Gaia Bonassi

Date of birth: 21/10/1989 | **Nationality:** Italian | **Gender:** Female | **Email address:** gaia.bonassi@unige.it

WORK EXPERIENCE

UNIVERSITÀ DEGLI STUDI DI GENOVA – GENOVA, ITALY

RESEARCH FELLOW – 01/02/2023 – CURRENT

AZIENDA SANITARIA LOCALE 4 – GENOVA, ITALY

RESEARCH SCHOLARSHIP – 01/01/2020 – 31/01/2023

Principal Investigator of the funded study I was in charge of the development and implementation of a three-year project, which includes high-intensity eelectroencephalographic assessment, clinical evaluation, and kinematic assessment (stereophotogrammetric analysis) of Parkinson's disease patients with balance problems. The second part of the project involves ad hoc rehabilitation integrating treadmill use with a 2D virtual reality (dual task training), combined with specific neuromodulation (tACS).

UNIVERSITÀ DEGLI STUDI DI GENOVA – GENOVA, ITALY

RESEARCH SCHOLARSHIP – 01/12/2017 – 11/2019

I worked on a study of the effect of gamma-frequency tACS stimulation on working memory performance in mild-to-moderate stage Hungtington's disease patients', funded by the Jacques and Gloria Gossweiler foundation

EDUCATION AND TRAINING

01/11/2014 – 17/05/2018 Genova, Italy

PH.D. IN NEUROSCIENCE- MOTOR AND SPORTS ACTIVITIES SCIENCE CURRICULUM (XXX CYCLE)
Università degli Studi di Genova

The aim of the studies carried out during my Ph.D., was to understand the response of the human motor system to different ways of moving without actual movement. This was the conditio-sine-qua-non in order to evaluate the possibility of practical application of these techniques in the rehabilitation setting. So, neurophysiological stimulation methods and behavioral assessment tools were engaged to analyze the mechanisms underlying these techniques, namely MI and illusion of movement, and their implications in learning and relearning abilities.

Address Via Balbi 5, 16126, Genova, Italy | **Website** https://unige.it |

Thesis Motor imagery and motor illusion: from plasticity to a translational approach

11/2012 – 24/10/2014 Genova, Italy

MASTER'S DEGREE IN HEALTH PROFESSION REHABILITATION SCIENCES Università degli Studi di Genova

Address Via Balbi 5, 16126, Genova, Italy | **Final grade** 110/110 |

Thesis Creazione ed implementazione di un database family-centered sulla presa in carico fisioterapica del paziente in età evolutiva in una ASL: Uno studio pilota.

01/11/2009 – 23/11/2012 Genova, Italy

DEGREE IN PHYSICAL THERAPY Università degli Studi di Genova

- occupational techniques (making of standard breads, fancy breads, cakes and pastries) - science applied to food and equipement (microbiology, biochemistry, hygiene) - occupational technology (basic principles, hygiene and safety) - knowledge of business and its economic, legal and social context

Address Via Balbi 5, 16126, Genova, Italy | **Final grade** 106/110 |

Thesis Mirror neurons and home rehabilitation in Parkinson's disease: A pilot study.

GRANTS

30/03/2024 – CURRENT

Call for University Research Funding (Fondi di Ricerca di Ateneo)

Winner of the Call for University Research Funding (Fondi di Ricerca di Ateneo), established by University of Genova, department DINOGMI (Department of Neuroscience, Rehabilitation, Ophthalmology, Genetics, and Maternal-Infant Sciences), with the project 'Exploring neurodegenative resilience'. Role: Principal Investigator.

2018
Call for Finalized Research 2018

Winner of the Call for Finalized Research 2018, established by the Ministry of Health, Starting grant (SG) section; I received funding for a three-year research project. Role: Principal Investigator.

2017
Call for scholarship, Università degli Studi di Genova

Winner of the call for research grant D.R. n 3329, 14.09.2017 issued by the University of Genoa for the program "Study of the effect of gamma-frequency tACS stimulation on working memory performance in mild-to-moderate stage Huntington's disease patients" at the Department of Experimental Medicine (DIMES). Role: Collaborator.

