## Current Title and Department: MD, PhD, Associate Professor of Neurology

- DAME, University of Udine;
- job-sharing: Dept. Medical Sciences, University of Trieste -

### Address:

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## Education

- Degree in Medicine University of Trieste (Summa cum laude).
- Specialization in Neurology –University of Trieste (70/70)
- PhD: Dept. of Neurosciences University of Verona in 1995.

# Career History

- Since 2005 Associate Professor of Neurology
- Since 2013: Neurologist, Azienda Sanitaria Universitaria Giuliano Isontina (ASUGI)
- From 2002 to 2011: Neurologist, Istituto Neurologico Carlo Besta-Milan
- From 1995 to 2002: Assistant Neurology and Research fellow, Dept. of Neurology University of Udine
- From 1992 to 1995: PhD student Dept. of Neurosciences University of Verona and Carlo Besta Institute, Milan (Italy)
- From 1990 to 1992: Research student Dept. of Neurosciences University of Verona
- From 1987 to 1990: Research student Dept. of Neurology, Ospedale Civile di Udine
- From 1983 to 1987: Residency student in Neurology- Dept. of Neurology University of Trieste and Clinical Neurology (Istituto Casimiro Mondino, Pavia (PV)

# University Teaching

# Teaching experience since 1995-Teaching courses in the academic year 2022-2023

#### English language:

 Neuroanatomy (International Course of Neuroanatomy – Neuroscience, Bio/14 University of Trieste)

## Italian language:

- Neuroanatomy (Degree Course in Medicine and Surgery, University of Udine)
- Neuroanatomy, Neurology and Dementias (Degree Course in Professional Education-University of Udine)
- Neuroanatomy (Degree Course in Medicine and Surgery and Dentistry, University of -Trieste)
- Neurology and Neuropathology in Graduate Schools (Psychiatry and Pediatrics, University of Udine; and Neurology, University of Trieste)

#### Scientific interest

- A. Clinical, Biological and Neuropathological Studies on Neurodegenerative disorders associated with dementia:
  - a. Characterization of human clinical phenotypes in kindreds affected by neurodegenerative dementias associated with mutations in *PSEN2, MAPT and PRNP* genes.
  - b. Characterization of neuropathological phenotypes in subjects affected by neurodegenerative dementias associated with mutations in *PSEN2*, *MAPT and PRNP* genes.
  - c. *In vitro models* of neurodegeneration in Alzheimer's disease, using synthetic peptides homologous of beta Amyloid fragments.
- B. Brain Aging in Centenarian populations
  - a. Since 2014: P.I. of a population-based study on centenarians living in Trieste (Italy) to create a database with clinical, biological and socio-demographic data;
  - b. Characterization of clinical and neuropathological phenotypes in centenarian population-

#### **Research Experiences**

- From 1989 to 1992 Laboratory of Neuropathology, University of Verona;
- In 1992 (Jan-June): Laboratory of Molecular Neurobiology, Farmacological Mario Negri Institute of Milan;
- From 1992 to 1995: Laboratory of Neuropathology –Neurological Institute Carlo Besta, Milan;
- In 1998: collaboration with Laboratory of Diabetes Research (prof. A Clark) and Department of Human Anatomy and Genetics (Redkliff Inst.) Oxford (UK);
- From 1998 to 2005: collaboration with Centre for Research in Neurodegenerative Diseases, University of Toronto (Prof. Peter St George-Hyslop);
- In 2002: Division of Genetics and Cell Biology DIBIT University "Vita-Salute San Raffaele" Milan.

## Collaborations in 2022-23

- 1. ICC-International Centenarian Consortium (Europa-Stati Uniti-Giappone)
- 2. Istituto Neurologico "C. Besta" Milano
- 3. Istituto di Ricerche Farmacologiche "M. NEGRI" Milano
- 4. Alma Mater-Università di Bologna : prof. Claudio Franceschi
- 5. University Medical Center, AMSTERDAM

