at R. Cancellieri school in Vittoria (RG).

Research experience

1992-1993. Internship, Department of Biology, University of Padova , laboratory of Prof. Giovanna Zaniolo. Experience in Ultra-structural studies by electronic microscope.

1993-1994. Internship, Department of Clinical Medicine, University of Padova , laboratory of Prof. Umberto Fagiolo. Experience in cellular biology: primary cell cultures

1994-1995 Internship, Genetic Institute, University of Padova, laboratory, Prof. Elena Ossi . Experience in immunological studies by immunohistochemistry and immunocytochemistry, immunofluorescence

1995-1996 CNR Fellowship, Department of Biomedical Sciences, Institute of General Pathology, University of Padova, laboratory of Prof. Stefano Schiaffino. Experience in Molecular biology: gene delivery on skeletal muscles of rat and mouse; nucleic acids analysis (DNA e RNA), PCR (single and multiple), and RT-PCR qualitative and semiquantitative; elettrophoresys; Southern blot, software for primers and molecular probes analyses

1996-1999 Fellowship, Oncology Division of Noale hospital (Venice). Laboratory of Prof. Orazio Vinante. Experience in stem cells studies (hematopoietic and mesenchymal stem cells) and in cancer cells.

2000-2006 Group leader for the project “Standardization of the tumour markers through molecular biology in solid and hematologic neoplasms, in solid bioptic samples, medullar and peripheral blood” at the Department of Oncology Mirano (VE).

2006-at present –Technician and group leader at Verona University for the study of the gene expressions in degenerative diseases (2006-present).

Awards and fellowships

- 1995-1996 CNR (National Research Council) Fellowship
- 1997 ROCHE fellowship
- 1997 Erasmus/Socrates fellowship
- 1998-1999 Procter and Gamble fellowhship
- 2004 Prize for young researcher for the best oral communication during the “6° National Congress of Italian Society of Osteoporosis, of Mineral Metabolism and Bone Diseases”

- 2009 Prizes for 2 of the best abstracts presented at the “9° National Congress of Italian Society of Osteoporosis, of Mineral Metabolism and Bone Diseases”

World Experience

- Socrates Project, Oncology Faculty of Bergen University, supervisor Prof. Dagfin Ogreid, (Norway 1997- 1998)
- Postgraduate course in Cancer Gene Therapy at the Imperial College School of Medicine , London (July 1999)
- Winter Symposium, University of Biochemistry and Molecular Biology, Miami (FL) (February 2003)

Technical skill

1 Molecular biology: gene transfections in vitro and in vivo (rat muscles); nucleic acids analysis (DNA e RNA); spectrophotometric analysis, PCR endpoint reactions (singleplex and multiplex) and RT-PCR qualitative and semiquantitative; electrophoresis; Southern blot, software for primers and molecular probes; Real time PCR (singleplex e multiplex) for the gene expression analysis; molecular migration analysis; study of polymorphisms (SNP):

2 cellular mechanism analysis: (hematopoietic and mesenchimal stem cells, lymphocyte, fibroblast, epithelial cells) and tumor lines; clonogenicity tests; chemosensitivity and cytotoxic tests; animal experiments and manipulations (rats and rabbits); microscopy analysis.

3 biochemical analyses: immunohistochemistry and immunocytochemistry, immunofluorescence; epifluorescence microscope; protein extraction technique; protein separations by elettrophoresis (SDS-PAGE); western blot and densitometric analysis; immunoabsorption surveying by ELISA.

Research Projects

- Member of the “Ricerca Finalizzata della Regione Veneto” entitled: “Espansione ex-vivo di progenitori ematopoietici. Analisi delle proprietà proliferative, differenziative e loro impiego nel trapianto autologo dopo chemioterapia ad alte dosi” (1998)
- Member of the “non-Hodgkin Lymphoma Co-operative Study Group (NHLCSG) (2001-2002): Perspective, randomized study in the lymphoma non-Hodgkin (LNH).
- Member of the research project AIRC (2002) entitled: “Aggiunta del Rofecoxib alla polichemioterapia nel trattamento del carcinoma polmonare non nel trattamento del

carcinoma polmonare non a piccole cellule in fase avanzata. Studio multicentrico di valutazione della tollerabilità e dell'efficacia.

- Member of the “Ricerca Finalizzata della Regione Veneto” (2002) entitled: “Significato della telomerasi quale marcatore biomolecolare in funzione della diagnosi e della prognosi nel carcinoma mammario e polmonare”.
- Member of the research project (Dipartimento di cardiologia di Mirano (VE) and Centro Cuore Columbus - Ospedale S. Raffaele di Milano) on the characterization in vivo ed in vitro of mesenchymal stem cells and on their graft in ischemic heart (2003).
- Member of the research project entitled "Neoangiogenesi e ripopolamento cellulare del miocardio ischemico: allestimento di modelli sperimentali e protocolli terapeutici" supported by Ministero dell'Istruzione, dell'Università e della Ricerca –FIRB
- Principal Investigator in the study entitled “ gene expression analyses of telomerase in prostatic and breast cancer cell lines” Dep of Oncology, Mirano, 2004-2006
- Member of the research program of Research of National Relevance (PRIN) 2004-2006 entitled: “Utilization and validation of TOM (Transcriptome of MIM) for the identification of gene-disease of bone mass”.
- Member of the Research Unit of Verona in the study entitled: “Studio delle cellule staminali mesenchimali in pazienti osteoporotici mediante espressione genica durante il differenziamento osteoblastico” (2006-2008).
- Member of the research “studio delle cellule staminali mesenchimali in pazienti osteoporotici mediante espressione genica durante il differenziamento osteoblastico”. Dep of Biomedical Sciences University of Verona. Supported by Stroder 2006
- Principal Investigator in the study entitled “circulating mRNA in cancer patients” 2008-2010 . Dep of Biomedical Sciences University of Verona.
- Principal Investigator in the study entitled “gene expression study in Alzheimer disease” 2010 2012 . Dep of Biomedical Sciences University of Verona.
- Principal Investigator in the study entitled “Runx2 mRNA expression in the tissue, serum, and circulating non-hematopoietic cells of patients with thyroid cancer.” 2010 2012 . Dep of Medicine University of Verona.

