Luca Cecchetti

Data di nascita: [redacted] | Nazionalità [redacted] | Sesso: [redacted] |
[redacted] | [redacted] |
[redacted] |
[redacted]

ESPERIENZA LAVORATIVA

20/12/2016 – ATTUALE – Lucca, Italia

RICERCATORE UNIVERSITARIO – Scuola IMT Alti Studi Lucca

Ricercatore a tempo determinato (RTDa) in Psicologia Generale (M-PSI/01)

03/03/2020 – ATTUALE – Pisa, Italia

DOCENTE UNIVERSITARIO A CONTRATTO – Università di Pisa

Docente a contratto del corso di Laurea specialistica in Psicologia Clinica e della Salute per l'insegnamento di Psicofisiologia Applicata (M-PSI/02)

10/12/2018 – 21/01/2019 – Pisa, Italia

DOCENTE UNIVERSITARIO A CONTRATTO – Università di Pisa

Docente a contratto del corso di Laurea triennale in Scienze e Tecniche di Psicologia Clinica e della Salute per l'insegnamento di Principi e Metodi di Valutazione Psicofisiologica (M-PSI/02)

03/03/2015 – 03/09/2016 – Pisa, Italia

BORSISTA DI RICERCA – Azienda Ospedaliera Universitaria Pisana

Borsista di Ricerca presso la U.O. di Psicologia Clinica dell'Azienda Ospedaliera Universitaria Pisana

13/06/2016 – 17/06/2016 – Milano, Italia

DOCENTE SUMMER SCHOOL – Università Cattolica del Sacro Cuore

Docente per la seconda edizione della Summer School: "Integrazione di metodi e tecniche per la ricerca, la clinica e la riabilitazione in psicofisiologia e neuroscienze"

22/06/2015 – 26/06/2015 – Milano, Italia

DOCENTE SUMMER SCHOOL – Università Cattolica del Sacro Cuore

Docente per la prima edizione della Summer School: "Integrazione di metodi e tecniche per la ricerca, la clinica e la riabilitazione in psicofisiologia e neuroscienze"

15/03/2011 – 14/09/2011 – Calambrone (PI), Italia

TIROCINANTE – IRCCS Fondazione Stella Maris

Tirocinio di sei mesi presso il Dipartimento Clinico di Neuroscienze dell'Età Evolutiva - IRCCS Fondazione Stella Maris. Tutor: Prof.ssa Chiara Pecini

15/09/2010 – 14/03/2011 – Volterra (PI), Italia

TIROCINANTE – Auxilium Vitae Volterra SpA

Tirocinio di sei mesi presso la U.O. di Riabilitazione Neurologica e Gravi Cerebrolesioni Acquisite. Tutor: Prof. Francesco Tomaiuolo

ISTRUZIONE E FORMAZIONE

01/11/2011 – 15/02/2016 – Lungarno Pacinotti, 43, Pisa, Italia

Dottorato di Ricerca in Esplorazione Molecolare, Metabolica e Funzionale del Sistema Nervoso – Università di Pisa

01/11/2007 – 05/07/2010 – Piazza San Marco, 4, Firenze, Italia

Laurea Specialistica in Psicologia Sperimentale – Università degli Studi di Firenze

01/11/2003 – 29/11/2007 – Piazza San Marco, 4, Firenze, Italia

Laurea Triennale in Scienze e Tecniche di Psicologia Generale e Sperimentale – Universit à degli Studi di Firenze

COMPETENZE LINGUISTICHE

Lingua madre: **ITALIANO**

	COMPRENSIONE		ESPRESSIONE ORALE		SCRITTURA
	Ascolto	Lettura	Produzione orale	Interazione orale	
INGLESE	C2	C2	C2	C2	C2

Livelli: A1 e A2: Livello elementare B1 e B2: Livello intermedio C1 e C2: Livello avanzato

COMPETENZE DIGITALI

MATLAB | AFNI | FSL | Freesurfer | SPM | ANTs | JavaScript | HTML | CSS | Psychtoo lbox | Bash

- **PUBBLICAZIONI**

Optimal encoding of interval timing in expert percussionists

10.1523/JNEUROSCI.3411-11.2012
https://www.jneurosci.org/content/32/3/1056.short – 2012
Cicchini, G. M., Arrighi, R., Cecchetti, L., Giusti, M., & Burr, D. C. (2012). Optimal encoding of interval timing in expert percussionists. *Journal of Neuroscience*, *32*(3), 1056-1060.