#### Memberships and Associations

- Italian Association research on Brain Aging (1993-)
- Italian Association of Neuropathology and Cellular (1993 and member of Executive Board from 2004 to 2007)
- SINDEM (Dementia section of Italian Society of Neurology from 1998-)
- FENS (Federation of European Neuroscience Societes)
- International Society of Neuropathology
- Euro-CNS (European Confederation of Neuropathology Societes)
- Italian Association of Neuropathology and Cellular (active member of the Board, 2023)
- Scientific Committee Membership International Consortium of Centenarian studies-Dementia (ICC-Dementia active member)
- Associated Editor: Journal of Alzheimer's Disease (JAD)
- Reviewer of International Scientific Journals (peer review)

#### Invited presentations (2017-2023)

G. Marcon "CaT Study: new protocol and data" ICC Annual Meeting, University of California- Santa Cruz (CA-USA) 2017

G. Marcon "Oral Microbiome and cognitive impairment in Centenarians from CaT study" ICC Meeting, May 2019, Lausanne (CH)

G. Marcon "CaT: Centenari a Trieste Study: protocol and first data", Healthy life and Longevity Meeting, Tel Aviv (Israel), 02.12.2019

G. Marcon "Centenarians in Trieste" Active Ageing as a tool for social innovation" International Meeting, Area Science Park , Trieste, 24th January 2020

G. Marcon "Clinical and neuropathological phenotypes in CaT Study" 7th Golden Age Expo & Summit (virtual summit) organized by Golden Age Foundation, Hong-Kong (China), August 2022.

Author of more than110 publications: peer-reviewed scientific articles, book chapters and scientific dissemination articles.

## Significant Publications (from 2008 to 2023)

- Caruso C, Marcon G et al "Role of Sex and Age in Fatal Outcomes of COVID-19: Women and Older Centenarians are More Resilient. Int J Mol Sci, 2023, Jan 30;24(3):2638-
- Marcon and ICC group "Cognition, function and prevalent dementia in Centenarians and Near-Centenarians: an individual participant data (IPD) meta-analysis of 18 studies" Alzheimer's & Dementia: The Journal of the Alzheimer's Association, 2022 in press)
- Conte M, Medici V, Malagoli D, Chiariello A, Cirrincione A, Davin A, Chikhladze M, Vasuri F, Legname G, Ferrer I, Vanni S, Marcon G, Poloni TE, Guaita A, Franceschi C, Salvioli S. "Expression pattern of perilipins in human brain during aging and in Alzheimer's disease" Journal of Neuropatology and Applied Neurobiology Neuropathol Appl Neurobiol. 2022 Feb;48(1):e12756.
- C. Nicoli, A.A. Galbussera, C. Bosettic, C. Franchi, S. Gallus, Sara Mandelli, G. Marcon, P. Quadri, P. Riso, E. Riva, U. Lucca, Mauro Tettamanti "The role of diet on the risk of dementia in the oldest old: The Monzino 80-plus population-based 3 study" *Clinical Nutrition* 2021, Jul;40(7):4783-4791.
- K. Rupel, M. Tettamanti, F. Vella, G. Fontanel, R.Di Lenarda, M.Biasotto, G.Marcon "What do we learn from the clinical and biological evaluation of the oral cavity in centenarians?" *Maturitas* 2021, 145:31–37
- G. Marcon, M. Tettamanti, G. Capacci, G. Fontanel, M. Spanò, A. Nobili, G. Forloni, C. Franceschi
  " COVID-19 mortality in Lombardy: the vulnerability of the oldest-old and the resilience of male centenarians" AGING 2020, 12: 1-10
- A. Cannatà, .. G.Marcon et al. "Epidemiology and Prevalence of cardiovascular conditions among centenarians in Trieste." *Journal of cardiovascular medicine*, 2020, 21:556–561.
- G. Marcon, P. Manganotti, M. Tettamanti. Is Parkinson's Disease a very rare pathology in centenarians? A clinical study in a cohort of subjects. *Journal of Alzheimer's disease*, 2020,73:73-76
- M. Tettamanti and G. Marcon. Cohort profile: 'Centenari a Trieste' (CaT), a study of the health status of centenarians in a small defined area of Italy. *BMJ Open. 2018 Feb 8;8(2):e019250*
- M.Vignando, M. Aiello, F. Foroni, G.Marcon, M.Tettamanti, R. I. Rumiati. How experience modulates semantic memory for food: evidence from elderly adults and centenarians. *Sci Rep.* 2018; 8: 6468.