SPEAKER AT CONGRESSES AND DISCLOSURE EVENTS

15/03/2024
invited talk

'Is targeted physiotherapy necessary for an Early Parkinson's Disease (PD) patient?' at the Congress, Liguria Parkinson, IRCCS Ospedale Policlinico San Martino

05/05/2023
invited talk

'Le abilità cognitive nel recupero del gesto motorio nelle persone con malattia di Parkinson' at physical therapist course during the 9' LIMPE-DISMOV congress at Padova.

04/05/2020
speaker

'Postural Problems in Parkinson's Disease' at Webinar for patients with Parkinson's disease: '1 hour together: meeting with physiotherapist and occupational therapist

10/05/2019
speaker

Talk titled 'Freezing assessment test' at the event 'IX day meeting of SIAMOC (Italian Society of Analysis of MOvement in Clinic) laboratories at the Neurological Clinic, Genoa

10/2018
speaker

"A Champion for Caregiver," The series of meetings that aims to address caregiver issues and explore the implications of the disease in the home management of the person with Parkinson's disease, in order to achieve greater awareness and obtain better management of the emotional, relational and practical aspects of caregiving. Title: 'Physiotherapy in Parkinson's disease.

16/12/2017
speaker

Talk titled 'tDCS in neurorehabilitation' at the III National GIS neuroscience congress AIFI at IRCCS San Camillo Hospital Foundation

05/11/2015
speaker

Talk titled 'Mirror therapy' at CBA IRCCS San Martino Course 'Mirror neuron theory and motor imagery applied to rehabilitation'.

2015
oral communication

‘Cholinergic dysfunction: a common substrate for attentional control of gait among fallers in older adults and people affected by Parkinson’s disease’. I Congresso Accademia Limpe-Dismov, Torino 2015.

TEACHING EXPERIENCE

01/01/2023 – CURRENT

Neuropsychology and neuropsychological rehabilitation

Teaching activity for the course" Neuropsychology and neuropsychological rehabilitation" of the Physiotherapy Studies Course, University of Genoa, for the duration of 10 hours.

01/01/2022 – CURRENT

Methodology and techniques of rehabilitation in neurology

Teaching activity for the Physiotherapy Studies Course, University of Genoa, for the duration of 20 hours. The course presents the bases and principles of neurological rehabilitation in adults based on scientific evidence and guidelines.

2021 – 2022

Motor Learning and Human Movement Sciences

Conducted teaching activity at 'LUNEX, International University of Health, Exercise, & Sports S.A.', Luxembourg, entitled "Motor Learning and Human Movement Sciences (module M05 and BPT07)". Course taught in English for the duration of 20 hours.

2021 – 2022

Neuropsychology and neuropsychological rehabilitation

Contract in accordance with R.D. No. 251 of 10/05/2013 to carry out teaching activities for the course" Neuropsychology and neuropsychological rehabilitation" of the Physiotherapy Studies Course, University of Genoa, for the duration of 10 hours.

2020 – 2021

Tutor activity

Tutor activities (20 hours) for an internship of Master's students in Neuroscience and Neurological Physiotherapy regarding the practical use of a stereophotogrammetry system (Vicon Nexus) and an engineered instrument for obtaining behavioral parameters in upper limb studies (Glove Analyzer System).

2020 – 2021

Motor Learning and Human Movement Sciences

Conducted teaching activities at 'LUNEX, International University of Health, Exercise, & Sports S.A.', Luxembourg, entitled "Motor Learning and Human Movement Sciences (module M05 and BPT07)". Course taught in English for the duration of 20 hours.

2019 – 2020

Lecture

2-hour lecture entitled 'Transcranial Direct Current Stimulation (tDCS)' to the Bachelor of Science in Rehabilitation Science of Health Professions, University of Genoa

2018 – 2019

Elective Teaching Activity

Elective Teaching Activity: "Alternative Learning Methods and Neuromodulation Techniques" (6 hrs total) During this ADE, I presented in both theoretical and practical mode, innovative rehabilitation techniques such as Action Observation and Motor Imagery and neuromodulation tools with special focus on transcranial direct current stimulation (tDCS).

