

Curriculum Vitae
Dr. Maria Eugenia Caligiuri



PERSONAL INFORMATION

- Family name: CALIGIURI, First name: Maria Eugenia
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- Researcher unique identifier: orcid.org/0000-0002-2030-5552
 - Scopus Author ID: 55944635100
 - Date of birth: 31/07/1987, Place of birth: Cosenza (Italy), Nationality: Italian
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EDUCATION

- 2012–2015, Ph.D. in Neurological and Rehabilitation Sciences, Dipartimento di Scienze Mediche e Chirurgiche (DSMC), Università Magna Graecia di Catanzaro (UNICZ), Catanzaro (Italy)
- 2009–2011, Master Degree in Biomedical Engineering, Campus BioMedico di Roma, Rome (Italy)
- 2006–2009, Bachelor Degree in Biomedical Engineering, Campus BioMedico di Roma, Rome (Italy)

CURRENT POSITION

- 2024-present, Associate Professor in Physics for Life Sciences, Environment, and Cultural Heritage (PHYS-06/A) at DSMC, UNICZ, Catanzaro (Italy)

PREVIOUS POSITIONS

- 2022–2024, Assistant Professor (Tenure Track, Italian RTD-B) in Applied Physics (FIS/07) at DSMC, UNICZ, Catanzaro (Italy)
- 2018–2022, Post-Doctoral Researcher in Information Processing Systems (ING-INF/05), Centro di Ricerca “Neuroscienze”, UNICZ, Catanzaro (Italy)
- 2015–2018, Post-Doctoral Researcher at Istituto di Bioimmagini e Fisiologia Molecolare (IBFM-CNR), UOS di Germaneto, Catanzaro (Italy)

TEACHING ACTIVITIES

In the period 2016-present at UNICZ:

- “Mapping the human brain in health and disease using advanced neuroimaging techniques”, within the PhD program Artificial Intelligence, Computer Science and Bioengineering, AA.AA. 2023/2024, 2024/2025

- “Novel MRI and bioinformatics techniques in Neuroscience” for PhD course "Biomarkers for chronic and complex diseases" A.A. 2018/2029
- Physics (Mechanics and Thermodynamics) for the Bachelor Degree in Biomedical Engineering
- Physics for Master Degree in Medicine and Surgery
- Physics for Additional Training for all Degrees of Medical Area (Corsi di Recupero OFA, 70h)
- Applied Physics (Robotics and neurorehabilitation) for Bachelor Degree in Healthcare Professions – Physiotherapy and Rehabilitation
- Applied Physics (Medical Imaging) for Bachelor Degree in Healthcare Professions – Radiology Technician
- Applied Physics for Bachelor Degree in Animal Production Science and Technology
- Information Processing Systems for Bachelor Degree in Healthcare Professions – Neurophysiopathology Technician
- Industrial Bioengineering for Bachelor Degree in Healthcare Professions – Cardiovascular Perfusion

INSTITUTIONAL RESPONSIBILITIES

- 2023-present, Academic Board Member for the PhD programme Artificial Intelligence, Computer Science and Bioengineering
- 2022-present, Academic Board Member for the PhD programme Digital Health
- 2022-present, Member of the Department Board, DSMC, UNICZ, Catanzaro (Italy)

MEMBER OF SCIENTIFIC SOCIETIES

- 2016–present, International Society of Magnetic Resonance in Medicine (ISMRM), N.82323
- 2018–present, Associazione Italiana di Risonanza Magnetica in Medicina (AIRMM, Italian Chapter of ISMRM)
- 2016–present, Organization for Human Brain Mapping (OHB), N.34923
- 2016–present, IEEE Engineering in Medicine and Biology Society, N.93661989
- 2017–present, Lega Italiana Contro l’Epilessia (LICE)
- 2012–present, Ordine degli Ingegneri di Cosenza, N.5560

