

Candidatura di Alessandro D'Ausilio al Consiglio Direttivo della SIPF per il biennio 2023-2025

Care colleghe e cari colleghi,

propongo la mia candidatura a consigliere della SIPF, una società scientifica a cui tengo molto. Frequentai il congresso annuale la prima volta nel 2011 e me ne fu subito chiaro il valore scientifico. Negli anni ho cercato di parteciparvi portando, quando possibile, il mio piccolo contributo scientifico. Negli anni ho anche osservato i mutamenti che ne hanno fatto il luogo più autorevole dove la comunità italiana di ricercatori in neuroscienze cognitive si possa ritrovare. Fino ad oggi non ho mai rivestito ruoli organizzativi nella Società e non ho certo l'ingenuità di pensare di saper fare meglio di chi ha ben condotto la Società in questi anni. Se mi sarà data occasione, proverò però a spendermi su alcune questioni che mi stanno a cuore:

- Internazionalizzazione. La comunità scientifica italiana e degli italiani è molto frammentata. Credo si possano immaginare nuove strategie per promuovere la partecipazione dei giovani ricercatori stranieri in Italia e dei giovani italiani all'estero.
- Futuro della comunicazione scientifica. Oggi tutto è "breve", "immediato" ma anche "superficiale". Credo si possa invece promuovere la "lentezza" nella comunicazione scientifica e tornare a considerare i congressi come un luogo dove prendersi il tempo del ragionamento e della discussione.

Prof. Alessandro D'Ausilio

Alessandro D'Ausilio

Short BIO

I studied Experimental Psychology and completed my PhD in Cognitive Psychology at the Sapienza University of Rome (2007 - Prof. Olivetti Belardinelli). During my PhD I spent long periods of research both at MIT (Brain and Cognitive Science Department, McGovern Institute for Brain Research - Prof. Bizzi) and at the Eberhart-Karls-Universität in Tübingen (Institut für Medizinische Psychologie und Verhaltensneurobiologie - Prof. Birbaumer and Prof. Lotze). Immediately after my PhD I obtained a three-year post-doctoral fellowship at the University of Ferrara (Section of Human Physiology - Prof. Fadiga and Prof. Craighero). Subsequently, I joined the Italian Institute of Technology (IIT) in Genoa, first as a Senior Post-doc (Prof. Sandini and Prof. Fadiga) and then from 2012 as a Researcher at the Department of Robotics, Brain and Cognitive Sciences. In 2016 I moved to the IIT Centre for Translational Neurophysiology of Language and Communication, hosted by the University of Ferrara. In 2017 I became Associate Professor and, in 2022, Full Professor of Physiology at the University of Ferrara.

Contacts

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Current positions

FULL PROFESSOR OF PHYSIOLOGY (since Oct 2022)

University of Ferrara

Department of Neuroscience and Rehabilitation, Section of Physiology

AFFILIATED RESEARCHER (since Apr 2017)

Italian Institute of Technology

CTNSC@UniFe - Center for Translational Neurophysiology of Speech and Communication

Past positions

ASSOCIATE PROFESSOR OF PHYSIOLOGY (Apr 2017 - Sept 2022). University of Ferrara, Department of Neuroscience and Rehabilitation, Section of Physiology

RESEARCHER (Jan 2016 - Mar 2017). Italian Institute of Technology, CTNSC@UniFe, Ferrara

RESEARCHER (Apr 2012 - Dec 2015). Italian Institute of Technology, Robotics, Brain and Cognitive Sciences Department, Genova

SENIOR POST-DOC (Apr 2010 - Mar 2012). Italian Institute of Technology, Robotics, Brain and Cognitive Sciences Department, Genova. Supervisor: Prof. Fadiga

POST-DOC (Apr 2007 - Mar 2010). University of Ferrara, Section of Human Physiology, Ferrara. Supervisor: Prof. Fadiga and Prof. Craighero

VISITING PHD STUDENT (Feb-Sept 2005; Apr-May 2006). MIT, Brain and Cognitive Science Department, Cambridge, MA (USA). Supervisor: Prof. Bizzi

VISITING PHD STUDENT (Mar-Sept 2004; Nov-Dec 2004). Institut für Medizinische Psychologie und Verhaltensneurobiologie, Tübingen (Germany). Supervisors: Prof. Birbaumer and Prof. Lotze

PHD STUDENT (Nov 2003 - Mar 2007). Sapienza University of Rome, Dept. of Psychology, Rome. Supervisor: Prof. Olivetti Belardinelli

UNDERGRADUATE RESEARCH ASSISTANT (Jan 2002-Oct 2003). Sapienza University of Rome, Dept. of Psychology, Rome (Italy). Supervisor: Prof. Olivetti Belardinelli

Education

2007 - PhD defence. Title: Learning and plasticity in cerebral sensory-motor coupling (2nd April)

2006 - Psychology professional habilitation (Feb)

2003/2006 - PhD in Cognitive Psychology-Psychophysiology-Personality, Sapienza University of Rome