2012 – 2013

Mobilization and transportation of the person

Lecturer at training course for Social and Health Care Workers for the subject 'Mobilization and transportation of the person' for the duration of 4 hours, organized by the company 'Private Assistance', via Molteni Genoa-Assistance to the elderly and sick disabled

THESIS CO-ADVISOR

2021 – 2022
Dietary habits and motor performance in Parkinson's disease: a pilot study

Bachelor of Science in Exercise Science Candidate: Chiara Parodi. Advisor Laura Avanzino

2020 – 2021
Analysis of cortical activity during a simple and dual task walking task

Physical therapy Degree Candidate: Francesca Grosso, Advisor Elisa Pelosin

2019 – 2020
Development of a questionnaire for sensory trick assessment in patients with cervical dystonia

Single-cycle Bachelor of Science in Medicine Candidate: Daniele Tremonti Advisor Laura Avanzino

2017 – 2018
Application of motor imagery in the rehabilitation of musculoskeletal disorders of the upper and lower limbs

Degree Physiotherapy Candidate: Liliana Mele Advisor Laura Avanzino

2017 – 2018
Dynamics of motor learning following exercise or mental imagination

Biomedical Engineering Degree Candidates: Francesco Bruno Advisor Laura Avanzino

2017 – 2018
The role of the cerebellum in motor adaptation

. BSc Biomedical Engineering, Candidates:Simona Martini Advisor Laura Avanzino

2017 – 2018
EEG correlates during a Working Memory task in healthy subjects

Biomedical Engineering Degree Candidates:Giorgio Cecconi Advisor Laura Avanzino

2017 – 2018
Study of the neurophysiological and behavioral effects of transcranial AC stimulation during a cognitive task in healthy subjects

Biomedical Engineering Degree Candidates:Giulia A. Mobilio Advisor Laura Avanzino

2015 – 2016
Study of inhibitory circuits, in primary motor area, during "Motor Imagery"

Biomedical Engineering Degree, Candidates Camilla Bergamino Advisor Laura Avanzino

2015 – 2016
Neurophysiological bases of inhibitory circuits during cortical mental imagination

Degree Biomedical Engineering, Candidate Elisa Sciandra Advisor Laura Avanzino

2014 – 2015
Mirror box and Parkinson's disease: a study of changes in cortical excitability and fine finger movements.

Degree Physiotherapy Candidate: Giovanna Candiani Advisor Elisa Pelosin

2014 – 2015
Effect of augmented motor imagery training on cortical plasticity'

Degree Biomedical Engineering. Candidate: Francesca Banella Advisor Laura Avanzino

2014 – 2015

Study of the interaction between a sensory stimulus and cerebellar activity'

Biomedical Engineering degree. Candidates: Emanuela Mo, Dario Consoli Advisor Laura Avanzino

THESIS ADVISOR

2021 – 2022

Dual task treatment in Parkinson's disease patients with balance disorders: effects on neural correlates"

Graduate Physiotherapy Candidate: Luca Fregara. co-advisor Martina Putzolu

2021 – 2022

Dual task treatment in Parkinson's disease patients with balance disorders: effects on kinematic parameters"

Graduate Physiotherapy Candidate: Camilla Ricci. Co-advisor: Carola Cosentino

ADDITIONAL SKILLS

Lab work tools

VICON NEXUS system (motion capture)
SPSS (statistica)
OPAL e Cometa Wave Track (IMU sensors)
TMS
tDCS, tACS
High density EEG
GAITrite sensorized mat
Glove Analyzer System, ett MTM tavoletta grafica, ePRIME

REVIEWER ACTIVITY

Active reviewer for

Archives of Physiotherapy
Applied Neuropsychology: Adult
Somatosensory & Motor Research
Frontiers in Neuroscience

AWARD

2019

Best scientific contribution

ARD Award, best scientific contribution on dystonias at the 5th LIMPE-DISMOV Congress, Catania, May 22-24, 2019, sponsored by the Italian Association for Dystonia Research.