TITLES AND AWARDS

- 2025-present, Secretary-Elect of the PET/MRI Study Group of the ISMRM
- 2024-present, Member of the Physical Sciences Group of Evaluation Experts (GEV) for the 2020-2024 Evaluation of Research Quality (Italian Ministry of University and Research)
- 2024-present, Nominated member of the Educations committee of the ISMRM
- 2024, Chair of the Reproducible Research Study Group of the ISMRM.
- 2023, Vice-Chair of the Reproducible Research Study Group of the ISMRM.
- 2022, Elected Secretary of the Reproducible Research Study Group of the ISMRM.
- 2021, Qualified to the position of Associate Professor for the Italian national academic competition sector 02/D1- Applied Physics, Didactics and History of Physics: 06-12-2021/06-12-2030.
- 2021-present, Nominated member of the Neuroimaging Committee of the Lega Italiana Contro l’Epilessia (LICE)
- 2021-2024, Nominated member of the ISMRM Publication Committee.
- 2021-2022, Nominated member of the ISMRM Web Editorial Board.
- 2021, MR Expert at 2021 ISMRM Annual Meeting, 15 May – 20 May 2021
- 2019, Trainee Representative of the Reproducible Research Study Group of the ISMRM.

- 2015, Selected for a Special issue of the IEEE Journal on Biomedical and Health Informatics (JBHI) on EMBC 2015 (by invitation only), as oral presenter of one of the top-rated contributions – chosen by EMBS Technical Committees.
- 2014, Winner of the "Brain Imaging Genetics data proposal competition" during the Radboud Summer School 2014, Radboud University, Nijmegen, Netherlands, with the scientific proposal "Risk factors of psychiatric disorders in the healthy population"
- 2011, Premio Calabria 2011 per la migliore Tesi di laurea in ambito scientifico, 49a edizione dei Premi Internazionali Calabria di Letteratura, Giornalismo e Scienze

RESEARCH HISTORY AND ACTIVITY

Dr. Caligiuri's research is in the field of medical physics and biomedical engineering with a focus on developing advanced methods for multimodal MRI fusion and on their application towards the identification of biomarkers of physiological brain aging and neurological disorders.

Since obtaining her PhD, Dr. Caligiuri closely collaborated with experienced physicians, supervising acquisition and analysis of multimodal MRI data from patients with movement disorders and epileptic syndromes, as well as the enrollment of healthy subjects for physiological aging studies. At UNICZ, neurological disorders are investigated on large cohorts, combining MRI with clinical data and other investigative modalities, from those more commonly used in routine clinical practice, such as DaTSCAN and EMG, to more advanced techniques such as hybrid PET/MRI and fNIRS.

Dr. Caligiuri has also developed national and international collaborations with prestigious interdisciplinary research centers. Since 2015 she is actively involved in the ENIGMA-Epilepsy working group of the Enhancing Neuro Imaging Genetics through Meta-Analysis consortium, an unprecedented effort uniting 30 centers from 14 countries worldwide, and in the Multi-centre Epilepsy Lesion Detection (MELD) project. Dr. Caligiuri played a critical role in the success of the main ENIGMA-Epilepsy studies, and she is also the Principal Investigator of two secondary projects. Other collaborations include: Swiss Innovation Hub (Siemens Healthineers) of Lausanne, Central European Institute of Technology (Brno, Czech Republic), Università Vita-Salute San Raffaele (Milan, Italy), Meyer Children Hospital (Florence, Italy).

Dr. Caligiuri is also an active member of the International Society for Magnetic Resonance in Medicine, particularly for what concerns translation of MR research into clinical practice and dissemination of open science and reproducible research culture.

From 2024, Dr. Caligiuri is Associate Professor in Physics for Life Sciences at DSMC, University Magna Graecia in Catanzaro, Italy. Her research is and will be devoted to development, processing, and clinical translation of novel neuroimaging approaches to investigate human brain structure and function, in health and disease. Research aims include multimodal image fusion, including PET-MR hybrid imaging techniques, network-based analysis of structural, diffusion and functional MRI, and use of novel analytical methods also based on multivariate (Machine Learning) analysis, all to identify biomarkers of brain physiology and pathology.

Dr. Caligiuri's work is characterized by an intense dissemination of her research, with a total impact factor above 200. Around 50% of Dr. Caligiuri's publications show a prominent role among author's contributions (first/co-first/corresponding author) and about the same number arose from national and international collaborations.

Dr. Caligiuri was also involved in over 50 abstracts presented at national and international meetings and in 3 book chapters. Dr. Caligiuri has >10 invited talks at national and international meetings, and has been both speaker and moderator of oral sessions in international meetings such as MeMeA and ISMRM.