- M.Tortarolo, D. Lo Coco, P.Veglianese, A.Vallarola, M.T. Giordana, G. Marcon, E.Beghi, M. Poloni, M.J. Strong, M. Iyer E.Aronica, C. Bendotti. Amyotrophic Lateral Sclerosis, a Multisystem Pathology: Insights into the Role of TNFa. *Mediators of Inflammation*, (2017) Article ID 2985051
- A.Cannata, G.Marcon, G.Cimmino et al. Role of circulating factors in cardiac aging. *J Thoracic Dis* (2017)9:S17-29
- Henry Brodaty, Claudia Woolf, Stacy Andersen, Nir Barzilai, Carol Brayne, Karen Siu-Lan Cheung, Maria M. Corrada10, John D. Crawford, Catriona Daly, Yasuyuki Gondo, Bo Hagberg, Nobuyoshi Hirose, Henne Holstege, Claudia Kawas, Jeffrey Kaye, Nicole A. Kochan, Bobo Hi-Po Lau, Ugo Lucca, Gabriella Marcon, Peter Martin, Leonard W. Poon, Robyn Richmond, Jean-Marie Robine, Ingmar Skoog, Melissa J. Slavin, Jan Szewiecze, Mauro Tettamanti, José Viña, Thomas Perls and Perminder S. Sachdev. ICC-dementia (International Centenarian Consortium - dementia): an international consortium to determine the prevalence and incidence of dementia in centenarians across diverse ethnoracial and sociocultural groups. BMC NEUROLOGY (2016) 16:52
- Irene Marzona, Marta Baviera, Tommaso Vannini, Mauro Tettamanti, Laura Cortesi, Emma Riva, Alessandro Nobili, Gabriella Marcon, Ida Fortino, Angela Bortolotti, Luca Merlino, Maria Carla Roncaglioni. Risk of dementia and death in patients with atrial fibrillation: A competing risk analysis of a population-based cohort. INTERNATIONAL JOURNAL OF CARDIOLOGY (2016) 220, 440–444
- Pincherle A, Tobaldini E, Mos L, Dominese A, Patruno E, Montano N, Villani F, Tagliavini F, Giaccone G and Marcon G. Brainstem Sparing in Human Prion Disesae: Sleep and Autonomic Function in a Long Survival Case Report. JOURNAL OF SLEEP DISORDERS & THERAPY, 2016
- Haïk S \* MARCON G\*, Mallet A, Tettamanti M, Welaratne A, Giaccone G, Azimi S, Pietrini V, Fabreguettes JR, Imperiale D, Cesaro P, Buffa C, Aucan C, Lucca U, Peckeu L, Suardi S, Tranchant C, Zerr I, Houillier C, Redaelli V, Vespignani H, Campanella A, Sellal F, Krasnianski A, Seilhean D, Heinemann U, Sedel F, Canovi M, Gobbi M, Di Fede G, Laplanche JL, Pocchiari M, Salmona M, Forloni G, Brandel JP, Tagliavini F. Doxycycline in Creutzfeldt-Jakob disease: a phase 2, randomised, double-blind, placebo-controlled trial. LANCET NEUROLOGY, 2014,13(2):150-8 (\* These authors contributed equally)
- MARCON G, Indaco A, Di Fede G, Suardi S, Finato N, Moretti V, Micoli S, Fociani P, Zerbi P, Pincherle A, Redaelli V, Tagliavini F, Giaccone G. Panencephalopathic Creutzfeldt-Jakob disease with distinct pattern of prion protein deposition in a patient with D178N mutation and homozygosity for valine at codon 129 of the prion protein gene. BRAIN PATHOLOGY, 2014, 24(2):148-51
- Clerici F, Vanacore N, Elia A, Spila-Alegiani S, Pomati S, Da Cas R, Raschetti R, Mariani C, MARCON G at al. Memantine effects on behaviour in moderately severe to severe Alzheimer's disease: a post-marketing surveillance study. NEUROLOGICAL SCIENCES, 2012, 33: p. 23-31
- MARCON G, Rossi G, Giaccone G, Giovagnoli AR, Piccoli E, Zanini S, Geatti O, Toso V, Grisoli M, Tagliavini F. Variability of the clinical phenotype in an Italian family with dementia associated with an intronic deletion in the GRN gene. JOURNAL OF ALZHEIMER'S DISEASE, 2011, 26: 583-590