2018

Best abstract

Best abstract winner at the 4th National GIS AIFI neuroscience congress 2018, Verona, October 27, 2018 (Italian Association of Physiotherapy)

2018

Grant winner

Winner of the 'Youth and Research Project' participation grant, at the 4th Limpe-dismov congress

2017

Grant winner

Winner of the 'Youth and Research Project' participation grant, at the 3rd Limpe-dismov congress

2016

Grant winner

Winner of the 'Youth and Research Project' participation grant, at the 2nd Limpe-dismov congress

SCIENTIFIC COLLABORATIONS

Prof. Chiappalone (Italian Institute of Technology, IIT).

The collaboration is being carried out as part of a project funded by the Jacques and Gloria Gossweiler foundation, having as its objective to explore (through the use of a high-intensity electroencephalograph, hdEEG) the activity in the gamma frequency band in the cognitive network during the performance of working memory exercises and to evaluate the potential plasticity of the cognitive network after administration of gamma frequency tACS in patients with Huntington's disease (HD)

Prof. Davide Martino Department of Clinical Neurosciences, Hotchkiss Brain Institute, Mathison Mental Health Centre and Alberta Children's Hospital Research Institute, University of Calgary, Canada

The collaboration is being conducted as part of a research strand focused on the neurophysiopathology of cervical dystonia

Prof. Dante Mantini (Research Center for Motor Control and Neuroplasticity, KU Leuven, Leuven, Belgium. Brain Imaging and Neural Dynamics Research Group, IRCCS San Camillo Hospital, Venice, Italy)

Collaboration is carried out as part of work involving acquisition and analysis of high-intensity electroencephalographic data

Prof. Nieuwboer (Department of Rehabilitation Sciences, KULeuven, Leuven, Belgium)

Collaboration takes place within the framework of studies on the analysis of electroencephalographic data during walking

Prof. Mirelman (Center for the Study of Movement, Cognition and Mobility, Department of Neurology, Tel Aviv, Israel; Department of Physical Therapy, Sackler Faculty of Medicine and Sagol School of Neuroscience, Tel Aviv UniversityTel Aviv, Israel.)

The collaboration is part of a European project, V-TIME, which aimed to evaluate the effects of motor-cognitive training on a population of patients with Parkinson's disease.

PUBLICATIONS

Total number of citations:442 (source: Scopus database) H-index: 13 (source Scopus)

34.Mezzarobba S, Bonassi G, Avanzino L, Pelosin E. Action Observation and Motor Imagery as a Treatment in Patients with Parkinson's Disease. J Parkinsons Dis. 2024 Jan 13. doi: 10.3233/JPD-230219. Epub ahead of print. PMID: 38250785.

33.Terranova S, Botta A, Putzolu M, **Bonassi G**, Cosentino C, Mezzarobba S, Ravizzotti E, Pelosin E, Avanzino L. Cerebellar Direct Current Stimulation Reveals the Causal Role of the Cerebellum in Temporal Prediction. Cerebellum. 2023 Dec 26. doi: 10.1007/s12311-023-01649-8. Epub ahead of print. PMID: 38147293.

32.Botta A, Zhao M, Samogin J, Pelosin E, **Bonassi G**, Lagravinese G, Mantini D, Avenanti A, Avanzino L. Early modulations of neural oscillations during the processing of emotional body language. Psychophysiology. 2024 Jan; 61(1):e14436. doi: 10.1111/psyp.14436. Epub 2023 Sep 8. PMID: 37681463.

31.**Bonassi G**, Semprini M, Mandich P, Trevisan L, Marchese R, Lagravinese G, Barban F, Pelosin E, Chiappalone M, Mantini D, Avanzino L. Neural oscillations modulation during working memory in pre-manifest and early Huntington's disease. Brain Res. 2023 Dec 1;1820:148540. doi: 10.1016/j.brainres.2023.148540. Epub 2023 Aug 19. PMID: 37598900.

