

Curriculum Vitae
EUROPEAN FORM



PERSONAL INFORMATION

Surname(s) / First name(s) **Quartarone Angelo**
Address(es) Viale Regina Elena 85 B, 98121 Messina, Italy
Telephone(s) office: +39 090 2212792 Mobile: +39 3409667642
E-mail aquartar@unime.it
Nationality Italian
Date of birth 18 october 1965
Gender Male

WORK EXPERIENCE

Date **From 2002 -To date**
Name of employer **Università degli Studi di Messina – www.unime.it**
Position **Full Professor of Neurology (January 2021)**

Former positions and dates
Position **2016- January 2021 – Full Professor of Neurophysiology and Rehabilitation SSD Med 48, University of Messina**
Name of employer Università degli Studi di Messina – www.unime.it
Position **2006-2016 Associate Professor of Neurophysiology and Rehabilitation Med 48: University of Messina**
Name of employer Università degli Studi di Messina

Name of employer **2003-2006 Assistant Professor of Neurology, Med26**
Position University of Messina, Italy

Other positions
position **2011-2015: Director of the School of Physiotherapy, University of Messina, The University of Messina**
position **2018-2021: Director of the School of Technicians of Neurophysiology, University of Messina**

Hospital appointments
position
position 1996-present Attending Physician, Clinica Neurologica II, Policlinico Universitario Messina
position 1996-present Attending Physician, Neurophysiology Unit, Policlinico Universitario Messina
position

2000-present Chief Director, Transcranial Magnetic Stimulation and Motor Control Lab, Clinica Neurologica , Messina.

position

September 2021-present Deputy Director of Neurophysiology and Movement Disorder Unit, Policlinico Universitario Messina

Certifications

1994 National Italian Board of Neurology;
1990 National Italian Board of Medicine;

Coordination of International and National Research Projects

2003-2004 [FISM](#) (Italian Foundation of Multiple Sclerosis) (co-investigator)

2008-2009 [American Blepharospasm Foundation Grant](#): Corneal sensitivity in patients affected by blepharospasm (PI)

2009 [FISM](#) (Italian Foundation of Multiple Sclerosis): Study of Central Fatigue (PI)

2009 [Grant Servier](#) (Paris, France) Memantine and cortical plasticity (PI)

2012-2013 [Grant Gossweiler Foundation](#): Mechanisms of action of premotor epidural stimulation in dystonia (PI)

2015 [Grant Ministry of Health](#) : Does intensive exercise induce plasticity-related changes in Parkinson's Disease? (co-investigator).

2019 [Grant of The American Ministry of Defense](#) (DoD Grant): Exercise and plasticity in PD: Functional and structural evidence in the cortex and the spinal cord. (PI).

2021 [Grant of Fresco Parkinson Institute](#), New York University, USA

Medical Foundations Executive Board

2003-2007 Board Member, Italian Clinical Neurophysiological Society

2009-2010 Board Member of Italian Movement Disorder Society

Organization of International meetings

2010: First International Workshop of Synaptic Plasticity: from bench to bed side, Giardini Naxos

2012: Second International Workshop of Synaptic Plasticity: from bench to bed side, Taormina

2014: Third International Workshop of Synaptic Plasticity: from bench to bed side, Milazzo

2016: Fourth International Workshop of Synaptic Plasticity: from bench to bed side, Lucca

2018: Fifth International Workshop of Synaptic Plasticity: from bench to bed side, Florence

2022: Sixth International Workshop of Synaptic Plasticity: from bench to bed side, Florence

Member of the Editorial Board of International Scientific Journals

Deputy Editor of *Frontiers System Neurosciences*

Editorial Board of Journal of Clinical Movement Disorder.
<https://clinicalmovementdisorders.biomedcentral.com/about/editorial-board>.

Editor of Books

Editor of e Special issue of Handbook of Neurology dedicated on Plasticity in Neuropsychiatric Disorders.

