

MARIA ILENIA DE BARTOLO
Curriculum Vitae

Place: Rome
Date: 10/07/2024

Part I – General Information

Full Name	Maria Ilenia De Bartolo
Date of Birth	()
Spoken Languages	Italian/English

Part II – Education

Type	Year	Institution	Notes (Degree, Experience,...)
University graduation	2014	Sapienza University of Rome	Degree in Medicine and Surgery
Post-graduate studies			
Specialty	2019	Sapienza University of Rome	Specialist in Neurology
PhD	2023	Sapienza University of Rome	Doctor Philosophiae in Neuroscience
Post-PhD	2023-2024	Sapienza University of Rome	Postdoctoral fellow in Neuroscience

Part III – Appointments

IIIA – Academic Appointments

Start	End	Institution	Position
2015	2019	Sapienza University of Rome	Resident in Neurology
2019	2023	Sapienza University of Rome	PhD in Neuroscience
2023	2024	Sapienza University of Rome	Post-PhD in Neuroscience

IIIB – Other Appointments

Start	End	Institution	Position
2024	To date	IRCCS Neuromed	Scientific Collaborator

Part IV – Teaching experience

Year	Institution	Lecture/Course
2021	Sapienza University of Rome	Terapia occupazionale-Corso di Laurea A

Part V - Society memberships, Awards and Honors

Year	Title
2019	GRANT Youth Project for the National Congress of the Italian Society of Neurogeriatrics-SINeG
2022	GRANT Youth Project for the National Congress of the Italian Society of Parkinson and Movement Disorders – LIMPE-DISMOV

2022	GRANT Youth Project for the National Congress of the Italian Society of Neurology - SIN
2023	Best Paper of the Year for the Italian Society of Parkinson and Movement Disorders – LIMPE-DISMOV
2023	Member of the Italian Society of Parkinson and Movement Disorders – LIMPE-DISMOV
2022	Member of the Italian Society of Neurology - SIN
2024	Member of the International Society of Movement Disorders - MDS

Part VI - Funding Information [grants as PI-principal investigator or I-investigator]

Year	Title	Program	Role	Grant value (euro)
2018	<i>Salivary caffeine: a potential biomarker for early Parkinson's disease</i>	Bando Ateneo	PI	1.000
2020	<i>Pathophysiology of Parkinson's disease heterogeneity</i>	Bando Ateneo	I	37.000
2021	<i>Investigating non-invasive biomarkers of cortical network disruption underlying motor impairment in Parkinson's disease and Multiple Sclerosis</i>	Bando Ateneo	I	10.000
2021	<i>The Theta-Gamma Coupling as predictive neurophysiological marker of cognitive decline in Parkinson's disease</i>	Bando Ateneo	PI	1.250
2022	<i>BREAKing BONDS: BRoadEning our Actual Knowledge on the BOTulinum Neurotoxin DiffuSion</i>	PRIN	I	223.752
2022	<i>Identification of environmental, genetic and epigenetic contributions to neurodegenerative disease risk prediction: a composite approach integrating computational and functional models</i>	PNRR	I	1.000.000

Part VII – Research Activities

Keywords	Brief Description
neurophysiological biomarkers	The use of Trans-cranial Magnetic Stimulation (TMS), TMS combined with Electroencephalography (TMS-EEG) and Somatosensory Temporal Discrimination (STD) techniques to investigate the mechanisms underlying synaptic plasticity, cortico-cortical connectivity, and somatosensory temporal integration in patients with neurodegenerative disorders in order to find potential diagnostic and prognostic biomarkers.
molecular biomarkers	The use of competitive-ELISA and RT-QuIC assays for the assessment of salivary biomarkers in patients with movement disorders in order to find potential diagnostic and prognostic biomarkers in an easily accessible biofluid.
neuroimaging biomarkers	The use of neuroimaging techniques (DTI, rsFC) to investigate potential pathological pathways that could help in discriminating different types of focal dystonia and Parkinson's disease subtypes. The use of a combined approach - linking neurophysiological and molecular biomarkers - to target pathological involvement of different pathways and explain the clinical heterogeneity of subtypes.