2003 - MA defence, score of 110/110 cum Laude. Title: Musical Recognition Modelling (16th July)

1998/2003 - Experimental Psychology (equivalent to a BA+MS), Sapienza University, Rome

1998 - High-School Scientific Diploma (Jul)

Italian National Scientific Habilitation

ASN 2016 - Full Professor (Physiology - 05/D1)

ASN 2016 - Full Professor (Psychobiology, Cognitive Psychology and Statistical Psychology - 11/E1)

ASN 2013 - Associate Professor (Physiology - 05/D1)

ASN 2013 - Associate Professor (Psychobiology, Cognitive Psychology and Statistical Psychology - 11/E1)

ASN 2012 - Associate Professor (Psychobiology, Cognitive Psychology and Statistical Psychology - 11/E1)

Invited talks (56 in total; Major ones 2018-2023)

2022 - Multiple temporal scales in solo, dyadic and group coordination. EnTimeMent, Experience, VirtualTimes, EU Horizon 2020 FET PROACTIVE Joint Workshop

2021 - Sensorimotor basis of human communication, Workshop "Computer vision and Cognitive science for human behaviour understanding and interaction", Lille

2021 - Sensorimotor basis of human communication. Instituto Superior Tecnico, Lisbon
2021 - Sensorimotor basis of human communication. University of Leeds
2021 - Investigating the sensorimotor basis of human communication. Freie Universität, Berlin
2020 - Sensorimotor communication. socialBRIDGES e-conferences - "Alignment in Groups, Teams and Networks"
2020 - Sensorimotor communication. MusicTechFest Aveiro. Aveiro (PT)
2019 - The sensorimotor side of speech perception. Brain-computer interaction and language Workshop, Grenoble

Awards

2023 - Young Researcher Award, SIPF - Società Italiana di Psicofisiologia e Neuroscienze Cognitive
2012 - "De Renzi" Prize for young investigators, SINP – Società Italiana di Neuropsicologia
2009 - Young Investigator Award, AIP - Associazione Italiana di Psicologia, Sezione Sperimentale 2006 - Travel award, Human Brain Mapping conference. OHBM Grant
2005 - Travel award, Human Brain Mapping conference. NIH Grant #2 R13 MH062008-06
2005 - Selected by the MIT/Italy Program for a research stay at the Massachusetts Institute of Technology

Main Active Funding

2024-2028 - PRIMI (Performance in Robot Interaction via Mental Imagery). HORIZON-CL4-2022-DIGITAL-EMERGING-02-06. Role: Unit PI (all project: 7.317M€; Unit: 545K€)
2024-2026 - PRIN-PNRR2022: MOTUS – Automated Analysis and Prediction of Human Movement Qualities. Role: Unit PI (all project: 258K; Unit: 84K)
2020-2023 - Min. Salute Ric. Finalizzata 2018 - Giovani Ricercatori. GR-2018-12366027. The treatment of persistent developmental stuttering: shaping of motor neural functioning to improve fluency. Role: Unit PI (all project: 344K€; Unit: 70K€)
2020/2024 - COBRA (COntersational BRAIns). H2020-MSCA-ITN-859588. Role: Unit PI (all project: 4M€; Unit: 523K€)

Italian translation of Neuroscience Textbooks

Principles of Neural Science (6th Edition). Edited by Kandel, Koester, Mack, Siegelbaum. McGraw-Hill, New York, 2021.
Neuroscience (6th Edition). Edited by Purves, Augustine, Fitzpatrick, Hall, LaMantia, Mooney, Platt, White. Oxford University Press, 2017.
Fundamental Neuroscience (4th Edition). Edited by Squire, Berg, Bloom, du Lac, Ghosh, Spitzer. Elsevier Science Publishing, 2012

Representative Publications (2018-2023) (@Corresponding Author)

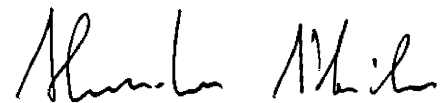
Kruyt J., de Jong D., D'Ausilio A., Beňuš S. (In Press) Measuring prosodic entrainment in conversation: a review and comparison of different methods. **J Speech Lang Hear Res.**
Casarotto A., Dolfini E., Fadiga L., Koch G., @D'Ausilio A. (In Press) Cortico-cortical paired associative stimulation conditioning superficial PMv-M1 connectivity influences motor cortical activity during precision grip. **J Physiol (London).**
Torricelli F., Tomassini A., Pezzulo G., Pozzo T., Fadiga L., D'Ausilio A. (2023) Motor invariants in action execution and perception. **Phys Life Rev.** 44, 13-47. Review article followed by 7 commentaries.