INVOLVEMENT IN CONGRESS ORGANIZATION

- Member of the Congress Planning Committee (CPC) for the organization of the 41st Annual Scientific Meeting of the European Society for Magnetic Resonance in Medicine and Biology (ESMRMB), 8-11 October 2025, Marseille, France <https://esmrmb2025.org/committee/>
- Organizer/Moderator of the Scientific Session: "ISMRM Reproducibility Challenge: Repeat it with Me - 2nd Edition", 2024 ISMRM Annual Meeting, 4-9 May 2024, Singapore.
- Organizer/Moderator of the Scientific Session: "ISMRM Reproducibility Challenge: Repeat it with Me", 2023 ISMRM Annual Meeting, 3-8 June 2023, Toronto, CA.
- Organizer/Speaker "1° corso pratico residenziale LICE: Imaging avanzato in Epilessia", on behalf of Commissione Neuroimmagini della Lega Italiana Contro l'Epilessia, 21-24 Ottobre 2022, Bologna, Italy.
- Moderator, "Image Processing B", MeMeA 2021 Virtual Conference, 23-25 June 2021.
- Moderator, combined educational/scientific session "Amyloid-Related Imaging Abnormalities, Alzheimer's & Dementia", ISMRM2021 Virtual Annual Meeting 10-15 May 2021.
- Moderator, combined educational/tutorial session "Software Demos for MRI", ISMRM2021 Virtual Annual Meeting 10-15 May 2021.
- Organizer/Moderator, Member-Initiated Symposium "How Open Should Our Science Be?", ISMRM2020 Virtual Annual Meeting 8-14 August 2020.
- Moderator, "Extrapyramidal Disease/Neurodegeneration 1", ISMRM2020 Virtual Annual Meeting 8-14 August 2020.
- Organizer/Moderator of the Secret Sessions "Getting involved with ISMRM" and "How to make an Impact with your Work" at the 26th ISMRM Annual Meeting, 16-21 June 2018, in Paris, France
- Organizer/Moderator of the Secret Session "Machine Learning in MRI" at the 25th ISMRM Annual Meeting, 22-27 April 2017, in Honolulu, HI, USA.

NATIONAL AND INTERNATIONAL GRANTS

- 2022-present, Title: Hybrid PET-MRI to simultaneously probe brain metabolism and cerebrovascular function in neurodegenerative diseases, Funding Agency: MUR, Role: Principal Investigator, Funding: 234.320,00€
- 2022-present, Title: Mapping Mitochondrial Function and Oxygen Metabolism in the Human Brain with Magnetic Resonance Imaging, Funding Agency: MUR, Role: Co-PI, Funding: 199.520,00€
- 2017-present, Title: Rare in rarity: advanced in vivo and in vitro technologies to study juvenile Huntington disease neuronal connectivity and its relationship with clinical and genetic factors. The RAREST-JHD project, Funding Agency: Italian Ministry of Health, Host: Neuroradiology Unit, DSMC, University Magna Graecia, Catanzaro, Funding: 336.000,00 €, Role: Collaborator
- 2015-2018, Title: PON01_01180 NEUROSTAR; Funding Agency: Italian Ministry of University and Research; Host: IBFM-CNR, UOS di Germaneto, Catanzaro, Italy, Funding: 4.369.953,91€; Role: Collaborator
- 2015-2018, Title: PON3PE_00009_1 NEUROMEASURES; Funding Agency: Italian Ministry of University and Research; Host: IBFM-CNR, UOS di Germaneto, Catanzaro, Italy, Funding: 612.000,00 €; Role: Collaborator
- 2015-present, Title: Enhancing Neuro Imaging Genetics through Meta-Analysis (ENIGMA) Consortium, Working Group: ENIGMA-Epilepsy, Funding: 2014 NIH Big Data to Knowledge Initiative and NIH R-21 (1R21NS107739- 01A1) Role: Collaborator

PARTICIPATION IN SCIENTIFIC AND JOURNAL EDITORIAL COMMITTEES

- Associate Editor/Editorial Board Member per le riviste:
 - Journal of Magnetic Resonance Imaging
(<https://onlinelibrary.wiley.com/page/journal/15222586/homepage/editorialboard.html>).

