UNIVERSITÀ DEGLI STUDI DI MILANO

TO MAGNIFICO RETTORE OF UNIVERSITA' DEGLI STUDI DI MILANO **ID CODE ___4593_____**

I the undersigned asks to participate in the public selection, for qualifications and examinations, for the awarding of a type B fellowship at **Dipartimento di _____ Scienze Biomediche e Cliniche 'Luigi Sacco'_____**

Scientist- in – charge: _____ Prof. Mario Carmine Emiliano Rosanova _____

MICHELE COLOMBO

CURRICULUM VITAE

PERSONAL INFORMATION

Surname	COLOMBO
Name	MICHELE
Date of birth	22,11,1988

PRESENT OCCUPATION

Appointment	Structure
PostDoc researcher	Dept. Scienze Biomediche e Cliniche 'Luigi Sacco', via G. B. Grassi 74, 20157 Milano

EDUCATION AND TRAINING

Degree	Course of studies	University	year of achievement
Bachelor Degree	**Scientific Psychology**, cognitive-psychometric curriculum. Grade: **110/110**	**Università Vita-Salute San Raffaele**	2010
Erasmus exchange	Faculdad de Psicologia, 66 credits, Exams Grade Point Average: 8.8 /10	**Universidad Autonoma de Madrid**	2009
Master of Science	**Research Master in Neuroscience and Cognition**; Cognitive Neuroscience Track	**Utrecht University**	2014
PhD	**Erasmus Mundi Joint PhD**, Neurotime program, across three universities. Research area: Medical/Neuroscience: Thesis: ''Insomnia Disorder and Endogenous Neurophysiological Dynamics'' **Cum laude**	**Amsterdam, UvA** (prof. Eus van Someren, prof. Andries Kalsbeek) **Basel, Unibas**: (prof. Dominique de Quervain, prof. Christian Cajochen) **Freiburg, ALUF** (prof. Ad Aertsen)	2018

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FOREIGN LANGUAGES

Languages	level of knowledge
English	fluent
Spanish	fluent
Dutch	basic

AWARDS, ACKNOWLEDGEMENTS, SCHOLARSHIPS

Year	Description
2019	**Top 10 most downloaded open access *NeuroImage* articles in 2019,** 2,503 downloads as per 29/1/2020, for: Colombo et al., 2019
2018-2019	**Grant for PostDoc postion,** from private foundation Fondazione Confalonieri**,** via Vincenzo Monti, 25 -20123 Milano
2017-2018	Regional Grant GR-2011-02352031 Project: '*Measures and mechanisms of recovery of consciousness in severely brain-injured patients: a longitudinal multimodal study*'; collaboration with the Neuroreanimation unit from Niguarda Hospital, Milan;
2013-2017	Erasmus Mundi Neurotime grant 520124-1-2011-1-FR-ERA: '*Individual differences in the spatiotemporal profile of brain activity during wake and sleep*'.

TRAINING OR RESEARCH ACTIVITY

Research Assistant @ Neural Oscillation & Cognition, Centre for Neurogenomic & Cognitive Research, Vrije Universiteit Amsterdam, with Dr. Klaus Linkenkaer-Hansen, 2013

PROJECT ACTIVITY

Year	Project
2017-2020	**EEG signal processing for event-related and ongoing spontaneous activity, related to recovery from loss of consciousness** (physiological, pharmacological and clinical disorders). • **time-series analysis**: signal processing (power spectral analysis, entropy indexes, multi-fractal indexes, cross-talk indexes, network analysis with graph-theory indexes) and signal pre-processing (automatic procedures for artifact detection and artifact removal via blind source separation). • **Statistics**: parametric and non-parametric ANOVA models, permutation procedures for mass-univariate tests (cluster and threshold-free cluster enhancement), resampling procedures for machine-learning tools. Analysis through Matlab toolboxes and R.
2013-2017	**Resting-state EEG individual differences in sleep complaints and insomnia disorder**. Time-series analysis through Matlab inbuilt toolboxes (signal processing, statistics) and EEG-specific toolboxes (fieldtrip, EEGlab, MEEGpipe), R and Python.
2012-2013	**EEG biofeedback design and implementation**. Software design and implementation: 3 mutually connected programs via TCP ports: BCI200 (data collection and real-time management), Matlab (EEG feature extraction) and MAX/MSP (sound modulations). Real-time feature extraction from EEG for brain computer interfaces (P300 speller) and biofeedback (music fading away with cortical arousal)

2011	**EEG during cross-modal interference task**. Assess bidirectional influences between speech and color processing in synesthesia, acquiring reaction-time and EEG. Use of Matlab and PsychToolBox for stimuli presentation.