International invited lectures

Seminary at National Hospital, Queen Square , London, England 2003
Seminary at Dpt. of Neurology of Kiel University, Germany 2005
Movement Disorder Society Meeting New Orleans, USA 2005
Seminary at Toronto Western Hospital, Canada 2005
Annual Teaching Course of Functional Neuroimaging Brain Voyager Sorrento Italy, 2006
Workshop on Complex Pain Regional Syndrome Warsaw, Poland 2006
Movement Disorder Society Meeting Kyoto, Japan 2006
Plasticity of basal ganglia disorders, Perugia, Italy 2006
Seminary at National Hospital, Queen Square , London, England 2006
Movement Disorder Society Meeting Istanbul, Turkey 2007
Seminar Department of Neuropsychology, University of Maastricht, Holland 2007 –
Seminary at National Hospital, Queen Square , London, England 2007
Dystonia Medical Research Foundation, Washington, USA 2007
International Federation of Clinical Neurophysiology, Siena, Italy 2008
Seminary at the Dpt of Neurology, Hospital del la Salpetriere Paris, France 2008
Movement Disorder Society Meeting Chicago, USA 2008
Seminary at the Dept of Neurology, Hopital del la Salpetriere Paris, France 2009
FENS Satellite Symposium on Motor Control, Nijmegen, Holland 2010
5 International Dystonia Symposium , Barcelona Spain 2011
Movement Disorder Society Meeting Toronto, Canada 2011
Sixth International Dystonia Symposium, Hannover 2012
Fifth International Conference on Non Invasive Brain Stimulation, Leipzig 2013
30th Congress of Clinical Neurophysiology, Berlin 2014
I Brain Stimulation Meeting , Singapore 2015
International DBS symposium Berlin 2016
Sixth Conference of Brain Stimulation Gottingen 2016
Neuromodulation Course, City College University, New York 2017
Movement Disorder Society , Hong Kong 2018
International Federation of Clinical Neurophysiology, Washington 2018
Fourth International Congress of treatment of dystonia, Hannover, 2019



SCIENTIFIC PRIZES AND OTHER RECOGNITIONS

Scientific Prize

Winner of "**Premio giovani ricercatori**" **Bonino Pulejo Foundation** and 1 year stage at stage National Hospital for Nervous Diseases, Quenn Square, of London under the supervision of Prof. John Rothwell and David Marsden.

International Recognitions

Award from the Serbian Academy of Sciences and title of Visiting Professor at the University of Belgrade 2014

Spin off

Member of the Spin off M.I.L.A. Multimodal Imaging Lab Activities
Numero REA: ME225183, Codice Fiscale: 03267110835; Web site
<https://portale.unime.it/mila/people/>

EDUCATION AND TRAINING

Award Date **July 1990**

Title of qualification awarded **Degree in Medicine and Surgery cum Laude**; University of Messina

Award Date **1994**

Title of qualification awarded **Specialization in Neurology cum Laude**, University of Messina

Post-doctoral positions,
fellowships

1994-96 Movement Disorders Fellowship; National Hospital for Nervous diseases, Queen Square . London UK Supervisione Prof. Charles David Marsden.

PERSONAL SKILLS AND COMPETENCES

Language skills

Mother tongue(s) **Italian**

Other language(s)

*Self-assessment
European level (*)*

Understanding		Speaking		Writing
Listening	Reading	Spoken interaction	Spoken production	
C1 Proficient User	C1 Proficient User	C1 Proficient User	C1 Proficient User	C1 Proficient User

Language: English

C1 Proficient User	C1 Proficient User	C1 Proficient User	C1 Proficient User	C1 Proficient User
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(*) *Common European Framework of Reference (CEF) level*