- Neuroimage: Clinical
(<https://www.sciencedirect.com/journal/neuroimage-clinical/about/editorial-board>)
- Frontiers in Psychiatry, section Aging Psychiatry
(<https://loop.frontiersin.org/people/419576/editorial>)
- Brain Sciences (https://www.mdpi.com/journal/brainsci/editors?page_no=2)
- Since 2022, Editor of MRM Highlights, a scientific outreach initiative of the journal Magnetic Resonance in Medicine.
- Reviewer for several Indexed Journals, including Journal of Magnetic Resonance Imaging, Neuroimage, Neuroimage: Clinical, Human Brain Mapping, American Journal of Neuroradiology, Frontiers In Neurology, Frontiers in Neuroscience
- Abstract reviewer: OHBM, ISMRM

LIST OF INVITED TALKS

- Invited Speaker, title “A Case-Control Study To Compare an MRI Metric Between Clinical Groups”, Educational on Trasferrable skills: “Beyond the p-value”, ISMRM & ISMRT Annual Meeting & Exhibition, 10-15 May 2025, Honolulu, HI, USA
- Invited Speaker, title “MR and MR-PET for drug discovery”, ESMRMB 40th Annual Scientific Meeting, 2-5 October 2024, Barcelona, Spain
- Invited Speaker, title “Open Science Best Practices”, ESMRMB 40th Annual Scientific Meeting, 2-5 October 2024, Barcelona, Spain
- Invited Speaker “More clinical sequences, contrast agents & hybrid PET/MRI” in the “Practical MR Physics For Clinicians, Biologists, Technicians Course” of ESMRMB, on September 24, 2024
- Invited Speaker con relazione dal titolo “The Biograph mMR system in clinical and research settings”, XV Congresso Nazionale AIRMM, 15-17 Aprile 2024, Padova.
- Invited Speaker con relazione dal titolo “Protocolli di neuroimmagini nella diagnosi differenziale dei parkinsonismi: tecniche di ML” 9° Congresso della Società Italiana Parkinson e Disordini del Movimento/LIMPE-DISMOV”, 4-6 maggio 2023, Padova.
- Invited Speaker con relazione dal titolo “Perspectives from Magnetic Resonance in Medicine Highlights”, 2023 ISMRM&ISMRT Annual Meeting, 3-8 June 2023, Toronto, ON, Canada;
- Invited Speaker con relazione dal titolo “Cenni di Elettromagnetismo, produzione delle onde elettromagnetiche ed interazione con la materia”, Corso ECM teorico-pratico “Stimolazione Magnetica Transcranica (TMS) e tecniche avanzate di neurostimolazione”, 26 maggio 2022 (online).
- Invited speaker: Caligiuri M. E., relazione dal titolo: “Emerging Imaging Techniques in Movement Disorders”, International Society for Magnetic Resonance in Medicine 2021 Virtual Annual Meeting, 15-20 Maggio 2021.
- Invited speaker: Caligiuri M. E., relazione dal titolo: “The Concept & History of Open-Source & Free Software”, International Society for Magnetic Resonance in Medicine 2021 Annual Meeting, 15-20 Maggio 2021.
- Invited speaker: Caligiuri M. E., relazione dal titolo: “Tecniche morfometriche e post-processing avanzato”, 2° Workshop WEBINAR 2021 “Applicazioni del Neuroimaging in Epilessia”, 20 Gennaio 2021
- Invited speaker: Caligiuri M. E., relazione dal titolo: “Nuove frontiere: applicazione dell’intelligenza artificiale”, 2° Workshop WEBINAR 2021 “Applicazioni del Neuroimaging in Epilessia”, 20 Gennaio 2021
- Invited speaker: Caligiuri M. E., relazione dal titolo: Biomarcatori nell’epilessia parziale con imaging negativo – Epilessia frontale sporadica: dati esistenti ed ipotesi di studio, 2° workshop EPIUMG Biomarcatori in Epilessia, 28-29 Settembre 2018, Catanzaro (CZ).

- Invited speaker: Caligiuri M. E., relazione dal titolo: Imaging avanzato ed elementi di analisi delle immagini, Corso di Risonanza Magnetica: dalla formazione dell'immagine alla refertazione - Imaging RM in Neuroradiologia, 3 Novembre 2017, Cetraro (CS).
- Invited speaker: Caligiuri M. E., relazione dal titolo: Advanced 3T MRI in Temporal Lobe Epilepsy. 4th Neuromed Workshop on Drug-Resistant Focal Epilepsies: Temporal Lobe Epilepsy in the era of the Networks – A multidisciplinary Approach. 25-26 Maggio 2017, Pozzilli (IS).