30.Putzolu M, Manzini V, Gambaro M, Cosentino C, **Bonassi G**, Botta A, Ravizzotti E, Avanzino L, Pelosin E, Mezzarobba S. Home-based exercise training by using a smartphone app in patients with Parkinson's disease: a feasibility study. Front Neurol. 2023 Jun 28;14:1205386. doi: 10.3389/fneur.2023.1205386. PMID: 37448748; PMCID: PMC10338039.

29.**Bonassi G**, Lagravinese G, Bove M, Bisio A, Botta A, Putzolu M, Cosentino C, Mezzarobba S, Pelosin E, Avanzino L. How Music Moves Us: Music-induced Emotion Influences Motor Learning. Neuroscience. 2023 Aug 21;526:246-255. doi: 10.1016/j.neuroscience.2023.06.023. Epub 2023 Jul 10. PMID: 37437801.

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28.Putzolu M, Samogin J, **Bonassi G**, Cosentino C, Mezzarobba S, Botta A, Avanzino L, Mantini D, Vato A, Pelosin E. Are Motor Imagery Ability scores related to cortical activity during gait imagery? Res Sq [Preprint]. 2023 Apr 12:rs. 3.rs-2777321. doi: 10.21203/rs.3.rs-2777321/v1. PMID: 37090654; PMCID: PMC10120778.

27.Cosentino C, Putzolu M, Mezzarobba S, Cecchella M, Innocenti T, **Bonassi G**, Botta A, Lagravinese G, Avanzino L, Pelosin E. One cue does not fit all: A systematic review with meta-analysis of the effectiveness of cueing on freezing of gait in Parkinson's disease. Neurosci Biobehav Rev. 2023 Jul;150:105189. doi: 10.1016/j.neubiorev.2023.105189. Epub 2023 Apr 20. PMID: 37086934.

26.Lagravinese G, Bisio A, Bove M, Botta A, **Bonassi G**, Marchese R, Ruggeri P, Pelosin E, Avanzino L. Motor Resonance Flexibility to Emotion-Enriched Context in Parkinson's Disease Patients. Behav Neurol. 2022 Dec 30;2022:6487419. doi: 10.1155/2022/6487419. PMID: 36755906; PMCID: PMC9900249.

25.**Bonassi G**, Lagravinese G, Putzolu M, Botta A, Bove M, Pelosin E and Avanzino L (2022) Transcranial direct current stimulation alters sensorimotor modulation during cognitive representation of movement. Front. Hum. Neurosci. 16:862013. doi: 10.3389/fnhum.2022.862013

24.Avanzino L, Di Biasio F, **Bonassi G**, Pelosin E, Cothros N, Marchese R and Martino D (2022) Observing the Diversity of Alleviating Manoeuvres in Cervical Dystonia.
Dyst. 1:10283. doi: 10.3389/dyst.2022.10283

23.Zhao M, **Bonassi G**, Samogin J, Taberna GA, Porcaro C, Pelosin E, Avanzino L, Mantini D. Assessing Neurokinematic and Neuromuscular Connectivity During Walking Using Mobile Brain-Body Imaging. Front Neurosci. 2022 Jun 3;16:912075. doi: 10.3389/fnins.2022.912075. PMID: 35720696; PMCID: PMC9204106.

22. Botta A, Lagravinese G, Bove M, Pelosin E, **Bonassi G**, Avenanti A, Avanzino L. Sensorimotor inhibition during emotional processing. Sci Rep. 2022 Apr 29;12(1):6998. doi: 10.1038/s41598-022-10981-8. PMID: 35488018; PMCID: PMC9054825.

21.Zhao M, **Bonassi G**, Samogin J, Taberna GA, Pelosin E, Nieuwboer A, Avanzino L, Mantini D. Frequency-dependent modulation of neural oscillations across the gait cycle. Hum Brain Mapp. 2022 Aug 1;43(11):3404-3415. doi: 10.1002/hbm.25856. Epub 2022 Apr 6. PMID: 35384123; PMCID: PMC9248303.

