

Scientific curriculum

Last name and name: Calabrese Massimiliano

E.mail : massimiliano.calabrese@univr.it

Date of Birth: 1975

Citizenship: italian

Languages: Italian, English

Address: Neurologia B, Policlinico GB Rossi, Piazzale LA Scuro 10, 37134 Verona

Medical doctors license n° 8928, Ordine dei Medici di Padova

Current Position

- Professor of Neurology and Head of the International Centre for Advanced Research in MS at Dept. of Neurological and Biomedical and Movement Sciences, University Hospital Verona
- Member of the Teaching staff council for the PhD in Neuroscience, Psychological and Psychiatric Sciences, University of Verona
- Member of the Teaching staff council for the Resident school in Neurology, University of Verona
- Member of the Teaching staff council for the Resident school in Pediatrics, University of Verona

Highlights

- **170 papers on international peer reviewed journals from 2005 up to now**
- **114 as first or last author or corresponding author**
- **H Index = 51 (ISIWEB)**

Education and Professional Experience:

December 1st 2015 to present:

- Associate Professor of Neurology and head of the International Centre for Advanced Research in MS at Dept. of Neuroscience, Biomedicine and Movement, University Hospital of Verona

January 2013 to present:

- Head of the Advanced Neuroimaging Lab at the Neurology B Dept. of Neuroscience, Biomedicine and Movement, University Hospital of Verona

January 2008 to december 2012:

- Head of the Advanced Neuroimaging Lab, at the Multiple Sclerosis Center, Dept. of Neurosciences, University Hospital of Padova

January 2006 to present:

- Outpatient clinic of general neurology
- Outpatient clinic of Multiple Sclerosis and other inflammatory disease of CNS
- Consultant Neurologist at Euganea Medica

July 2004 to July 2005

- Research Fellow at the Neuroimmunology Branch of National Institute of Health in Bethesda, MD, (Chairman Henry McFarland and Roland Martin)

December 2000 to December 2005:

- Residency in Neurology with honours at Neurology Clinic, Dept. of Neurosciences, University of Padova
- Specialization thesis: "Regional cortical atrophy in Multiple Sclerosis: an MRI study"

July 2000

- Graduated in Medicine with honours at University of Padova

Clinical activity, didactic and research

Research activity:

Evaluation of Grey Matter Pathology in Multiple Sclerosis by a combination of neuropathological (post-mortem), immunological and MRI approach, with especial interest in:

1. Clinical, radiological and immunological (CSF and serum) biomarkers associated to development of GREY MATTER pathology
2. Biomarkers of DISEASE PROGRESSION
3. Predicting of efficacy of disease modifying drugs based on the clinical, immunological and MRI profile in order to develop e PERSONALIZED THERAPY
4. Study of GENES AND RNA EXPRESSION by microarrays in patients with high inflammatory cortical burden with the purpose to identify genetic markers of cortical pathology.
5. Developing of new MRI sequences to better visualize the SUBPIAL DEMYELINATION AND THE CHRONIC ACTIVE LESIONS

International Clinical Trials based on GCP:

Over the last 15 years, Prof. Calabrese conducted more than 30 international Phase 2 and Phase 3 clinical trials in 12 of which he was the Principal Investigator. There are currently 6 international trials ongoing at the MS center of Verona and Prof Calabrese is the Italian coordinator of the **COMB157G23101**

External Funding

- PRIN 2023 (Italian Minister of research and university): Euro 250.000
- Italian Health Minister, 2022, Ricerca Finalizzata, Euro 450.000.
- Third call of International Progressive MS Alliance- July 2021. Euro 75.000
- International Merck Grant for the project: *Exploring the intrathecal anti-inflammatory effect of cladribine and its relationship with clinical efficacy (2019)*. PROTOCOL CODE: CLAD19; TRIAL PHASE: IV. EudraCT: 2018-004947-21. Euro 237.000.
- Young investigator grant from Italian Minister of Health. 2017, Euro 383.000
Source and code: Italian Ministry of Health, Young Investigator Award n. GR-2013-02355322
Title of project: Longitudinal multi-parametric clinical, CSF and MRI study aimed at predicting disability progression in Multiple Sclerosis
- First call of International Progressive MS Alliance- July 2014. Euro 75.000
- Italian Health Minister, 2014. Progetto 17 – Multiple Sclerosis: Biomarkers and Diagnosis – Unità Operativa 15. Mar 2014, Euro 250.000

Prizes

- **First prize for best oral presentation at the ECTRIMS 2022 in Amsterdam**
- First prize for best 2020 Research Project at 51° congress of SIN (Neurological Italian Society), 28-30 november 2020

- First prize for best Poster Presentation at 31nd Congress of the European Committee for Treatment and Research in Multiple Sclerosis, Barcellona , 2015
- First prize for best Poster presentation at 20^o congress of SIN (Neurological Italian Society) in Padova, 16-21 november 2009.
- First prize for best Poster presentation at 18^o congress of SIN (Neurological Italian Society) in Florence, 13-17 October 2007.
- First prize for best oral communication in the young session at 22nd Congress of the European Committee for Treatment and Research in Multiple Sclerosis September 27–30, 2006.