PUBLICATION METRICS (SOURCE: SCOPUS)

- Total number of Indexed, Peer-Reviewed, Publications: 67
- Total number of citations: 1613
- *h*-index: 21

LIST OF PUBLICATIONS IN PEER-REVIEWED JOURNALS

1. **Caligiuri, M. E.**, Quattrone, A., Bianco, M. G., Aquila, V. R., Bonacci, M. C., Calomino, C., ... & Quattrone, A. (2024). Corpus callosum damage in PSP and unsteady PD patients: A multimodal MRI study. *NeuroImage: Clinical*, 43, 103642.
2. **Caligiuri, M. E.**, Tinelli, E., Vizza, P., Giancaterino, G., Ciccone, F., Cascini, G. L., ... & Squitieri, F. (2024). Pediatric Huntington Disease Brains Have Distinct Morphologic and Metabolic Traits: the RAREST-JHD Study. *Movement Disorders Clinical Practice*.
3. Malik, S., Shimron, E., Schauman, S., Nayak, K., Kumar, P., **Caligiuri, M. E.**, ... & Jezzard, P. (2024). Code review facility in Magnetic Resonance in Medicine. *Magnetic resonance in medicine*.
4. Santini, F., Pansini, M., Deligianni, X., **Caligiuri, M. E.**, & Oei, E. H. (2024). ESR Essentials: advanced MR safety in vulnerable patients—practice recommendations by the European Society for Magnetic Resonance in Medicine and Biology. *European Radiology*, 1-9.
5. Bonacci, M.C., Sammarra, I., **Caligiuri, M.E.**, Sturniolo, M., Martino, I., Vizza, P., Veltri, P. and Gambardella, A., 2024. Quantitative analysis of visually normal EEG reveals spectral power abnormalities in temporal lobe epilepsy. *Neurophysiologie Clinique*, 54(3), p.102951.
6. Genovese, M., Arcasensa, A., Morbelli, S., Lenge, M., Barba, C., Mirandola, L., **Caligiuri, M.E.**, Caulo, M., Panzica, F., Cardinale, F. and Rossi-Espagnet, C., 2024. SWANe: Standardized workflow for advanced neuroimaging in epilepsy. *SoftwareX*, 26, p.101703.
7. Sammarra I, **Caligiuri ME**, Bonacci MC, Di Gennaro G, Fortunato F, Martino I, Giugno A, Labate A, Gambardella A. May anti-seizure medications alter brain structure in temporal lobe epilepsy? A prospective study. *Epilepsia Open*. 2024 Mar 12. doi: 10.1002/epi4.12912. Epub ahead of print. PMID: 38475905.
8. Hájek, M., Flögel, U., S. Tavares, A. A., Nichelli, L., Kennerley, A., Kahn, T., ... & Waiczies, S. (2024). MR beyond diagnostics at the ESMRMB annual meeting: MR theranostics and intervention. *Magnetic Resonance Materials in Physics, Biology and Medicine*, 1-6.
9. Bortolotti L, Schauman S, **Caligiuri ME**. Boosting reproducible research practices with the Repeat It With Me: Reproducibility Team Challenge. *Magn Reson Med*. 2024 Mar 5. doi: 10.1002/mrm.30041. Epub ahead of print. PMID: 38441403.
10. Kerestes R, Perry A, Vivash L, O'Brien TJ, Alvim MKM, Arienzo D, Aventurato ÍK, Ballerini A, Baltazar GF, Bargalló N, Bender B, Brioschi R, Bürkle E, **Caligiuri ME**, Cendes F, de Tisi J, Duncan JS, Engel JP Jr, Foley S, Fortunato F, Gambardella A, Giacomini T, Guerrini R, Hall G, Hamandi K, Ives-Deliperi V, João RB, Keller SS, Kleiser B, Labate A, Lenge M, Marotta C, Martin P, Mascalchi M, Meletti S, Owens-Walton C, Parodi CB, Pascual-Diaz S, Powell D, Rao J, Rebsamen M, Reiter J,