Social and communication skills	Excellent networking skills; good communication skills at the level of divulgative conference and meetings
Organizational / managerial skills	Leadership (Coordination of International teams, as reported above); excellent experience in project or team management
Research areas and knowledge, Scientific activity and general information	<p>Research areas and knowledge Clinical Neurophysiology of Movement Disorders Transcranial Magnetic Stimulation Study of Neuroplasticity within sensory-motor cortex in healthy humans and in basal ganglia disorders. Pathophysiology of dystonia by means of neurophysiology and neuroimaging Pathophysiology of Parkinson's disease by means of neurophysiology and Neuroimaging., DTI and tractography</p> <p>Scientific activity and other information The research activity is testified by over 160 full papers published in international high-level journals and/or books, and by over 80 talks delivered at international or national conferences or at research institutes, on invitation. The scientific papers have been extensively quoted in the literature, as testified by the remarkable h-index (44) with over 10000 citations, 1401 citations in 2021 (data from Scopus, February 2022).</p> <p>Selected publications Publications (since 2010)</p> <p>Quartarone A, Ghilardi MF. Neuroplasticity in dystonia: Motor symptoms and beyond Review Handb Clin Neurol 2022;184:207-218.</p> <p>Rizzo V, Terranova C, Raffa G, Cardali M, Angileri F, Marzano G, Quattropani MC, Germanò A, Girlanda P, Quartarone A, Cortical Excitability and Connectivity in Patients With Brain Tumors Front Neurol 2021 Aug 26;12:673836. IF: 3.2</p> <p>Ghilardi MF, Tatti E, Quartarone A. Beta power and movement-related beta modulation as hallmarks of energy for plasticity induction: Implications for Parkinson's disease Parkinsonism Relat Disord 2021 Jul;88:136-139 IF: 5.3</p> <p>Rizzo V, Mastroeni C, Maggio R, Terranova C, Girlanda P, Siebner HR, Quartarone A. Low-intensity repetitive paired associative stimulation targeting the motor hand area at theta frequency causes a lasting reduction in corticospinal excitability. Clin Neurophysiol. 2020 Oct;131(10):2402-2409. IF: 3.6</p> <p>Quartarone A, Cacciola A, Milardi D, Ghilardi MF, Calamuneri A, Chillemi G, Anastasi G, Rothwell J. New insights into cortico-basal-cerebellar connectome: clinical and physiological considerations. Brain. 2020 Feb 1;143(2):396-406. IF: 11.3</p>

Cacciola A, Milardi D, Bertino S, Basile GA, Calamuneri A, Chillemi G, Rizzo G, Anastasi G, **Quartarone A**. Structural connectivity-based topography of the human globus pallidus: Implications for therapeutic targeting in movement disorders. **Mov Disord**. 2019 Jul;34(7):987-996.

IF: 8.3

Terranova C, Rizzo V, Morgante F, Maggio R, Calamuneri A, Chillemi G, Girlanda P, **Quartarone A**. Spatial Integration of Somatosensory Inputs during Sensory-Motor Plasticity Phenomena Is Normal in Focal Hand Dystonia. **Neural Plast**. 2018 Oct 10;2018

IF: 3.5

Restivo DA, Panebianco M, Casabona A, Lanza S, Marchese-Ragona R, Patti F, Masiero S, Biondi A, **Quartarone A** Botulinum Toxin A for Sialorrhoea Associated with Neurological Disorders: Evaluation of the Relationship between Effect of Treatment and the Number of Glands Treated. **Toxins (Basel)**. 2018 Jan 27;10(2):55

IF: 3.5

Soundara Rajan T, Ghilardi MFM, Wang HY, Mazzon E, Bramanti P, Restivo D, **Quartarone A**. Mechanism of Action for rTMS: A Working Hypothesis Based on Animal Studies. **Front Physiol**. 2017 Jun 30;8:457.

IF: 4.1

Morgante F, Naro A, Terranova C, Russo M, Rizzo V, Risitano G, Girlanda P, **Quartarone A**. Normal sensorimotor plasticity in complex regional pain syndrome with fixed posture of the hand. **Mov Disord**. 2017 Jan;32(1):149-157.

IF: 8.3

Milardi D, Cacciola A, Calamuneri A, Ghilardi MF, Caminiti F, Cascio F, Andronaco V, Anastasi G, Mormina E, Arrigo A, Bruschetta D, **Quartarone A**. The Olfactory System Revealed: Non-Invasive Mapping by using Constrained Spherical Deconvolution Tractography in Healthy Humans. **Front Neuroanat**. 2017 Apr 10;11:32.