Editorial Boards:

- Associate Editor of Diagnostics
- Associate Editor of BMC Neurology journal
- Associate Editor of Neuroimmunology and Neuroinflammation journal

List of five most important publications

1. Magliozzi R, Scalfari A, Pisani AI, Ziccardi S, Marastoni D, Pizzini FB, Bajrami A, Tamanti A, Guandalini M, Bonomi S, Rossi S, Mazziotti V, Castellaro M, Montemezzi S, Rasia S, Capra R, Pitteri M, Romualdi C, Reynolds R, **Calabrese M**. The CSF Profile Linked to Cortical Damage Predicts Multiple Sclerosis Activity. *Ann Neurol*. 2020 May 17. **IF. 9.49**
2. Magliozzi R, Howell OW, Nicholas R, Cruciani C, Castellaro M, Romualdi C, Rossi S, Pitteri M, Benedetti MD, Gajofatto A, Pizzini FB, Montemezzi S, Rasia S, Capra R, Bertoldo A, Facchiano F, Monaco S, Reynolds R, **Calabrese M**. Inflammatory intrathecal profiles and cortical damage in multiple sclerosis. *Ann Neurol*. 2018 Mar **IF. 9.89**
3. **Calabrese M**, Magliozzi R, Ciccarelli O, Geurts JJ, Reynolds R, Martin R. Exploring the origins of grey matter damage in multiple sclerosis. *Nat Rev Neurosci*. 2015 Mar;16(3):147-58. **IF. 31.427**
4. **Calabrese M**, Romualdi C, Poretto V, et al. The changing clinical course of multiple sclerosis: a matter of gray matter. *Ann Neurol*. 2013 Jul;74(1):76-83. **IF. 11.91**
5. **Calabrese M**, Poretto V, Favaretto A, et al P. Cortical lesion load associates with progression of disability in multiple sclerosis. *Brain*. 2012 Oct;135(Pt 10):2952-61. **IF 9.46**

Last Publications in International Peer-Reviewed Journals

1. Marastoni D, Foschi M, Eccher C, Crescenzo F, Mazziotti V, Tamanti A, Bajrami A, Camera V, Ziccardi S, Guandalini M, Bosello F, Anni D, Virla F, Turano E, Romoli M, Mariotti R, Pizzini FB, Bonetti B, Calabrese M. CSF levels of Chitinase3like1 correlate with early response to cladribine in multiple sclerosis. *Front Immunol*. 2024 Feb 9;15:1343892. doi: 10.3389/fimmu.2024.1343892. PMID: 38404586; PMCID: PMC10885800.
2. Bajrami A, Tamanti A, Peloso A, Ziccardi S, Guandalini M, Calderone M, Castellaro M, Pizzini FB, Montemezzi S, Marastoni D, Calabrese M. Ocrelizumab reduces cortical and deep grey matter loss compared to the SIP-receptor modulator in multiple sclerosis. *J Neurol*. 2024 Jan 30. doi: 10.1007/s00415-023-12179-y. Epub ahead of print. PMID: 38289534.
3. Cagol A, Cortese R, Barakovic M, Schaedelin S, Ruberte E, Absinta M, Barkhof F, Calabrese M, Castellaro M, Ciccarelli O, Coccozza S, De Stefano N, Enzinger C, Filippi M, Jurynczyk M, Maggi P, Mahmoudi N, Messina S, Montalban X, Palace J, Pontillo G, Pröbstel AK, Rocca MA, Ropele S, Rovira A, Schoonheim MM, Sowa P, Strijbis E, Wattjes MP, Sormani MP, Kappos L, Granziera C; MAGNIMS Study Group. Diagnostic Performance of Cortical Lesions and the Central Vein Sign in Multiple Sclerosis. *JAMA Neurol*. 2024 Feb 1;81(2):143-153. doi: 10.1001/jamaneurol.2023.4737. PMID: 38079177; PMCID: PMC10714285.