- Riva A, Rüber T, Rummel C, Scheffler F, Severino M, Silva LS, Staba RJ, Stein DJ, Striano P, Taylor PN, Thomopoulos SI, Thompson PM, Tortora D, Vaudano AE, Weber B, Wiest R, Winston GP, Yasuda CL, Zheng H, McDonald CR, Sisodiya SM, Harding IH. Patterns of subregional cerebellar atrophy across epilepsy syndromes: An ENIGMA-Epilepsy study. *Epilepsia*. 2024 Feb 27. doi: 10.1111/epi.17881. Epub ahead of print. PMID: 38411286.
11. Mellor S, Timms RC, O'Neill GC, Tierney TM, Spedden ME; MELD Project Consortium; Brookes MJ, Wagstyl K, Barnes GR. Combining OPM and lesion mapping data for epilepsy surgery planning: a simulation study. *Sci Rep*. 2024 Feb 4;14(1):2882. doi: 10.1038/s41598-024-51857-3. PMID: 38311614; PMCID: PMC10838931.
 12. Quattrone, A., Calomino, C., Sarica, A., **Caligiuri, M.E.**, Bianco, M.G., Vescio, B., Arcuri, P.P., Buonocore, J., De Maria, M., Vaccaro, M.G. and Quattrone, A., 2023. Neuroimaging correlates of postural instability in Parkinson's disease. *Journal of Neurology*, pp.1-11.
 13. Bonacci MC, **Caligiuri ME**. Editorial for "MRI Assessment of Cerebral White Matter Microvascular Hemodynamics Across the Adult Lifespan". *J Magn Reson Imaging*. 2024 Jan 25. doi: 10.1002/jmri.29256. Epub ahead of print. PMID: 38270282.
 14. Lenge M, Balestrini S, Mei D, Macconi L, **Caligiuri ME**, Cuccarini V, Aquino D, Mazzi F, d'Incerti L, Darra F, Bernardino BD, Guerrini R. Morphometry and network-based atrophy patterns in SCN1A-related Dravet syndrome. *Cereb Cortex*. 2023 Aug 8;33(16):9532-9541. doi: 10.1093/cercor/bhad224.
 15. Bianco MG, Quattrone A, Sarica A, Aracri F, Calomino C, **Caligiuri ME**, Novellino F, Nisticò R, Buonocore J, Crasà M, Vaccaro MG, Quattrone A. Cortical involvement in essential tremor with and without rest tremor: a machine learning study. *J Neurol*. 2023 Aug;270(8):4004-4012. doi: 10.1007/s00415-023-11747-6. Epub 2023 May 5.
 16. **Caligiuri, M.E.**, Quattrone, A., Bianco, M.G. et al. Structural connectivity alterations in the motor network of patients with scans without evidence of dopaminergic deficit (SWEDD). *J Neurol* 269, 5926–5933 (2022). <https://doi.org/10.1007/s00415-022-11259-9>
 17. **Caligiuri, M.E.**, Quattrone, A., Mechelli, A. et al. Semi-automated assessment of the principal diffusion direction in the corpus callosum: differentiation of idiopathic normal pressure hydrocephalus from neurodegenerative diseases. *J Neurol* 269, 1978–1988 (2022). <https://doi.org/10.1007/s00415-021-10762-9>
 18. Larivière, S., Royer, J., Rodríguez-Cruces, R., **Caligiuri, M.E.**, et al. Structural network alterations in focal and generalized epilepsy assessed in a worldwide ENIGMA study follow axes of epilepsy risk gene expression. *Nat Commun* 13, 4320 (2022). <https://doi.org/10.1038/s41467-022-31730-5>
 19. Cohen, N.T., You, X., Krishnamurthy, M., et al. Networks Underlie Temporal Onset of Dysplasia-Related Epilepsy: A MELD Study. *Ann Neurol*, 92: 503-511 (2022). <https://doi.org/10.1002/ana.26442>
 20. Lopez, SM, Aksman, LM, Oxtoby, NP, et al., for the ENIGMA-Epilepsy Working Group. Event-based modeling in temporal lobe epilepsy demonstrates progressive atrophy from cross-sectional data. *Epilepsia*, 63: 2081– 2095 (2022). <https://doi.org/10.1111/epi.17316>
 21. Quattrone A, Morelli M, Bianco MG, et al. Magnetic Resonance Planimetry in the Differential Diagnosis between Parkinson's Disease and Progressive Supranuclear Palsy. *Brain Sciences*, 12(7):949 (2022). <https://doi.org/10.3390/brainsci12070949>
 22. Park B, Larivière S, Rodríguez-Cruces R, Royer J, Tavakol S, Wang Y, Caciagli L, Caligiuri ME, Gambardella A, et al. Topographic divergence of atypical cortical asymmetry and atrophy patterns in temporal lobe epilepsy. *Brain*, 145(4):1285–1298 (2022) <https://doi.org/10.1093/brain/awab417>
 23. Sammarra I, Martino I, **Caligiuri ME**, et al. The impact of one-year COVID-19 containment measures in patients with mesial temporal lobe epilepsy: A longitudinal survey-based study. *Epilepsy & behavior*, 128, 108600, (2022) <https://doi.org/10.1016/j.yebeh.2022.108600>
 24. Altmann, A, Ryten, M, Di Nunzio, M, et al. A systems-level analysis highlights microglial activation as a modifying factor in common epilepsies. *Neuropathol Appl Neurobiol*. 48(1):e12758 (2022) doi:10.1111/nan.12758