- Casarotto A., Dolfini E., Cardellicchio P., Fadiga L., *D'Ausilio A., *Koch G. (2023) Mechanisms of Hebbian-like plasticity in the ventral premotor – primary motor network. **J Physiol (London)**, 601(1), 211-226. (*Equal contribution)
- Pastore A., Tomassini A., Delis I., Dolfini E., Fadiga L., @D'Ausilio A. (2022) Speech listening entails neural encoding of invisible articulatory features. **Neuroimage**, 264, 119724.
- Tomassini A., Emanuele M., Nazzaro G., Petrone N., Fadiga L., D'Ausilio A. (2022) Interpersonal synchronization of movement intermittency. **iScience**, 25(4), 104096.
- Cardellicchio P., Dolfini E., D'Ausilio A. (2021) The Role of dorsal premotor cortex in joint action stopping. **iScience**, 24 (11), 103330.
- Viaro R., Maggolini E., Farina E., Canto R., Iriki A., D'Ausilio A., Fadiga L. (2021) Neurons of rat motor cortex become active during both grasping execution and grasping observation. **Curr Biol**, 31(19), 4405-4412.
- Cardellicchio P., Koch G., Fadiga L., D'Ausilio A., (2021) Motor overload: GABAergic index of parallel buffer costs. **Brain Stim**, 14 (5), 1106-1108.
- Delfino E., Pastore A., Zucchini E., Porto Cruz M.F., Ius T., Vomero M., D'Ausilio A., Casile A., Skrap M., Stieglitz T., Fadiga L. (2021) Prediction of Speech Onset by Micro-electrocorticography of the Human Brain. **Int J Neural Syst**, 31 (07), 2150025.
- Emanuele M., Nazzaro G., Marini M., Veronesi C., Boni S., Polletta G., *D'Ausilio A., *Fadiga L., (2021) Motor synergies: Evidence for a novel motor signature in autism spectrum disorder. **Cognition**, 213, 104652. (*Equal contribution)
- Cardellicchio P., Dolfini E., Fadiga L., D'Ausilio A. (2020) Parallel fast and slow motor inhibition processes regulate Joint Action coordination. **Cortex**, 133, 346-357.
- Tomassini A., Maris E., Hilt P.M. Fadiga L., D'Ausilio A. (2020) Visual detection is locked to the internal dynamics of cortico-motor control. **PLoS Biol**, 18(10):e3000898.
- Cardellicchio P., Hilt P.M. Dolfini E., Fadiga L., D'Ausilio A. (2020) Beta rebound as an index temporal integration of somatosensory and motor signals. **Front Syst Neurosci**, 14, 63.
- Hilt P. M., Cardellicchio P., Dolfini E., Pozzo T., Fadiga L., D'Ausilio A. (2020) Motor recruitment during action observation: effect of interindividual differences in action strategy. **Cereb Cortex**, 30(7), 3910–3920.
- Cardellicchio P., Dolfini E., Hilt P., Fadiga L., D'Ausilio A. (2020) Motor cortical inhibition during concurrent action execution and action observation. **Neuroimage**, 208, 116445.
- Pezzulo G., Donnarumma F., Dindo H., D'Ausilio A., Konvalinka I., Castelfranchi C. (2019) The body talks: sensorimotor communication and its brain and kinematic signatures. **Phys Life Rev**, 28, 1-21. Review article followed by 8 commentaries.
- Schmitz J., Bartoli E., Maffongelli L., Sebastian Galles N., Fadiga L., @D'Ausilio A. (2019) Motor cortex compensates for lack of sensory and motor experience during auditory speech perception. **Neuropsychologia**, 128, 290-296.
- Hilt P.M., Badino L., @D'Ausilio A., Volpe G., Fadiga L., Camurri A. (2019) Multi-layer adaptation of group coordination in musical ensembles. **Sci Rep**, 9: 5854.
- Mukherjee S., Badino L., Hilt P., Tomassini A., Inuggi A., Fadiga L., Nguyen N., D'Ausilio A. (2019). The neural oscillatory markers of phonetic convergence during verbal interaction. **Hum Brain Mapp**, 40(1), 187-201.
- Lapenta O.M., Ferrari E., Boggio P.S., Fadiga L. D'Ausilio A. (2018) Motor system recruitment during action observation: no correlation between mu-rhythm desynchronization and corticospinal excitability. **PLoS ONE**, 13(11), e0207476.
- Soriano M., Cavallo A., D'Ausilio A., Becchio C., Fadiga L. (2018) Movement kinematics drive chain selection towards intention detection. **Proc Nat Acad Sci USA**, 115 (41), 10452-10457.

Tomassini A., D'Ausilio A. (2018) Passive sensorimotor stimulation triggers long lasting alpha-band fluctuations in visual perception. **J Neurophysiol**, 119(2), 380-388.

Cardellicchio P., Hilt P., Fadiga L., D'Ausilio A. (2018) Early inhibitory processes signals error detection in action observation: a paired TMS study. **Sci Rep**, 8, 1784.

Alessandro D'Ausilio
Ferrara, August 2023

A handwritten signature in black ink, appearing to read 'Alessandro D'Ausilio', written in a cursive style.