4. Ziccardi S, Fuchs T, Dwyer MG, Zivadinov R, Hulst HE, Calabrese M, Benedict RH. Cognitive phenotypes predict response to restorative cognitive rehabilitation in multiple sclerosis. *Mult Scler*. 2023 Nov 9;13524585231208331. doi: 10.1177/13524585231208331. Epub ahead of print. PMID: 37942544.
5. Di Filippo M, Ferraro D, Ragonese P, Prosperini L, Maniscalco GT, Gallo A, Cavalla P, Loreface L, Nociti V, Di Sabatino E, Clerico M, Guaschino C, Radaelli M, Fantozzi R, Buttari F, Laroni A, Gajofatto A, Calabrese M, Malucchi S, Paolicelli D, De Luca G, Tomassini V, Lanzillo R, Moccia M, Solaro C, Cocco E, Gasperini C, Tortorella C; RIREMS (Rising Researchers in MS) group. SARS-CoV-2 vaccination and multiple sclerosis: a large multicentric study on relapse risk after the third booster dose. *J Neurol*. 2024 Jan;271(1):24-31. doi: 10.1007/s00415-023-12034-0. Epub 2023 Nov 3. PMID: 37922069; PMCID: PMC10769943.
6. Chisari CG, Bianco A, Brescia Morra V, Calabrese M, Capone F, Cavalla P, Chiavazza C, Comi C, Danni M, Filippi M, Iaffaldano P, Lanzillo R, Lo Fermo S, Lucisano A, Lugaresi A, Lus G, Marfia GA, Marinelli F, Mirabella M, Moiola L, Perin C, Realmuto S, Toscano S, Trojano M, Vecchio D, Patti F; Italian MS Registry. Effectiveness of Ocrelizumab in Primary Progressive Multiple Sclerosis: a Multicenter, Retrospective, Real-world Study (OPPORTUNITY). *Neurotherapeutics*. 2023 Oct;20(6):1696-1706. doi: 10.1007/s13311-023-01415-y.
7. Noteboom S, van Nederpelt DR, Bajrami A, Moraal B, Caan MWA, Barkhof F, Calabrese M, Vrenken H, Strijbis EMM, Steenwijk MD, Schoonheim MM. Feasibility of detecting atrophy relevant for disability and cognition in multiple sclerosis using 3D-FLAIR. *J Neurol*. 2023 Nov;270(11):5201-5210. doi: 10.1007/s00415-023-11870-4. Epub 2023 Jul 19. PMID: 37466663; PMCID: PMC10576669.
8. Altieri M, Capuano R, Bisecco A, d'Ambrosio A, Risi M, Cavalla P, Vercellino M, Annovazzi P, Zaffaroni M, De Stefano N, Stromillo ML, D'Amico E, Zanghì A, Buscarinu MC, Lanzillo R, De Luca G, Calabrese M, Loreface L, Di Filippo M, Valentino P, Gajofatto A, Marfia GA, Fuiani A, Nociti V, Tedeschi G, Gallo A. Quality of care provided by Multiple Sclerosis Centers during Covid-19 pandemic: Results of an Italian multicenter patient-centered survey. *Mult Scler Relat Disord*. 2023 Sep;77:104870. doi: 10.1016/j.msard.2023.104870.
9. Magliozzi R, Howell OW, Calabrese M, Reynolds R. Meningeal inflammation as a driver of cortical grey matter pathology and clinical progression in multiple sclerosis. *Nat Rev Neurol*. 2023 Aug;19(8):461-476. doi: 10.1038/s41582-023-00838-7.