25. Spitzer H, Ripart M, Whitaker K, et al. Interpretable surface-based detection of focal cortical dysplasias: a Multi-centre Epilepsy Lesion Detection study. *Brain*, 145(11):3859–3871, <https://doi.org/10.1093/brain/awac224>
26. Wagstyl, K, Whitaker, K, Raznahan, A, et al. Atlas of lesion locations and postsurgical seizure freedom in focal cortical dysplasia: A MELD study. *Epilepsia* 63: 61– 74, (2022). <https://doi.org/10.1111/epi.17130>
27. Sisodiya, SM, Whelan, CD, Hatton, SN, et al. The ENIGMA-Epilepsy working group: Mapping disease from large data sets. *Hum Brain Mapp* 43: 113– 128, (2022). <https://doi.org/10.1002/hbm.25037>
28. Gleichgerrcht E, Munsell BC, Alhusaini S, Alvim MKM, Bargalló N, Bender B, Bernasconi A, Bernasconi N, Bernhardt B, Blackmon K, **Caligiuri ME**, et al. (2021) Artificial intelligence for classification of temporal lobe epilepsy with ROI-level MRI data: A worldwide ENIGMA-Epilepsy study, *NeuroImage: Clinical*, 31:102765, <https://doi.org/10.1016/j.nicl.2021.102765>.
29. Salsone, M.*, **Caligiuri, M. E.***, Castronovo, V., Canessa, N., Marelli, S., Quattrone, A., Quattrone, A., & Ferini-Strambi, L. (2021). Microstructural changes in normal-appearing white matter in male sleep apnea patients are reversible after treatment: A pilot study. *Journal of Neuroscience Research*, 00, 1– 11. <https://doi.org/10.1002/jnr.24858>.
30. **Caligiuri, M.E.** (2021), Editorial for “Small-World Networks and Their Relationship With Hippocampal Glutamine/Glutamate (Glx) Concentration in Healthy Adults With Varying Genetic Risk for Alzheimer's Disease”. *J Magn Reson Imaging*. <https://doi.org/10.1002/jmri.27773>.
31. Ficiarà E, Munir Z, Boschi S, **Caligiuri ME**, Guiot C. Alteration of Iron Concentration in Alzheimer's Disease as a Possible Diagnostic Biomarker Unveiling Ferroptosis. *Int. J. Mol. Sci.* 2021; 22(9):4479. <https://doi.org/10.3390/ijms22094479>
32. Labate, A., Martino, I., **Caligiuri, M. E.**, Fortunato, F., Bruni, A., Segura-Garcia, C., ... & Gambardella, A. (2021). Orbito-frontal thinning together with a somatoform dissociation might be the fingerprint of PNES. *Epilepsy & Behavior*, 121, 108044. doi: 10.1016/j.yebeh.2021.108044.
33. De Benedittis S., Fortunato F., Cava C., Gallivanone F., Iaccino E., **Caligiuri M.E.**, Castiglioni I., Bertoli G., Manna I., Labate A., et al. Circulating microRNAs as Potential Novel Diagnostic Biomarkers to Predict Drug Resistance in Temporal Lobe Epilepsy: A Pilot Study. *Int. J. Mol. Sci.* **2021**, 22, 702. <https://doi.org/10.3390/ijms22020702>.
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