

Candidatura di Claudio Babiloni al Consiglio Direttivo della SIPF per il biennio 2023-2025

Cari Colleghi e Colleghe,

Sono uno Psicologo e, come Professore ordinario di Fisiologia, coordino le attività scientifiche di un gruppo di ricerca del Laboratorio di Neuroscienze delle Funzioni Superiori Umane, ubicato presso il Dipartimento di Fisiologia e Farmacologia "V. Erspamer" della Sapienza Università di Roma.

Lo studio delle basi psicofisiologiche della mente umana (vigilanza-coscienza e funzioni cognitive) è il centro di gravità del mio viaggio di 35 anni attraverso la scienza e la filosofia. Nel flusso di coscienza durante la veglia tranquilla, o nelle interazioni intense con il nostro ambiente fisico e sociale, percepiamo e reagiamo a ciò che accade riattivando selettivamente le memorie rappresentate nei circuiti del nostro cervello, in relazione alle varie circostanze.

Purtroppo, questa impronta cerebrale personale viene progressivamente cancellata durante vari disturbi cerebrali neurodegenerativi progressivi della terza età che portano a gravi deficit cognitivi e alla disabilità nelle attività della vita quotidiana (la demenza), tra cui la malattia di Alzheimer, di Parkinson e a corpi di Lewy. In queste malattie, non si verifica solo la compromissione di alcune memorie autobiografiche, ma si arriva all'alterazione della personalità e alla vera e propria cancellazione del sé, nei gradi finali della demenza. Da molti anni, studio i processi patopsicofisiologici delle suddette malattie, insieme ai miei collaboratori, usando principalmente l'EEG quantitativo, le neuroimmagini di risonanza magnetica e la valutazione delle loro prestazioni cognitive e del controllo del comportamento.

Nel passato biennio, ho svolto il mio servizio come Membro del Consiglio Direttivo della SIPFNC, cercando di mettere a frutto la mia suddetta esperienza neuroscientifica nella discussione collegiale sul programma del Congresso Annuale della SIPFNC e in altre iniziative societarie (webinar, etc.). Ho cercato anche, al mio meglio, di attrarre proposte di simposi e di presentazioni sul tema della psicofisiologia dei deficit cognitivi e delle demenze negli eventi SIPFNC, per far conoscere quanto si sta producendo a livello nazionale in questo campo di studio a me caro. Con lo stesso intento e maggiore esperienza, presento, oggi, la mia candidatura come Membro del Consiglio Direttivo della SIPFNC per il biennio 2023-2025, continuando, comunque vada, a rimanere tra voi, ad essere uno di voi.

A presto, Claudio Babiloni

Web: <https://web.uniroma1.it/dff/it/Laboratorio-di-Neuroscienze-delle-funzioni-superiori-dell-Uomo>

Canale YouTube: <https://www.youtube.com/channel/UCJF6bAQkFcPFt8vHcLRy9-Q>

Twitter: [@BabiloniClaudio](https://twitter.com/BabiloniClaudio)

PROFESSIONAL CV BY PROF. CLAUDIO BABILONI



Full Name: Claudio Babiloni

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Citizenship Italian

Job position Full Professor of Physiology

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Spoken Languages Italian (mother tongue), English

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Web: <https://web.uniroma1.it/dff/en>.

Web: <https://web.uniroma1.it/dff/it/Laboratorio-di-Neuroscienze-delle-funzioni-superiori-dell-Uomo>.

Web: www.pdwaves.eu.

CV was updated on September 8th, 2023.

PART I – SUMMARY OF THE ACHIEVEMENTS

Academic appointments

Received a *Ph.D. in Biomedical Sciences* (Aalborg University, Denmark) on June 1, 2001, and was appointed *Associate Professor in Physiology* on December 7, 2007, at the University of Foggia (Italy), served as *Associate Professor in Physiology* from December 27, 2012, to March 30, 2022, and as *Full Professor in Physiology* March 31, 2022, to date, at the Sapienza University of Rome (Italy).

Chief lecturing in Physiology

59 academic educational credits (CFU) of frontal lectures for Degree Courses at the University of Foggia (2008-2012) and **144** CFU at Sapienza University of Rome (2013-2023). **In total, 203 CFU.**

Main scientific interests

Investigate the brain rhythms underlying the regulation of vigilance/consciousness level and cognitive functions in aging. He is particularly interested in the abnormalities in that regulation in patients with the main progressive neurodegenerative diseases leading to cognitive deficits and dementia, such as Alzheimer's, Lewy body, and Parkinson's. The primary methods of this research are quantitative EEG and neuroimaging (mostly magnetic resonance imaging) techniques. He founded an international Consortium, The PDWAVES Consortium (www.pdwaves.eu), to promote that research line.