10. Aprea MG, Schiavetti I, Portaccio E, Ballerini C, Battaglia MA, Bergamaschi R, Bricchetto G, Bunul SD, Calabrese M, Capobianco M, Cavalla P, Celani MG, Clerico M, Cocco E, Comi G, Confalonieri P, Conte A, Cordioli C, De Luca G, De Rossi N, Filippi M, Gumes H, Immovilli P, Inglese M, Karabudak R, Landi D, Lanzillo R, L'Episcopo MR, Loreface L, Mantero V, Marangoni S, Marfia GA,
11. Masciulli C, Milano E, Moiola L, Orlandi R, Patti F, Perini P, Pesci I, Pucci E, Puthenparampil M, Radaelli M, Salvetti M, Sartori A, Scandellari C, Sen S, Siva A, Strumia S, Teatini F, Tedeschi G, Trojano M, Tutuncu M, Vaula G, Sormani MP, Amato MP; Musc-19 Study Group. Sars-CoV2 infection in pregnant women with multiple sclerosis. *Mult Scler*. 2023 Aug;29(9):1090-1098. doi:10.1177/13524585231176174.
12. Camera V, Mariano R, Messina S, Menke R, Griffanti L, Craner M, Leite MI, Calabrese M, Meletti S, Gheraldes R, Palace JA. Shared imaging markers of fatigue across multiple sclerosis, aquaporin-4 antibody neuromyelitis optica spectrum disorder and MOG antibody disease. *Brain Commun*. 2023 Apr 4;5(3):fcad107. doi: 10.1093/braincomms/fcad107. PMID: 37180990; PMCID: PMC10171455.
13. Gajofatto A, Cardobi N, Gobbin F, Calabrese M, Turatti M, Benedetti MD. Resting-state functional connectivity in multiple sclerosis patients receiving nabiximols for spasticity. *BMC Neurol*. 2023 Mar 29;23(1):128. doi: 10.1186/s12883-023-03171-0. PMID: 36991352; PMCID: PMC10052832.
14. Pezzini F, Pisani A, Mazziotti V, Marastoni D, Tamanti A, Borroni E, Magon S, Zinnhardt B, Magliozzi R, Calabrese M. Intrathecal versus Peripheral Inflammatory Protein Profile in MS Patients at Diagnosis: A Comprehensive Investigation on Serum and CSF. *Int J Mol Sci*. 2023 Feb 13;24(4):3768. doi:10.3390/ijms24043768. PMID: 36835179; PMCID: PMC9964553.
15. Pitteri M, Vannucci M, Dapor C, Guandalini M, Daffinì A, Marastoni D, Calabrese M. Prominent role of executive functioning on the Phonemic Fluency Test in people with multiple sclerosis. *J Int Neuropsychol Soc*. 2023 Nov;29(9):902-906. doi: 10.1017/S1355617723000139.
16. Bouman PM, Noteboom S, Nobrega Santos FA, Beck ES, Bliault G, Castellaro M, Calabrese M, Chard DT, Eichinger P, Filippi M, Inglese M, Lapucci C, Marciniak A, Moraal B, Morales Pinzon A, Muhlau M, Preziosa P, Reich DS, Rocca MA, Schoonheim MM, Twisk JWR, Wiestler B, Jonkman LE, Guttman CRG, Geurts JGG, Steenwijk MD. Multicenter Evaluation of AI-generated DIR and PSIR for Cortical and Juxtacortical Multiple Sclerosis Lesion Detection. *Radiology*. 2023 Apr;307(2):e221425. doi: 10.1148/radiol.221425.