20.Putzolu M, Samogin J, Cosentino C, Mezzarobba S, **Bonassi G**, Lagravinese G, Vato A, Mantini D, Avanzino L, Pelosin E. Neural oscillations during motor imagery of complex gait: an HdEEG study. Sci Rep. 2022 Mar 12;12(1):4314. doi: 10.1038/s41598-022-07511-x. PMID: 35279682; PMCID: PMC8918338.

19.Zhao M, **Bonassi G**, Guarnieri R, Pelosin E, Nieuwboer A, Avanzino L, Mantini D. A multi-step blind source separation approach for the attenuation of artifacts in mobile high-density electroencephalography data. J Neural Eng. 2021 Dec 28;18(6). doi: 10.1088/1741-2552/ac4084. PMID: 34874319.

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18. **Bonassi G**, Pelosin E, Lagravinese G, Bisio A, Grasselli G, Bove M, Avanzino L. Somatosensory inputs modulate the excitability of cerebellar-cortical interaction. Clin Neurophysiol. 2021 Dec;132(12):3095-3103. doi: 10.1016/j.clinph.2021.08.026. Epub 2021 Oct 18. PMID: 34740041.

17.Ilari S, Vitiello L, Russo P, Proietti S, Milić M, Muscoli C, Cardaci V, Tomino C, **Bonassi G**, Bonassi S. Daily Vegetables Intake and Response to COPD Rehabilitation. The Role of Oxidative Stress, Inflammation and DNA Damage. Nutrients. 2021 Aug 14;13(8):2787. doi: 10.3390/nu13082787. PMID: 34444947; PMCID: PMC8398833.

16. Barban F, Chiappalone M, **Bonassi G**, Mantini D, Semprini M. Yet another artefact rejection study: an exploration of cleaning methods for biological and neuromodulatory noise. J Neural Eng. 2021 Aug 2;18(4). doi: 10.1088/1741-2552/ac01fe. PMID: 34342270.

15. Semprini M, **Bonassi G**, Barban F, Pelosin E, Iandolo R, Chiappalone M, Mantini D, Avanzino L. Modulation of neural oscillations during working memory update, maintenance, and readout: An hdEEG study. Hum Brain Mapp. 2021 Mar; 42(4):1153-1166. doi: 10.1002/hbm.25283. Epub 2020 Nov 17. PMID: 33200500; PMCID: PMC7856639.

14. Lagravinese G, Santangelo G, **Bonassi G**, Cuoco S, Marchese R, Di Biasio F, Erro R, Pelosin E, Avanzino L. Affective and cognitive theory of mind in patients with cervical dystonia with and without tremor. J Neural Transm (Vienna). 2020 Aug 7. doi: 10.1007/s00702-020-02237-4. Epub ahead of print. PMID: 32770275.

13. **Bonassi G**, Lagravinese G, Bisio A, Ruggeri P, Pelosin E, Bove M, Avanzino L. Consolidation and retention of motor skill after motor imagery training. Neuropsychologia. 2020 Jun;143:107472. doi: 10.1016/j.neuropsychologia. 2020.107472. Epub 2020 Apr 20. PMID: 32325154.

12. Martino D, **Bonassi G**, Lagravinese G, Pelosin E, Abbruzzese G, Avanzino L. Defective Human Motion Perception in Cervical Dystonia Correlates With Coexisting Tremor. Mov Disord. 2020 Jun;35(6):1067-1071. doi: 10.1002/mds.28017. Epub 2020 Mar 21. PMID: 32199036.

11. Iandolo R, Semprini M, Buccelli S, Barban F, Zhao M, Samogin J, **Bonassi G**, Avanzino L, Mantini D, Chiappalone M. Small-World Propensity Reveals the Frequency Specificity of Resting State Networks. IEEE Open J Eng Med Biol. 2020 Feb 14;1:57-64. doi: 10.1109/OJEMB.2020.2965323. PMID: 35402950; PMCID: PMC8979624.

10. Putzolu M, Ogliastro C, Lagravinese G, **Bonassi G**, Trompetto C, Marchese R, Avanzino L, Pelosin E. Investigating the effects of transcranial direct current stimulation on obstacle negotiation performance in Parkinson disease with freezing of gait: A pilot study. Brain Stimul. 2019 Nov - Dec;12(6):1583-1585. doi: 10.1016/j.brs.2019.07.006. Epub 2019 Jul 12. PubMed PMID: 31326366.