Part VIII – International experiences and collaborations

Year	Experience (E) or collaboration (C)
2013	German Center for Neurodegenerative Diseases-DZNE-Magdeburg (E)
2020	Human Motor Control Section, National Institutes of Health-NIH- Bethesda (USA) (C)
2022	Department of Clinical and Movement Neurosciences, University College London-UCL-UK (C)
2023	Professor Spillantini lab- Cambridge University (UK) (C)

Part IX– Summary of Scientific Achievements

Product type	Number	Data Base	Start	End
Papers [international]	32	Scopus	2016	2024

Total Citations	285
Average Citations per Product	8.9
Hirsch (H) index	10
Field-Weighted Citation Impact	2.94

Part X - Full List of Publications

1. De Bartolo, M. I., Vivacqua, G., Belvisi, D., Mancinelli, R., Fabbrini, A., Manzo, N., Costanzo, M., Leodori, G., Conte, A., Fabbrini, G., Morini, S., & Berardelli, A. (2023). A Combined Panel of Salivary Biomarkers in de novo Parkinson's Disease. *Annals of Neurology*, 93(3), 446–459. <https://doi.org/10.1002/ana.26550>
2. De Bartolo, M. I., Manzo, N., Ferrazzano, G., Baione, V., Belvisi, D., Fabbrini, G., Berardelli, A., & Conte, A. (2020). Botulinum toxin effects on sensorimotor integration in focal dystonias. *Toxins*, 12(5). <https://doi.org/10.3390/toxins12050277>
3. De Bartolo, M. I., Belvisi, D., Mancinelli, R., Costanzo, M., Caturano, C., Leodori, G., Berardelli, A., Fabbrini, G., & Vivacqua, G. (2024). A systematic review of salivary biomarkers in Parkinson's disease. *Neural Regeneration Research*, 19(12), 2613.
4. Leodori, G., De Bartolo, M. I., Piervincenzi, C., Mancuso, M., Ojha, A., Costanzo, M., Aiello, F., Vivacqua, G., Fabbrini, G., Conte, A., Pantano, P., Berardelli, A., & Belvisi, D. (2024). Mapping Motor Cortical Network Excitability and Connectivity Changes in De Novo Parkinson's Disease. *Movement Disorders*. <https://doi.org/10.1002/mds.29901>
5. Gialluisi, A., De Bartolo, M. I., Costanzo, S., Belvisi, D., Falciglia, S., Ricci, M., Di Castelnuovo, A., Panzera, T., Donati, M. B., Fabbrini, G., de Gaetano, G., Berardelli, A., & Iacoviello, L. (2023). Risk and protective factors in Parkinson's disease: A simultaneous and prospective study with classical statistical and novel machine learning models. *Journal of Neurology*, 270(9), 4487–4497. <https://doi.org/10.1007/s00415-023-11803-1>
6. Leodori, G., De Bartolo, M. I., Belvisi, D., Ciogli, A., Fabbrini, A., Costanzo, M., Manetto, S., Conte, A., Villani, C., Fabbrini, G., & Berardelli, A. (2021). Salivary caffeine in Parkinson's disease. *Scientific Reports*, 11(1). <https://doi.org/10.1038/s41598-021-89168-6>