17. Ziccardi S, Pisani AI, Schiavi GM, Guandalini M, Crescenzo F, Colombi A, Peloso A, Tamanti A, Bertolazzo M, Marastoni D, Calabrese M. Cortical lesions at diagnosis predict long-term cognitive impairment in multiple sclerosis: A 20-year study. *Eur J Neurol.* 2023 May;30(5):1378-1388. doi: 10.1111/ene.15697.
18. Ziccardi S, Pizzini FB, Guandalini M, Tamanti A, Cristofori C, Calabrese M. Making Visible the Invisible: Automatically Measured Global and Regional Brain Volume Is Associated with Cognitive Impairment and Fatigue in Multiple Sclerosis. *Bioengineering (Basel).* 2022 Dec 29;10(1):41.
19. Bosello F, Marastoni D, Pizzini FB, Zaffalon C, Zuliani A, Turri G, Mariott S, Bonacci E, Pedrotti E, Calabrese M. Atypical myelin oligodendrocyte glycoprotein antibody-associated optic neuritis and acute demyelinating polyneuropathy after SARS-CoV-2 infection: Case report and literature review. *J Neuroimmunol.* 2022 Dec 23;375:
20. Mazziotti V, Crescenzo F, Tamanti A, Dapor C, Ziccardi S, Guandalini M, Colombi A, Camera V, Peloso A, Pezzini F, Turano E, Marastoni D, Calabrese M. Immune Response after COVID-19 mRNA Vaccination in Multiple Sclerosis Patients Treated with DMTs. *Biomedicines.* 2022 Nov 24;10(12):3034.
21. Magliozzi R, Pedrinolla A, Rossi S, Stabile AM, Danese E, Lippi G, Schena F, Calabrese M, Venturelli MV. Chronic Bedridden Condition Is Reflected by Substantial Changes in Plasma Inflammatory Profile. *Biomolecules.* 2022 Dec 13;12(12):1867.
22. Ponzano M, Schiavetti I, Bergamaschi R, Pisoni E, Bellavia A, Mallucci G, Carmisciano L, Inglese M, Cordioli C, Marfia GA, Cocco E, Immovilli P, Pesci I, Scandellari C, Cavalla P, Radaelli M, Vianello M, Vitetta F, Montepietra S, Amato MP, Fioretti C, Filippi M, Sartori A, Caleri F, Clerico M, Gallo A, Conte A, Clerici R, De Luca G, Boneschi FM, Cantello R, Calabrese M, Tortorella C, Rovaris M, Verrengia EP, Patti F, Morra VB, Salvetti M, Sormani MP; MuSC-19 Study Group. The impact of PM2.5, PM10 and NO2 on Covid-19 severity in a sample of patients with multiple sclerosis: A case-control study. *Mult Scler Relat Disord.* 2022 Dec;68:104243.
23. Andretta E, Finazzi Agrò E, Calabrese M, Orecchia L, Furlan A, Zuliani C. Antimuscarinics for neurogenic overactive bladder in multiple sclerosis: real- life data. *Ther Adv Urol.* 2022 Sep 24;
24. Meaton I, Altokhis A, Allen CM, Clarke MA, Sinnecker T, Meier D, Enzinger C, Calabrese M, De Stefano N, Pitiot A, Giorgio A, Schoonheim MM, Paul F, Pawlak MA, Schmidt R, Granziera C, Kappos L, Montalban X, Rovira À, Wuerfel J, Evangelou N. Paramagnetic rims are a promising diagnostic imaging biomarker in multiple sclerosis. *Mult Scler.* 2022 Dec;28(14):2212-2220.
25. Baroncini D, Ghezzi A, Guaschino C, Moiola L, Filippi M, Ianniello A, Pozzilli C, Lanzillo R, Brescia-Morra V, Margoni M, Gallo P, Callari G, Grimaldi L, Lus G, Calabrese M, Simone M, Marfia GA, Rasia S, Cargnelutti D, Comi G, Zaffaroni M; MS Study Group of the Italian Neurological Society. Long-term follow-up (up to 11 years) of an Italian pediatric MS cohort treated with Natalizumab: a multicenter, observational study. *Neurol Sci.* 2022 Nov;43(11):6415-6423.
26. James Bates RE, Browne E, Schalks R, Jacobs H, Tan L, Parekh P, Magliozzi R, Calabrese M, Mazarakis ND, Reynolds R. Lymphotoxin-alpha expression in the meninges causes lymphoid tissue formation and neurodegeneration. *Brain.* 2022 Dec 19;145(12):4287-4307.
27. Marastoni D, Crescenzo F, Pisani AI, Zucco C, Schiavi G, Benedetti G, Ricciardi GK, Montemezzi S, Pizzini FB, Tamanti A, Calabrese M. Two years' effect of dimethyl fumarate on focal and diffuse gray matter pathology in multiple sclerosis. *Mult Scler.* 2022 Nov;28(13):2090-2098.
28. Marastoni D, Pisani AI, Schiavi G, Mazziotti V, Castellaro M, Tamanti A, Bosello F, Crescenzo F, Ricciardi GK, Montemezzi S, Pizzini FB, Calabrese M. CSF TNF and osteopontin levels correlate with the response to dimethyl fumarate in early multiple sclerosis. *Ther Adv Neurol Disord.* 2022 Jun 21;
29. Magliozzi R, Fadda G, Brown RA, Bar-Or A, Howell OW, Hametner S, Marastoni D, Poli A, Nicholas R, Calabrese M, Monaco S, Reynolds R. "Ependymal-in" Gradient of Thalamic Damage in Progressive Multiple Sclerosis. *Ann Neurol.* 2022 Oct;92(4):670-685.
30. Guerrera G, Mandelli A, Finardi A, Orrico M, D'Orso S, Picozza M, Noviello M, Beretta V, Bonetti B, Calabrese M, Marastoni D, De Rossi N, Capra R, Salvetti M, Buscarinu MC, Inglese M, Uccelli A, Moiola L, Raposo C, Muros-Le Rouzic E, Pedotti R, Filippi M, Bonini C, Battistini L, Borsellino G, Furlan R. Anti-SARS- CoV-2 T-stem cell memory persists in ocrelizumab-treated MS patients. **Mult Scler.** 2022 Oct;28(12):1937-1943.