- BUGIANI O, GIACCONE G, ROSSI G, MANGIERI M, CAPOBIANCO R, MORBIN M, MAZZOLENI G, CUPIDI C, MARCON G, GIOVAGNOLI A, BIZZI A, DI FEDE G, PUOTI G, CARELLA F, SALMAGGI A, ROMORINI A, PATRUNO GM, MAGONI M, PADOVANI A, TAGLIAVINI F. Hereditary cerebral hemorrhage with amyloidosis associated with the E693K mutation of APP. ARCHIVES OF NEUROLOGY,2010, 67: 987-995
- CUPIDI C, CAPOBIANCO R, GOFFREDO D, MARCON G, GHETTI B, BUGIANI O, TAGLIAVINI F, GIACCONE G. Neocortical Variation of Abeta Load in Fully Expressed, Pure Alzheimer's Disease. JOURNAL OF ALZHEIMER'S DISEASE, 2010, 19: 57-68
- MARCON G, G.DIFEDE, G.GIACCONE, G.ROSSI, AR.GIOVAGNOLI, E. MACCAGNANO, F TAGLIAVINI . A novel Italian PSEN2 mutation with behavioral phenotype. JOURNAL OF ALZHEIMER'S DISEASE, 2009, 16: 509-511
- MARCON G, TELL G, PERRONE L, GARBELLI R, QUADRIFOGLIO F, TAGLIAVINI F, GIACCONE G. APE1/Ref-1 in Alzheimer's disease: an immunohistochemical study. NEUROSCIENCE LETTERS, 2009, 466: 124-127
- GHIDONI R, BINETTI G, MARCON G. Late onset neurodegenerative diseasess: A theoretical point of view. *MEDICAL HYPOTHESES, 2009, 72(1): 201*
- CLERICI F, VANACORE N, ELIA A, SPILA-ALEGIANI S, POMATI S, DA CAS R, RASCHETTI R, MARIANI C, MARCON G at al Memantine in moderately-severe-to-severe Alzheimer's disease: a postmarketing surveillance study. DRUGS & AGING, 2009, 26: 321-332
- MARCON G, GIOVAGNOLI AR, MANGIAPANE P, ERBETTA A, TAGLIAVINI F, GIROTTI F. Regression of chronic posterior leukoencephalopathy after stop of methotrexate treatment. NEUROLOGICAL SCIENCES, 2009, 30:375-378
- FORLONI G, SALMONA M, MARCON G, TAGLIAVINI F. Tetracyclines and prion infectivity. INFECTIOUS DISORDERS - DRUG TARGETS, 2009, 9: 23-30
- PISCOPO P\*, MARCON G\*, PIRAS MR, CRESTINI A, CAMPEGGI LM, DEIANA E, CHERCHI R, TANDA F, DEPLANO A, VANACORE N, TAGLIAVINI F, POCCHIARI M, GIACCONE G, CONFALONI A . A novel PSEN2 mutation associated with a peculiar phenotype. *NEUROLOGY, 2008, 70 (17):1549-1554* \*These authors contributed equally
- FANTINI D, VASCOTTO C, DEGANUTO M, BIVI N, GUSTINCICH S, MARCON G, QUADRIFOGLIO F, DAMANTE G, BHAKAT KK, MITRA S, TELL G . APE1/Ref-1 regulates PTEN expression mediated bu EGR-1. FREE RADICAL RESEARCH, 2008,42: 20-29
- GIACCONE G, MARCON G, MANGIERI M, MORBIN M, ROSSI G, FETONI V, PATRIARCA C, CATANIA M, FEDE GD, TAGLIAVINI F. Atypical tauopathy with massive involvment of the white matter. NEUROPATHOLOGY AND APPLIED NEUROBIOLOGY, 2008,34(4): 468-472

 DOSSENA S, IMERI L, MANGIERI M, GAROFOLI A, FERRARI L, SENATORE A, RESTELLI E, BALDUCCI C, FIORDALISO F, SALIO M, BIANCHI S, FIORITI L, MORBIN M, PINCHERLE A, MARCON G, VILLANI F, CARLI M, TAGLIAVINI F, FORLONI. Mutant prion protein expression causes motor and memory deficits and abnormal sleep patterns in a transgenic mouse model. *Neuron. 2008 Nov 26;60(4):598-609*

GM, 2023