Institutional commitments at Sapienza University of Rome

Member of

- Faculty of Pharmacy and Medicine
- Council of the Department of Physiology and Pharmacology “Erspamer”
- Department Quality Team
- Department Ethical Committee
- Council of the Ph.D. Course in “Neurosciences and Psychiatry”
- Council of the Residency School in “Medicine of Sport and Physical Exercise”
- Team of European Civic University **CIVIS** (<https://civis.eu/it>) for Domain 15 “Neurophysiology, Neurosciences, and Neurodegenerative Disease.”

Organization, direction, and coordination of national and international research groups

Principal investigator

- 25 projects granted by Italian Sponsors for research for a total financing of 1,252,187 (one million-252,187) Euro.
- 8 projects granted by **International** Sponsors for research for a total financing of 2,043,141 (two million-043,141).
- Total national and international financing: 3, 295,328 (three million-295,328) Euro.

Co-founder and leader of the PDWAVES Consortium from 2014 for investigating abnormalities in neurophysiological mechanisms of quiet vigilance in patients suffering from Parkinson's, Lewy Body, and Alzheimer's diseases by advanced EEG techniques (www.pdwaves.eu/). The Consortium includes 13 Scientific Institutions based in Italy (IRCCS, Academia), Switzerland, Hungary, Austria, and Turkey.

Former scientific tutor (Ph.D. and/or post-doc) of excellent neuroscientists

- Prof. Claudio Del Percio (Associate Professor in Physiology at the Sapienza University of Rome);
- Prof. Fabrizio Vecchio (Associate Professor in Physiology at the eCAMPUS UNICO, Brescia, Italy);
- Prof. Alfredo Brancucci (Associate Professor in Physiology at the University of Chieti "D'Annunzio", Italy);
- Prof. Paolo Capotosto (Associate Professor in Bioengineering at the University of Chieti "D'Annunzio", Italy);
- Dr Roberta Lizio (Assistant Professor in Physiology at the Sapienza University of Rome, Italy).

Editorial Board of international scientific journals

Regular Editorial Board Member of NeuroImage (3 years), Clinical Neurophysiology (6 years), Current Alzheimer's Research (5 years), and Journal of Alzheimer's Disease (10 years, five of which as Senior Editor). On-demand reviewer for many neuroscientific journals.

International prizes, appointments, and ranks

2006 **Prix Lèon et Henri Fredericq** (Classes de Sciences), received by Académie Royale (des Sciences, des Lettres ex des Beaux-Arts) de Belgique (Degree Diploma).

2013 **Award of Honor** received by the Scientific Committee of the "Second International Conference on Basic and Applied Physiology" held in SMS Medical College, Jaipur, India, on December 21 and 22, 2013.

October 22, 2019 (nowadays, there is a fee of 40 Euro to pay). Ranked as Italian "top 36" for **Neurosciences and Psychology** by **Top Italian Scientists** via Academy pages at <https://topitalianscientists.org/top-italian-scientists/Claudio%20Babiloni>.

October 26, 2021. Ranked as World's "top 7" expertise for **Electroencephalography** at <https://expertscape.com/ex/electroencephalography> by **ExpertScape** Rating Company <https://expertscape.com/>.

Officer in neuroscientific societies and organizing roles

Member of

- Italian Society of Psychophysiology (SIPF) Steering Committee as **Officer** in 2002-2005 and 2022-2023, **Auditor** in 2008-2009 <http://www.sipf.it/Direttivi-Precedenti>.
- The Alzheimer's Association International Society to Advance Alzheimer's Research and Treatment (ISTAART) - Electrophysiology Professional Interest Area (E-PIA) Steering Committee as **Communication Chair** in 2017-2019, **Chair** in 2019-2021, and **Immediately Past Chair** in 2021-2023. Member of the ISTAART Advisory Board 2022-2024.
- Working group of the International Federation of Clinical Neurophysiology (IFCN) for promoting "IFCN Guidelines on EEG" as **Senior Co-Leader** <http://www.ifcn.info/sigs/sig-functional-brain-connectivity-as-revealed-by-eeg-meg/> from 2018 to date.
- Global Brain Consortium Steering Committee as **Co-leader** of the Workgroup on "International Clinical Care Translation using EEG" from 2019 to date <https://globalbrainconsortium.org/>.