7. Leodori, G., De Bartolo, M. I., Fabbrini, A., Costanzo, M., Mancuso, M., Belvisi, D., Conte, A., Fabbrini, G., & Berardelli, A. (2022). The Role of the Motor Cortex in Tremor Suppression in Parkinson's Disease. *Journal of Parkinson's Disease*, 12(6), 1957–1963. <https://doi.org/10.3233/JPD-223316>
8. Leodori, G., De Bartolo, M. I., Guerra, A., Fabbrini, A., Rocchi, L., Latorre, A., Paparella, G., Belvisi, D., Conte, A., Bhatia, K. P., Rothwell, J. C., & Berardelli, A. (2022). Motor Cortical Network Excitability in Parkinson's Disease. *Movement Disorders*, 37(4), 734–744. <https://doi.org/10.1002/mds.28914>
9. D'Antonio, F., De Bartolo, M. I., Ferrazzano, G., Monti, M. S., Imbriano, L., Trebbastoni, A., Berardelli, A., & Conte, A. (2021). Blink Rate Study in Patients with Alzheimer's Disease, Mild Cognitive Impairment and Subjective Cognitive Decline. *Current Alzheimer Research*, 18(14), 1104–1110. <https://doi.org/10.2174/1567205019666211227102706>
10. D'Antonio, F., De Bartolo, M. I., Ferrazzano, G., Trebbastoni, A., Amicarelli, S., Campanelli, A., De Lena, C., Berardelli, A., & Conte, A. (2019). Somatosensory Temporal Discrimination Threshold in Patients with Cognitive Disorders. *Journal of Alzheimer's Disease*, 70(2), 423–430. <https://doi.org/10.3233/JAD-190385>
11. Costanzo, M., Galosi, E., De Bartolo, M. I., Gallo, G., Leodori, G., Belvisi, D., Conte, A., Fabbrini, G., Truini, A., Berardelli, A., & Vivacqua, G. (2024). Evaluating the Diagnostic Potential of Combined Salivary and Skin Biomarkers in Parkinson's Disease. *International Journal of Molecular Sciences*, 25(9). <https://doi.org/10.3390/ijms25094823>
12. Leodori, G., Belvisi, D., De Bartolo, M. I., Fabbrini, A., Costanzo, M., Vial, F., Conte, A., Hallett, M., & Berardelli, A. (2020). Re-emergent Tremor in Parkinson's Disease: The Role of the Motor Cortex. *Movement Disorders*, 35(6), 1002–1011. <https://doi.org/10.1002/mds.28022>
13. Vivacqua, G., Mason, M., De Bartolo, M. I., Węgrzynowicz, M., Calò, L., Belvisi, D., Suppa, A., Fabbrini, G., Berardelli, A., & Spillantini, M. (2023). Salivary α -Synuclein RT-QulC Correlates with Disease Severity in de novo Parkinson's Disease. *Movement Disorders*, 38(1), 153–155. <https://doi.org/10.1002/mds.29246>
14. Belvisi, D., Fabbrini, A., De Bartolo, M. I., Costanzo, M., Manzo, N., Fabbrini, G., Defazio, G., Conte, A., & Berardelli, A. (2021). The Pathophysiological Correlates of Parkinson's Disease Clinical Subtypes. *Movement Disorders*, 36(2), 370–379. <https://doi.org/10.1002/mds.28321>
15. Conte, A., Belvisi, D., De Bartolo, M. I., Manzo, N., Cortese, F. N., Tartaglia, M., Ferrazzano, G., Fabbrini, G., & Berardelli, A. (2018). Abnormal sensory gating in patients with different types of focal dystonias. *Movement Disorders*, 33(12), 1910–1917. <https://doi.org/10.1002/mds.27530>
16. Conte, A., Leodori, G., Ferrazzano, G., De Bartolo, M. I., Manzo, N., Fabbrini, G., & Berardelli, A. (2016). Somatosensory temporal discrimination threshold in Parkinson's disease parallels disease severity and duration. *Clinical Neurophysiology*, 127(9), 2985–2989. <https://doi.org/10.1016/j.clinph.2016.06.026>
17. Costanzo, M., Cutrona, C., Leodori, G., De Bartolo, M. I., Fabbrini, A., Vivacqua, G., Conte, A., Fabbrini, G., Berardelli, A., & Belvisi, D. (2023). Distal Upper Limb Tremor during Walking in Parkinson's Disease. *Movement Disorders Clinical Practice*, 10(8), 1198–1202. <https://doi.org/10.1002/mdc3.13814>
18. Costanzo, M., Leodori, G., Cutrona, C., Marchet, F., De Bartolo, M. I., Mancuso, M., Belvisi, D., Conte, A., Berardelli, A., & Fabbrini, G. (2023). Motor Cortical Correlates of Paired Associative Stimulation Induced Plasticity: A TMS-EEG Study. *Brain Sciences*, 13(6). <https://doi.org/10.3390/brainsci13060921>