- Member of the research “a new strategy for management of bone impairment in sickle cell diseases – goal: the histomorphometric analysis of a humanized mouse model with sickle cell disease” Dep of Medicine finanziato prin 2012
- Member of the research: “an ex vivo therapeutic approach for skeletal diseases. University of Verona –joint project 2015.
- Member of the research: “ α 15 in pancreatic cancer initiation and progression: exploring its potential as a marker and pharmacological target” AIRC 2015.
- Principal Investigator “validation of anti-tumor activity and mechanisms evaluation of lectins in melanoma by a multidisciplinary approach”
- Member of the research: “Multidisciplinary study on the acromegalic disease”. dipartimento di medicina - unité 1033 de l’inserm – université de lyon. 2016

Didactic activities

Tutor for students pre e post-lauream of Faculty of Biological Sciences and Medicine (in the Department of Oncology (Noale, VE) as a collaboration with University of Padova (1998-2003).

Tutor for PhD students in the laboratori of “Malattie Fragilizzanti dello Scheletro ed Istomorfometria” of the Clinic of Internal Medicine, University of Verona (from 2004).

Seminars on genetic expression evaluating in vivo and in vitro studies, University of Verona (from 2006)

Teacher in scientific disciplines for the Didactic Center “Cortivo” of Verona (from 2009 to 2011).

Professor for advanced formation at course of “Genetic, biomolecular and histomorphometric diagnosis of skeletal and degenerative diseases” School of Medicine, University of Verona (From AA 2011-2012 to AA 2015-2016)

Temporary Professor in Medical Laboratory Science University of Verona (AA 2013-2014).

Professor in Biology, Corso di Perfezionamento e di Aggiornamento professionale in Tecnico ortopedico – University of Verona (AA 2016-2017)

Professor in Biochemistry and Genetics, Corso di Perfezionamento e di Aggiornamento professionale in Tecnico ortopedico – University of Verona (From 2016-)

Temporary Professor in Molecular Biology Workshop University of Verona (From AA 2016-2018 to AA 2018-2019).

Scientific Associations

- Associazione Italiana di Colture Cellulari (AICC)
- SIB

Editorial activity

- ISRN Molecular Biology
- WJSC
- SRL STEM CELL & RESEARCH
- AIMS CELL AND TISSUE ENGINEERING

Reviewer activity for Research projects

EVALUATION OF RESEARCH PROPOSALS SUBMITTED TO THE NATIONAL SCIENCE CENTRE (NARODOWE CENTRUM NAUKI - NCN) IN POLAND (DAL 2013)

Reviewer for the following journals:

- Basic and Applied Myology
- European Journal of Pharmacology
- Tumori
- Diabetes
- Cellular and Molecular Life Sciences
- Differentiation
- Journal of Translational Medicine
- BMC Molecular Biology
- International Journal of Food Sciences and Nutrition
- Molecular and Cellular Biochemistry
- Stem Cells and Development
- Plos One
- Experimental and Therapeutic Medicine
- World journal of Stem Cells
- Molecular Medicine Reports

Member of scientific committee or invited speaker at scientific congress/international schools

Invited speaker at “17° CORSO NAZIONALE TEORICO-PRATICO SULLE MALATTIE METABOLICHE DELL’OSSO” MANTOVA June 21-23/06/2007

Invited speaker at “18° CORSO NAZIONALE TEORICO-PRATICO SULLE MALATTIE METABOLICHE DELL’OSSO” TORINO June 19-21/2008

Member of scientific committee “ "IL MODELLO DI ZEBRAFISH: NUOVE PROSPETTIVE NELLA RICERCA" UNIVERSITA' DI VERONA March 22/2016

Invited speaker at AICC congress “THE FUTURE OF CANCER THERAPY: THE GENOME EDITING ERA, University of Catanzaro June 8-9/2017

Member of Scientific committee and co-Director at the International Summer School of Medicine “Bone ACROSS THE LIFE SPAN: FUNCTION, DYSFUNCTION ANF THERAPY. University of Verona 2-6 October/2017

Speaker at THE COURSES OF INTERNATIONAL SUMMER SCHOOL “BONE MOLECULAR PATHWAYS” University of Verona 2-6 October/2017

Member of Scientific committee at the International Summer School of Medicine “ THE BASICS OF BONE IN HEALTH AND DISEASE: A JOURNAY FROM LAB BENCH TO BEDSIDE.. University of Verona 17-21 September 2018

Speaker at THE COURSES OF INTERNATIONAL SUMMER SCHOOL “BONE MOLECULAR PATHWAYS” Molecular biology workshop” University of Verona 17 September 2018

Patent:

Patent n. PD2011A000324 / 12.10.2011 “Method for pancreas tumor diagnosis by Ga15 expression”

Verona,
10/10/2018

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