31. Pitteri M, Dapor C, DeLuca J, Chiaravallotti ND, Marastoni D, Calabrese M. Slowing processing speed is associated with cognitive fatigue in newly diagnosed multiple sclerosis patients. **J Int Neuropsychol Soc.** 2022 Apr 25:1-7.
32. Buonomo AR, Viceconte G, Calabrese M, et al. Raising Italian Researchers in Multiple Sclerosis (RIREMS) study group. Management of hepatitis B virus prophylaxis in patients treated with disease-modifying therapies for multiple sclerosis: a multicentric Italian retrospective study. **J Neurol.** 2022 Jun;269(6):3301-3307.
33. Ziccardi S, Crescenzo F, Calabrese M. "What Is Hidden behind the Mask?" Facial Emotion Recognition at the Time of COVID-19 Pandemic in Cognitively Normal Multiple Sclerosis Patients. *Diagnostics (Basel)*. 2021 Dec 27;12(1):47.
34. Cerea S, Ghisi M, Pitteri M, Guandalini M, Strober LB, Scozzari S, Crescenzo F, Calabrese M. Coping Strategies and Their Impact on Quality of Life and Physical Disability of People with Multiple Sclerosis. *J Clin Med*. 2021 Nov 29;10(23):5607.
35. Sormani MP, Schiavetti I, Carmisciano L, Cordioli C, Filippi M, Radaelli M, Immovilli P, Capobianco M, De Rossi N, Bricchetto G, Cocco E, Scandellari C, Cavalla P, Pesci I, Zito A, Confalonieri P, Marfia GA, Perini P, Inglese M, Trojano M, Brescia Morra V, Tedeschi G, Comi G, Battaglia MA, Patti F, Salvetti M; MuSC-19 Study Group. COVID-19 Severity in Multiple Sclerosis: Putting Data Into Context. *Neurol Neuroimmunol Neuroinflamm*. 2021 Nov 9;9(1):
36. Marastoni D, Magliozzi R, Bolzan A, Pisani AI, Rossi S, Crescenzo F, Montemezzi S, Pizzini FB, Calabrese M. CSF Levels of CXCL12 and Osteopontin as Early Markers of Primary Progressive Multiple Sclerosis. *Neurol Neuroimmunol Neuroinflamm*. 2021 Sep 29;8(6):e1083.
37. Di Filippo M, Cordioli C, Malucchi S, Annovazzi P, Cavalla P, Torri Clerici V, Ragonese P, Nociti V, Radaelli M, Laroni A, Buttari F, Lorefice L, Ferraro D, Gajofatto A, Prosperini L, Fantozzi R, Boffa L, Lanzillo R, Moccia M, Clerico M, De Luca G, Tomassini V, Calabrese M, Borrelli A, Paolicelli D, Maniscalco GT, Gazzola P, Gallo A, Solaro C, Cocco E, Gasperini C, Tortorella C; RIREMS (Rising Researchers in MS) group. mRNA COVID-19 vaccines do not increase the short-term risk of clinical relapses in multiple sclerosis. *J Neurol Neurosurg Psychiatry*. 2021 Aug 18
38. Bajrami A, Magliozzi R, Pisani AI, Pizzini FB, Crescenzo F, Marastoni D, Calabrese M. Volume changes of thalamus, hippocampus and cerebellum are associated with specific CSF profile in MS. **Mult Scler.** 2021 Aug
39. Magliozzi R, Pezzini F, Pucci M, Rossi S, Facchiano F, Marastoni D, Montagnana M, Lippi G, Reynolds R, Calabrese M. Changes in Cerebrospinal Fluid Balance of TNF and TNF Receptors in Naïve Multiple Sclerosis Patients: Early Involvement in Compartmentalised Intrathecal Inflammation. **Cells.** 2021 Jul 6;10(7):1712.
40. Sormani MP, Schiavetti I, Landi D, Carmisciano L, De Rossi N, Cordioli C, Moiola L, Radaelli M, Immovilli P, Capobianco M, Brescia Morra V, Trojano M, Tedeschi G, Comi G, Battaglia MA, Patti F, Fragoso YD, Sen S, Siva A, Furlan R, Salvetti M; MuSC-19 Study Group. SARS-CoV-2 serology after COVID-19 in multiple sclerosis: An international cohort study. **Mult Scler.** 2021 Jul 30:
41. Pitteri M, Magliozzi R, Nicholas R, Ziccardi S, Pisani AI, Pezzini F, Marastoni D, Calabrese M. Cerebrospinal fluid inflammatory profile of cognitive impairment in newly diagnosed multiple sclerosis patients. **Mult Scler.** 2021 Jul 30:
42. Sormani MP, Salvetti M, Labauge P, Schiavetti I, Zephir H, Carmisciano L, Bensa C, De Rossi N, Pelletier J, Cordioli C, Vukusic S, Moiola L, Kerschen P, Radaelli M, Théaudin M, Immovilli P, Casez O, Capobianco M, Ciron J, Trojano M, Stankoff B, Créange A, Tedeschi G, Clavelou P, Comi G, Thouvenot E, Battaglia MA, Moreau T, Patti F, De Sèze J, Louapre C; Muse-19; Covisep study groups. DMTs and Covid-19 severity in MS: a pooled analysis from Italy and France. **Ann Clin Transl Neurol.** 2021 Aug;8(8):1738-1744.
43. Pitteri M, Galazzo IB, Brusini L, Cruciani F, Dapor C, Marastoni D, Menegaz G, Calabrese M. Microstructural MRI Correlates of Cognitive Impairment in Multiple Sclerosis: The Role of Deep Gray Matter. **Diagnostics (Basel).** 2021 Jun 16;11(6):1103.
44. Boscolo Galazzo I, Brusini L, Akinci M, Cruciani F, Pitteri M, Ziccardi S, Bajrami A, Castellaro M, Salih AMA, Pizzini FB, Jovicich J, Calabrese M, Menegaz G. Unraveling the MRI-Based Microstructural Signatures Behind Primary Progressive and Relapsing-Remitting Multiple Sclerosis Phenotypes. **J Magn Reson Imaging.** 2022 Jan;55(1):154-163.
45. Cruciani F, Brusini L, Zucchelli M, Retuci Pinheiro G, Setti F, Boscolo Galazzo I, Deriche R, Rittner L, Calabrese M, Menegaz G. Interpretable deep learning as a means for decrypting disease signature in multiple sclerosis. **J Neural Eng.** 2021 Jul 19;18(4).