SELECTED CONGRESSES

Date	Title	Place
6-7 June, 2019	Using EEG to Identify Conscious Experience Under Anesthesia, **talk**, available online	EEG analytical approached and applications, Virtual Symposium, from Sapien Lab
25-28 September 2018	The Scaling Exponent of the Power Spectrum of the Resting-EEG Indexes the Level of Consciousness during Anesthesia and Sleep, poster	European Sleep Research Society, Basel, Switzerland
26-29 June 2018	Consciousness and spectral features in anesthesia and sleep, **talk**	Sleep-dreams session @Association for Scientific Study of Consciousness, Krakow, Poland
31 October- 3 November 2015	Electroencephalographic spatiospectral Signatures of Insomnia, poster	World Sleep Congress, Istanbul, Turkey
16-20 September 2014	Power Spectral Analysis in Insomnia, poster	European Sleep Research Society conference, Tallinn, Estonia
29-31 May 2012	Towards a sleep biofeedback protocol: comparison of EEG biomarkers, poster	Dutch EndoNeuroPsycho meeting, Lunteren, The Netherlands
12-13 April 2011	Cross-modal interference in grapheme color synesthesia: EEG recording during fast recognition of spoken graphemes and visual color, poster	Mind the Brain, UMC Utrecht, the Netherlands

PUBLICATIONS

Peer reviewed Scientific Articles	Citations	year
Colombo, M. A., Napolitani, M., Boly, M., Gosseries, O., Casarotto, S., Rosanova, M., ... & Massimini, M. (2019). The spectral exponent of the resting EEG indexes the presence of consciousness during unresponsiveness induced by propofol, xenon, and ketamine. ***Neuroimage***, *189*, 631-644.	17	2019
Colombo, M. A., Ramautar, J. R., Wei, Y., Gomez-Herrero, G., Stoffers, D., Wassing, R., ... & Van Someren, E. J. (2016). Wake high-density electroencephalographic spatiospectral signatures of insomnia. ***Sleep***, *39*(5), 1015-1027.	27	2016
Colombo, M. A., Wei, Y., Ramautar, J. R., Linkenkaer-Hansen, K., Tagliazucchi, E., & Van Someren, E. J. (2016). More severe insomnia complaints in people with stronger long-range temporal correlations in wake resting-state EEG. ***Frontiers in physiology***, *7*, 576.	13	2016
Wei, Y., **Colombo, M. A.**, Ramautar, J. R., Blanken, T. F., Van Der Werf, Y. D., Spiegelhalder, K., ... & Van Someren, E. J. (2017). Sleep stage transition dynamics reveal specific stage 2 vulnerability in insomnia. ***Sleep***, *40*(9). (Co-first author)	17	2017
Wei, Y., Ramautar, J. R., **Colombo, M. A.**, Te Lindert, B. H., & Van Someren, E. J. (2018). EEG microstates indicate heightened somatic awareness in insomnia:	8	2018

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Toward objective assessment of subjective mental content. ***Frontiers in psychiatry***, *9*, 395.		
Wei, Y., Ramautar, J. R., **Colombo, M. A.**, Stoffers, D., Gómez-Herrero, G., Van Der Meijden, W. P., ... & Van Someren, E. J. (2016). I keep a close watch on this heart of mine: increased interoception in insomnia. ***Sleep***, *39*(12), 2113-2124.	31	2016

OTHER INFORMATION

Research Gate profile: https://www.researchgate.net/profile/Michele_Colombo2
Google Scholar profile: https://scholar.google.com/citations?user=O8uktnAAAAAJ&hl=en
Citations: 113 h-index: 6 i-10-index: 5

Declarations given in the present curriculum must be considered released according to art. 46 and 47 of DPR n. 445/2000.

The present curriculum does not contain confidential and legal information according to art. 4, paragraph 1, points d) and e) of D.Lgs. 30.06.2003 n. 196.

Place and date: ___Milano_____, ____8/6/2020_____

SIGNATURE

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