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9. Mori L, Putzolu M, **Bonassi G**, Galeoto G, Mezzarobba S, Trompetto C, Avanzino L, Marchese R, Abbruzzese G, Pelosin E. Haptic perception of verticality correlates with postural and balance deficits in patients with Parkinson's disease. Parkinsonism Relat Disord. 2019 Sep;66:45-50. doi:10.1016/j.parkreldis.2019.06.026. Epub 2019 Jul 2. PubMed PMID: 31279636.

8. **Bonassi G**, Bisio A, Lagravinese G, Ruggeri P, Bove M, Avanzino L. Selective sensorimotor modulation operates during cognitive representation of movement. Neuroscience. 2019 Jun 15;409:16-25. doi: 10.1016/j.neuroscience. 2019.04.031. Epub 2019 Apr 25. PubMed PMID: 31028830.

7.Pelosin E, Cerulli C, Ogliastro C, Lagravinese G, Mori L, **Bonassi G**, Mirelman A, Hausdorff JM, Abbruzzese G, Marchese R, Avanzino L. A multimodal training modulates short-afferent inhibition and improves complex walking in a cohort of faller older adults with an increased prevalence of Parkinson's disease. J Gerontol A Biol Sci Med Sci. 2019 Mar 15. pii: glz072. doi:10.1093/gerona/glz072. [Epub ahead of print] PubMed PMID: 30874799.

6. Putzolu M, Pelosin E, Ogliastro C, Lagravinese G, **Bonassi G**, Ravaschio A, Abbruzzese G, Avanzino L. Anodal tDCS over prefrontal cortex improves dual-task walking in Parkinsonian patients with freezing. Mov Disord. 2018 Dec;33(12): 1972-1973. doi: 10.1002/mds.27533. Epub 2018 Nov 13. PubMed PMID: 30423199.

5. Lagravinese G, Pelosin E, **Bonassi G**, Carbone F, Abbruzzese G, Avanzino L. Gait initiation is influenced by emotion processing in Parkinson's disease patients with freezing. Mov Disord. 2018 Apr;33(4):609-617. doi: 10.1002/mds.27312. Epub 2018 Feb 2. PubMed PMID: 29392774.

4. Avanzino L, Ravaschio A, Lagravinese G, **Bonassi G**, Abbruzzese G, Pelosin E. Adaptation of feedforward movement control is abnormal in patients with cervical dystonia and tremor. Clin Neurophysiol. 2018 Jan;129(1):319-326. doi: 10.1016/j.clinph.2017.08.020. Epub 2017 Sep 9. PubMed PMID: 28943258.

3. **Bonassi G**, Biggio M, Bisio A, Ruggeri P, Bove M, Avanzino L. Provision of somatosensory inputs during motor imagery enhances learning-induced plasticity in human motor cortex. Sci Rep. 2017 Aug 24;7(1):9300. doi: 10.1038/ s41598-017-09597-0. PubMed PMID: 28839226; PubMed Central PMCID: PMC5571213.

2. **Bonassi G**, Pelosin E, Ogliastro C, Cerulli C, Abbruzzese G, Avanzino L. Mirror Visual Feedback to Improve Bradykinesia in Parkinson's Disease. Neural Plast. 2016;2016:8764238. doi: 10.1155/2016/8764238. Epub 2016 Aug 1. PubMed PMID: 27563470; PubMed Central PMCID: PMC4983670.

1. Pelosin E, Ogliastro C, Lagravinese G, **Bonassi G**, Mirelman A, Hausdorff JM, Abbruzzese G, Avanzino L. Attentional Control of Gait and Falls: Is Cholinergic Dysfunction a Common Substrate in the Elderly and Parkinson's Disease? Front Aging Neurosci. 2016 May 9;8:104. doi: 10.3389/fnagi.2016.00104. eCollection 2016. PubMed PMID: 27242515; PubMed Central PMCID: PMC4860418.