46. Messina S, Mariano R, Roca-Fernandez A, Cavey A, Juryńczyk M, Leite MI, Calabrese M, Jenkinson M, Palace J. Contrasting the brain imaging features of MOG-antibody disease, with AQP4-antibody NMOSD and multiple sclerosis. **Mult Scler.** 2022 Feb;**28(2):217-227.**
47. Granziera C, Wuerfel J, Barkhof F, Calabrese M, De Stefano N, Enzinger C, Evangelou N, Filippi M, Geurts JGG, Reich DS, Rocca MA, Ropele S, Rovira À, Sati P, Toosy AT, Vrenken H, Gandini Wheeler-Kingshott CAM, Kappos L; MAGNIMS Study Group. Quantitative magnetic resonance imaging towards clinical application in multiple sclerosis. **Brain.** 2021 Jun 22;**144(5):1296-1311.**
48. Crescenzo F, Marastoni D, Pisani AI, Tamanti A, Dapor C, Colombi A, Brillo A, Magliozzi R, Pizzini FB, Castellaro M, Calabrese M. The Prognostic Value of White-Matter Selective Double Inversion Recovery MRI Sequence in Multiple Sclerosis: An Exploratory Study. **Diagnostics (Basel).** 2021 Apr 12;**11(4):686.**
49. Ferraro D, Annovazzi P, Lanzillo R, Calabrese M, Fantozzi R, De Luca G, Cordioli C, Paolicelli D, Ragonese P, Gajofatto A, Lo Fermo S, Cavalla P, Tortorella C, Pesci I, Gallo A, Pinardi F, Di Filippo M, Maniscalco GT, Nociti V, Radaelli M, Tomassini V, Buscarinu MC, Moccia M, Camera V, Cocco E, Gasperini C, Solaro C. A multicenter survey on access to care in Multiple Sclerosis- related trigeminal neuralgia. **J Neurol Sci.** 2021 May 15;**424:117430.**
50. Pisani AI, Scalfari A, Crescenzo F, Romualdi C, Calabrese M. A novel prognostic score to assess the risk of progression in relapsing-remitting multiple sclerosis patients. **Eur J Neurol.** 2021 Apr 9.
51. Pitteri M, Dapor C, Ziccardi S, Guandalini M, Meggiato R, Calabrese M. A Videogame-Based Approach to Measuring Information Processing Speed in Multiple Sclerosis Patients. **Games Health J.** 2021 Apr;**10(2):115-120**
52. Ziccardi S, Pitteri M, Genova HM, Calabrese M. Social Cognition in Multiple Sclerosis: A 3-Year Follow-Up MRI and Behavioral Study. **Diagnostics (Basel).** 2021 Mar 9;**11(3):484.**
53. Calabrese M, Marastoni D, Crescenzo F, Scalfari A. Early multiple sclerosis: diagnostic challenges in clinically and radiologically isolated syndrome patients. **Curr Opin Neurol.** 2021 Jun 1;**34(3):277-285**
54. Magliozzi R, Pitteri M, Ziccardi S, Pisani AI, Montibeller L, Marastoni D, Rossi S, Mazziotti V, Guandalini M, Dapor C, Schiavi G, Tamanti A, Nicholas R, Reynolds R, Calabrese M. CSF parvalbumin levels reflect interneuron loss linked with cortical pathology in multiple sclerosis. **Ann Clin Transl Neurol.** 2021 Mar;**8(3):534-547**
55. Sormani MP, De Rossi N, Schiavetti I, Carmisciano L, Cordioli C, Moiola L, Radaelli M, Immovilli P, Capobianco M, Trojano M, Zaratin P, Tedeschi G, Comi G, Battaglia MA, Patti F, Salvetti M; Musc-19 Study Group. Disease-Modifying Therapies and Coronavirus Disease 2019 Severity in Multiple Sclerosis. **Ann Neurol.** 2021 Apr;**89(4):780-789.**
56. Masuccio FG, Gamberini G, Calabrese M, Solaro C. Imaging and depression in multiple sclerosis: a historical perspective. **Neurol Sci.** 2021 Mar;**42(3):835-845.**
57. Castellaro M, Tamanti A, Pisani AI, Pizzini FB, Crescenzo F, Calabrese M. The Use of the Central Vein Sign in the Diagnosis of Multiple Sclerosis: A Systematic Review and Meta-analysis. **Diagnostics (Basel).** 2020 Nov 29;**10(12):1025.**
58. Pitteri M, Dapor C, Ziccardi S, Guandalini M, Meggiato R, Calabrese M. Visual-Attentional Load Unveils Slowed Processing Speed in Multiple Sclerosis Patients: A Pilot Study with a Tablet-Based Videogame. **Brain Sci.** 2020 Nov 18;**10(11):871.**
59. Magliozzi R, Mazziotti V, Montibeller L, Pisani AI, Marastoni D, Tamanti A, Rossi S, Crescenzo F, Calabrese M. Cerebrospinal Fluid IgM Levels in Association With Inflammatory Pathways in Multiple Sclerosis Patients. **Front Cell Neurosci.** 2020 Oct 16;**14:569827.**
60. Magliozzi R, Marastoni D, Calabrese M. The BAFF / APRIL system as therapeutic target in multiple sclerosis. **Expert Opin Ther Targets.** 2020 Sep 8.
61. Crescenzo F, Marastoni D, Bovo C, Calabrese M. Frequency and severity of COVID-19 in multiple sclerosis: A short single-site report from northern Italy. **Mult Scler Relat Disord.** 2020 Jul 4;**44:102372.**
62. Zanoni M, Orlandi E, Rossetti G, Turatti M, Calabrese M, Gomez Lira M, Gajofatto A. Upregulated serum miR-128-3p in progressive and relapse-free multiple sclerosis patients. **Acta Neurol Scand.** 2020 May 20.