Member of organizing committees for

- SIPF Congresses in 2002-2005 and 2009 (<http://www.sipf.it/Archivio-Congressi>).
- E-PIA Day Scientific Sessions in 2017 (London), 2018 (Chicago), 2019 (Los Angeles), 2020 (virtual), and 2021 (virtual).

- Meeting entitled “International Federation of Clinical Neurophysiology Guidelines on the Frequency and Topographical Analysis of Resting State EEG: The Controversies” in 2017 (Chengdu, China) <http://dff.uniroma1.it/it/node/6125>.
- Meeting entitled “Rome Training Meeting” for European Marie S. Curie ITN-ETN H2020 project “BBDiag” in 2018 (Rome, Italy) <https://web.uniroma1.it/dff/it/dff/ricerca/blood-biomarker-based-diagnostic-tools-early-stage-ad>.
- 17th European Congress of Clinical Neurophysiology (ECCN) in 2019 (Warsaw, Poland) <http://eccn2019.com/committees/>.
- 5th International Congress of Basic and Clinical Multimodal Imaging (BaCI2021) in 2021 (Virtual) <https://baci-conference2021.com/>.
- Session Chair of Scientific Symposium organized by Electrophysiology Professional Interest Area and Neuromodulatory Subcortical System Professional Interest Areas (ISTAART), May 4, 2021 (virtual).
- Organizer and Session Chair in the Meeting of Electrophysiology Professional Interest Area (ISTAART) and Latin American Dementia Network, scheduled on October 30 and il 31, 2021 virtual <https://twitter.com/AgustinMilbanez/status/1448346412345970690>.

Role in editorial initiatives by scientific societies

- Working group of International Federation of Clinical Neurophysiology (IFCN) for promoting “IFCN Guidelines on EEG” as **Senior Co-Leader** <https://www.sciencedirect.com/science/article/pii/S1388245719311642> from 2018 to date.
- Working group of European Societies of Clinical Neurosciences for writing the paper entitled "Clinical Practice Guideline Protocol: Recommendations for the Biomarker-Based Diagnosis of Dementia. A European Inter-Societal Delphi Consensus" (Principal Author: Prof. Giovanni Frisoni, University of Geneva, Switzerland).
- Working group of IFCN and International League Against Epilepsy (ILAE <https://www.ilae.org/>) for writing the paper entitled "Source imaging of scalp EEG signals in the presurgical evaluation of patients with drug-resistant focal epilepsy” (Principal Author: Dr. Stefan Rampp, University Hospital in Erlangen, Germany).
- Working group of Network of European funding for Neuroscience research (NEURON), Joint Programme Neurodegenerative Disease Research (JPND), and Human Brain Project (HBP) for producing the Shared European Brain Research Agenda (SEBRA) for the European H2021-2027 Program.

Invited as chairman or speaker in neuroscientific conferences

- > **70** times in **national** scientific conferences.
- > **130** times in **international** scientific conferences.

Temporal continuity of the scientific production over more than 20 years “1991-2020” as an example of my scientific productivity

| | | |
|---|-------------|--------|
| Total papers (1991-2020) | Scopus | 338 |
| Total papers (1991-2020) | PubMed | 295 |
| Total Impact factor (1991-2020) | ISI | 1,218 |
| Mean Impact factor (1991-2020) | ISI | 4.1 |
| Total citations (1991-2020) | Scopus | 13,680 |
| Mean citations (1991-2020) | Scopus | 40.5 |
| H index 2021 | Scopus | 67 |
| H index 2021 | Google Sch. | 84 |
| Papers with IF | | 295 |
| Papers with IF authored as First or Last Author | | 156 |
| Papers with IF based on original experiments | | 264 |
| Papers with IF based on reviews | | 31 |
| | | |
| Total papers last 10 years (2011-2020) | Scopus | 145 |
| Total papers last 10 years (2011-2020) | PubMed | 130 |
| Total Impact factor last 10 years (2011-2020) | ISI | 597 |
| Mean Impact factor last 10 years (2011-2020) | ISI | 4.6 |
| Total citations last 10 years (2011-2020) | Scopus | 3,206 |
| Mean citations last 10 years (2011-2020) | Scopus | 22 |
| Papers with IF (2011-2020) | | 130 |
| Papers with IF authored as First or Last Author (2011-2020) | | 74 |
| Papers with IF based on original experiments (2011-2020) | | 107 |
| Papers with IF based on reviews (2011-2020) | | 23 |

Updates about scientific productivity on September 8, 2023 (Scopus Source)

Metrics overview

Scopus: 384 documents; 16,647 citations in 10,206 documents, H index of 72.