IF: 3.23

Cacciola A, Milardi D, Anastasi GP, Basile GA, Ciolli P, Irrera M, Cutroneo G, Bruschetta D, Rizzo G, Mondello S, Bramanti P, **Quartarone A**. A Direct Cortico-Nigral Pathway as Revealed by Constrained Spherical Deconvolution Tractography in Humans. **Front Hum Neurosci**. 2016 Jul 26;10:374.

IF: 3.2

Milardi D, Arrigo A, Anastasi G, Cacciola A, Marino S, Mormina E, Calamuneri A, Bruschetta D, Cutroneo G, Trimarchi F, **Quartarone A**. Extensive Direct Subcortical Cerebellum-Basal Ganglia Connections in Human Brain as Revealed by Constrained Spherical Deconvolution Tractography.

Front Neuroanat. 2016 Mar 18;10:29.

IF: 3.2

Chillemi G, Calamuneri A, Morgante F, Terranova C, Rizzo V, Girlanda P, Ghilardi MF, **Quartarone A.** Spatial and Temporal High Processing of Visual and Auditory Stimuli in Cervical Dystonia. **Front Neurol.** 2017 Mar 3;8:66.

IF: 3.5

Arrigo A, Mormina E, Calamuneri A, Gaeta M, Marino S, Milardi D, Anastasi GP,

Quartarone A. Amygdalar and hippocampal connections with brainstem and spinal

cord: A diffusion MRI study in human brain. **Neuroscience.** 2017 Feb

IF: 3.2

Rajan TS, Cuzzocrea S, Bruschetta D, **Quartarone A.** Repetitive Transcranial Magnetic Stimulation as a Novel Therapy in Animal Models of Traumatic Brain Injury. **Methods Mol Biol.** 2016;1462:433-43.

IF: 10.7

Milardi D, Gaeta M, Marino S, Arrigo A, Vaccarino G, Mormina E, Rizzo G, Milazzo C, Finocchio G, Baglieri A, Anastasi G, **Quartarone A.** Basal ganglia

network by constrained spherical deconvolution: a possible cortico-pallidal pathway? **Mov Disord.** 2015 Mar;30(3):342-9.

IF: 8.3

Russo M, Crupi D, Naro A, Avanzino L, Buccafusca M, Dattola V, Terranova C, Sottile F, Rizzo V, Ghilardi MF, Girlanda P, Bove M, **Quartarone A.** Fatigue in patients with multiple sclerosis: from movement preparation to motor execution **J Neurol Sci.** 2015 Apr 15;351(1-2):52-57

IF: 3.1

Rizzo V, Terranova C, Crupi D, Sant'angelo A, Girlanda P, **Quartarone A.** Increased transcranial direct current stimulation after effects during concurrent peripheral electrical nerve stimulation. **Brain Stimul.** 2014 Jan-Feb;7(1):113-21.

IF: 6.91

Quartarone A, Hallett M. Emerging concepts in the physiological basis of dystonia. *Mov Disord.* 2013 Jun 15;28(7):958-67.

IF: 8.3

Terranova C, SantAngelo A, Morgante F, Rizzo V, Allegra R, Arena MG, Ricciardi L, Ghilardi MF, Girlanda P, **Quartarone A.** Impairment of sensory-motor

plasticity in mild Alzheimer's disease. **Brain Stimul.** 2013 Jan;6(1):62-6.

IF: 6.91

Quartarone A, Pisani A. Abnormal plasticity in dystonia: Disruption of synaptic homeostasis. *Neurobiol Dis.* 2011 May;42(2):162-70.

IF: 5.2

Morgante F, Dattola V, Crupi D, Russo M, Rizzo V, Ghilardi MF, Terranova C,

Girlanda P, **Quartarone A**. Is central fatigue in multiple sclerosis a disorder of movement preparation? **J Neurol.** 2011 Feb;258(2):263-72
IF: 3.8

According to law 679/2016 of the Regulation of the European Parliament of 27th April 2016, I hereby express my consent to process and use my data provided in this CV

Messina 12-02-2022
Angelo Quartarone

A handwritten signature in black ink, appearing to read "Angelo Quartarone", written in a cursive style.