63. Magliozzi R, Scalfari A, Pisani AI, Ziccardi S, Marastoni D, Pizzini FB, Bajrami A, Tamanti A, Guandalini M, Bonomi S, Rossi S, Mazziotti V, Castellaro M, Montemezzi S, Rasia S, Capra R, Pitteri M, Romualdi C, Reynolds R, Calabrese M. The CSF Profile Linked to Cortical Damage Predicts Multiple Sclerosis Activity. *Ann Neurol*. 2020 May 17.
64. Pitteri M, Vannucci M, Ziccardi S, Beccherle M, Semenza C, Calabrese M. False memories in relapsing remitting multiple sclerosis patients: A preliminary investigation with the DRM paradigm. *Mult Scler Relat Disord*. 2020 Jan;37:101418.
65. Pitteri M, Dapor C, Pisani AI, Castellaro M, DeLuca J, Chiaravalloti N, Guandalini M, Ziccardi S, Calabrese M. Executive functioning affects verbal learning process in multiple sclerosis patients: Behavioural and imaging results. *J Neuropsychol*. 2019 Nov 30.
66. Magliozzi R, Hametner S, Facchiano F, Marastoni D, Rossi S, Castellaro M, Poli A, Lattanzi F, Visconti A, Nicholas R, Reynolds R, Monaco S, Lassmann H, Calabrese M. Iron homeostasis, complement, and coagulation cascade as CSF signature of cortical lesions in early multiple sclerosis. *Ann Clin Transl Neurol*. 2019 Nov;6(11):2150-2163.
67. Magliozzi R, Marastoni D, Rossi S, Castellaro M, Mazziotti V, Pitteri M, Gajofatto A, Monaco S, Benedetti MD, Calabrese M. Increase of CSF inflammatory profile in a case of highly active multiple sclerosis. *BMC Neurol*. 2019 Sep 26;19(1):231.
68. Sinnecker T, Clarke MA, Meier D, Enzinger C, Calabrese M, De Stefano N, Pitiot A, Giorgio A, Schoonheim MM, Paul F, Pawlak MA, Schmidt R, Kappos L, Montalban X, Rovira À, Evangelou N, Wuerfel J; MAGNIMS Study Group. Evaluation of the Central Vein Sign as a Diagnostic Imaging Biomarker in Multiple Sclerosis. *JAMA Neurol*. 2019 Dec 1;76(12):1446-1456.
69. Marastoni D, Buriani A, Pisani AI, Crescenzo F, Zuco C, Fortinguerra S, Sorrenti V, Marenda B, Romualdi C, Magliozzi R, Monaco S, Calabrese M. Increased NK Cell Count in Multiple Sclerosis Patients Treated With Dimethyl Fumarate: A 2-Year Longitudinal Study. *Front Immunol*. 2019 Jul 19;10:1666.
70. Calabrese M, Gasperini C, Tortorella C, et al "Better explanations" in multiple sclerosis diagnostic workup: A 3-year longitudinal study. *Neurology*. 2019 May 28;92(22):e2527-e2537.
71. M, Ziccardi S, Dapor C, Guandalini M, Calabrese M. Lost in Classification: Lower Cognitive Functioning in Apparently Cognitive Normal Newly Diagnosed RRMS Patients. *Brain Sci*. 2019 Nov 13;9(11):321.
72. Pitteri M, Genova H, Lengenfelder J, DeLuca J, Ziccardi S, Rossi V, Calabrese M. Social cognition deficits and the role of amygdala in relapsing remitting multiple sclerosis patients without cognitive impairment. *Mult Scler Relat Disord*. 2019 Jan 23;29:118-123.
73. Magliozzi R, Reynolds R, Calabrese M. MRI of cortical lesions and its use in studying their role in MS pathogenesis and disease course. *Brain Pathol*. 2018 Sep;28(5):735-742.
74. Bajrami A, Pitteri M, Castellaro M, Pizzini F, Romualdi C, Montemezzi S, Monaco S, Calabrese M. The effect of fingolimod on focal and diffuse grey matter damage in active MS patients. *J Neurol*. 2018 Jun 25.
75. Amiri H, de Sitter A, Bendfeldt K, Battaglini M, Gandini Wheeler-Kingshott CAM, Calabrese M, Geurts JJG, Rocca MA, Sastre-Garriga J, Enzinger C, de Stefano N, Filippi M, Rovira À, Barkhof F, Vrenken H; MAGNIMS Study Group. Urgent challenges in quantification and interpretation of brain grey matter atrophy in individual MS patients using MRI. *Neuroimage Clin*. 2018 Apr 26;19:466-475.
76. Calabrese M. Multiple sclerosis and epilepsy: much more than a coincidence. *Eur J Neurol*. 2018 Sep;25(9):1103-1104.
77. Scalfari A, Romualdi C, Nicholas RS, Mattoscio M, Magliozzi R, Morra A, Monaco S, Muraro PA, Calabrese M. The cortical damage, early relapses, and onset of the progressive phase in multiple sclerosis. *Neurology*. 2018 May 16
78. Magliozzi R, Howell OW, Nicholas R, Cruciani C, Castellaro M, Romualdi C, Rossi S, Pitteri M, Benedetti MD, Gajofatto A, Pizzini FB, Montemezzi S, Rasia S, Capra R, Bertoldo A, Facchiano F, Monaco S, Reynolds R, Calabrese M. Inflammatory intrathecal profiles and cortical damage in multiple sclerosis. *Ann Neurol*. 2018 Mar
79. Calabrese M, Pitteri M, Farina G, Bajrami A, Castellaro M, Magliozzi R, Monaco S. Dimethyl fumarate: a possible exit strategy from natalizumab treatment in patients with multiple sclerosis at risk for severe adverse events. *J Neurol Neurosurg Psychiatry*. 2017 Dec;88(12):1073-1078.

Publications in Scientific Books

1. "The Gray Matter Pathology in Multiple Sclerosis". Calabrese M; Gallo P, Edizioni Publishock 2010);
2. Trattato di Neurologia : 2010 - Malattie Infiammatorie del Sistema Nervoso Centrale. In: Angelini C, Battistin L. Neurologia Clinica.

Based on Decreto Legislativo 30 giugno 2003, n. 196 "Codice in materia di protezione dei dati personali ", I authorize the use of my personal data.

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N. Calabrese