19. Gialluisi, A., Tirozzi, A., Costanzo, S., De Bartolo, M. I., Belvisi, D., Magnacca, S., De Curtis, A., Falciglia, S., Ricci, M., Cerletti, C., Donati, M. B., Berardelli, A., de Gaetano, G., & Iacoviello, L. (2024). Blood-based biological ageing and red cell distribution width are associated with prevalent Parkinson's disease: Findings from a large Italian population cohort. *Frontiers in Endocrinology*, 15. <https://doi.org/10.3389/fendo.2024.1376545>
20. Cutrona, C., Marchet, F., Costanzo, M., De Bartolo, M. I., Leodori, G., Ferrazzano, G., Conte, A., Fabbrini, G., Berardelli, A., & Belvisi, D. (2024). Exploring the Central Mechanisms of Botulinum Toxin in Parkinson's Disease: A Systematic Review from Animal Models to Human Evidence. *Toxins*, 16(1). <https://doi.org/10.3390/toxins16010009>
21. Ferrazzano, G., Belvisi, D., De Bartolo, M. I., Baione, V., Costanzo, M., Fabbrini, G., Defazio, G., Berardelli, A., & Conte, A. (2022). Longitudinal evaluation of patients with isolated head tremor. *Parkinsonism and Related Disorders*, 94, 10–12. <https://doi.org/10.1016/j.parkreldis.2021.11.018>
22. Ferrazzano, G., Berardelli, I., Belvisi, D., De Bartolo, M. I., Di Vita, A., Conte, A., & Fabbrini, G. (2020). Awareness of Dystonic Posture in Patients With Cervical Dystonia. *Frontiers in Psychology*, 11. <https://doi.org/10.3389/fpsyg.2020.01434>
23. Ferrazzano, G., Frantellizzi, V., De Bartolo, M. I., De Feo, M. S., Conte, A., Fabbrini, G., De Vincentis, G., & Berardelli, A. (2020). Isolated head tremor: A DAT-SPECT and somatosensory temporal discrimination study. *Parkinsonism and Related Disorders*, 81, 56–59. <https://doi.org/10.1016/j.parkreldis.2020.10.015>
24. Ferrazzano, G., Frantellizzi, V., De Bartolo, M. I., De Feo, M. S., Conte, A., Fabbrini, G., De Vincentis, G., & Berardelli, A. (2021). Response to “Response to isolated head tremor: A DAT-SPECT and somatosensory temporal discrimination study”. *Parkinsonism and Related Disorders*, 87, 168–169. <https://doi.org/10.1016/j.parkreldis.2021.05.025>
25. Pietracupa, S., Ojha, A., Belvisi, D., Piervincenzi, C., Tommasin, S., Petsas, N., De Bartolo, M. I., Costanzo, M., Fabbrini, A., Conte, A., Berardelli, A., & Pantano, P. (2024). Understanding the role of cerebellum in early Parkinson's disease: A structural and functional MRI study. *Npj Parkinson's Disease*, 10(1), 1–10. <https://doi.org/10.1038/s41531-024-00727-w>
26. Gianni, C., Pasqua, G., Ferrazzano, G., Tommasin, S., De Bartolo, M. I., Petsas, N., Belvisi, D., Conte, A., Berardelli, A., & Pantano, P. (2022). Focal Dystonia: Functional Connectivity Changes in Cerebellar-Basal Ganglia-Cortical Circuit and Preserved Global Functional Architecture. *Neurology*, 98(14), E1499–E1509. <https://doi.org/10.1212/WNL.0000000000200022>
27. Gianni, C., Piervincenzi, C., Belvisi, D., Tommasin, S., De Bartolo, M. I., Ferrazzano, G., Petsas, N., Leodori, G., Fantoni, N., Conte, A., Berardelli, A., & Pantano, P. (2023). Cortico-Subcortical White Matter Bundle Changes in Cervical Dystonia and Blepharospasm. *Biomedicines*, 11(3). <https://doi.org/10.3390/biomedicines11030753>
28. Leodori, G., Fabbrini, A., De Bartolo, M. I., Costanzo, M., Asci, F., Palma, V., Belvisi, D., Conte, A., & Berardelli, A. (2021). Cortical mechanisms underlying variability in intermittent theta-burst stimulation-induced plasticity: A TMS-EEG study. *Clinical Neurophysiology*, 132(10), 2519–2531. <https://doi.org/10.1016/j.clinph.2021.06.021>
29. Leodori, G., Rocchi, L., Mancuso, M., De Bartolo, M. I., Baione, V., Costanzo, M., Belvisi, D., Conte, A., Defazio, G., & Berardelli, A. (2022). The effect of stimulation frequency on transcranial evoked potentials. *Translational Neuroscience*, 13(1), 211–217. <https://doi.org/10.1515/tnsci-2022-0235>

30. Leodori, G., Santilli, M., Modugno, N., D'Avino, M., De Bartolo, M. I., Fabbrini, A., Rocchi, L., Conte, A., Fabbrini, G., & Belvisi, D. (2023). Postural Instability and Risk of Falls in Patients with Parkinson's Disease Treated with Deep Brain Stimulation: A Stabilometric Platform Study. *Brain Sciences*, 13(9). <https://doi.org/10.3390/brainsci13091243>
31. Pietracupa, S., Belvisi, D., Piervincenzi, C., Tommasin, S., Pasqua, G., Petsas, N., De Bartolo, M. I., Fabbrini, A., Costanzo, M., Manzo, N., Berardelli, A., & Pantano, P. (2023). White and gray matter alterations in de novo PD patients: Which matter most? *Journal of Neurology*, 270(5), 2734–2742. <https://doi.org/10.1007/s00415-023-11607-3>
32. Tofani, M., Massai, P., Fabbrini, G., Berardi, A., Pelosin, E., Conte, A., De Bartolo, I., Valente, D., & Galeoto, G. (2019). Psychometric properties of the italian version of the barthel index in patients with parkinson's disease: A reliability and validity study. *Functional Neurology*, 34(3), 145–150.

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