Memory and anatomical change in severe non missile traumatic brain injury: ~1 vs.~8 years follow-up

10.1016/j.brainresbull.2012.01.008
https://www.sciencedirect.com/science/article/abs/pii/S0361923012000093 – 2012
Tomaiuolo, F., Bivona, U., Lerch, J. P., Di Paola, M., Carlesimo, G. A., Ciurli, P., ... & Azicnuda, E. (2012). Memory and anatomical change in severe non missile traumatic brain injury:~ 1 vs.~ 8 years follow-up. *Brain research bulletin*, *87*(4-5), 373-382.

It's not all in your car: functional and structural correlates of exceptional driving skills in pro

10.3389/fnhum.2014.00888
https://www.frontiersin.org/articles/10.3389/fnhum.2014.00888/full – 2014
Bernardi, G., Cecchetti, L., Handjaras, G., Sani, L., Gaglianese, A., Ceccarelli, R., ... & Ricciardi, E. (2014). It's not all in your car: functional and structural correlates of exceptional driving skills in professional racers. *Frontiers in human neuroscience*, *8*, 888.

Congenital blindness affects diencephalic but not mesencephalic structures in the human brain

10.1007/s00429-014-0984-5
https://link.springer.com/article/10.1007/s00429-014-0984-5 – 2016
Cecchetti, L., Ricciardi, E., Handjaras, G., Kupers, R., Ptito, M., & Pietrini, P. (2016). Congenital blindness affects diencephalic but not mesencephalic structures in the human brain. *Brain Structure and Function*, *221*(3), 1465-1480.

Sleep reverts changes in human gray and white matter caused by wake-dependent training

10.1016/j.neuroimage.2016.01.020
https://www.sciencedirect.com/science/article/pii/S1053811916000264 – 2016
Bernardi, G., Cecchetti, L., Siclari, F., Buchmann, A., Yu, X., Handjaras, G., ... & Alexander, A. L. (2016). Sleep reverts changes in human gray and white matter caused by wake-dependent training. *Neuroimage*, *129*, 367-377.

Progression from vegetative to minimally conscious state is associated with changes in brain neural

10.1017/S1355617716000485
https://www.cambridge.org/core/journals/journal-of-the-international-neuropsychological-society/article/progression-from-vegetative-to-minimally-conscious-state-is-associated-with-changes-in-brain-neural-response-to-passive-tasks-a-longitudinal-singlecase-functional-mri-study/D9C110429D15C7EB954FBA983864668A – 2016
Tomaiuolo, F., Cecchetti, L., Gibson, R. M., Logi, F., Owen, A. M., Malasoma, F., ... & Ricciardi, E. (2016). Progression from Vegetative to Minimally Conscious State Is Associated with Changes in Brain Neural Response to Passive Tasks: A Longitudinal Single-Case Functional MRI Study. *Journal of the International Neuropsychological Society*, *22*(6), 620-630.

How concepts are encoded in the human brain: a modality independent, category-based cortical organi

10.1016/j.neuroimage.2016.04.063
https://www.sciencedirect.com/science/article/pii/S1053811916301021 – 2016
Handjaras, G., Ricciardi, E., Leo, A., Lenci, A., Cecchetti, L., Cosottini, M., ... & Pietrini, P. (2016). How concepts are encoded in the human brain: a modality independent, category-based cortical organization of semantic knowledge. *Neuroimage*, *135*, 232-242.

Are supramodality and cross-modal plasticity the yin and yang of brain development? From blindness

10.3389/fnsys.2016.00089
https://www.frontiersin.org/articles/10.3389/fnsys.2016.00089/full – 2016
Cecchetti, L., Kupers, R., Ptito, M., Pietrini, P., & Ricciardi, E. (2016). Are supramodality and cross-modal plasticity the yin and yang of brain development? From blindness to rehabilitation. *Frontiers in Systems Neuroscience*, *10*, 89.

Randomized trial on the effects of a combined physical/cognitive training in aged MCI subjects: the

10.1038/srep39471
https://www.nature.com/articles/srep39471 – 2017
Train the Brain Consortium. (2017). Randomized trial on the effects of a combined physical/cognitive training in aged MCI subjects: the Train the Brain study. *Scientific Reports*, *7*.

Modality-independent encoding of individual concepts in the left parietal cortex

10.1016/j.neuropsychologia.2017.05.001
https://www.sciencedirect.com/science/article/pii/S0028393217301677 – 2017
Handjaras, G., Leo, A., Cecchetti, L., Papale, P., Lenci, A., Marotta, G., ... & Ricciardi, E. (2017). Modality-independent encoding of individual concepts in the left parietal cortex. *Neuropsychologia*, *105*, 39-49.

Functional and spatial segregation within the inferior frontal and superior temporal cortices durin

10.1038/s41598-017-17314-0
https://www.nature.com/articles/s41598-017-17314-0 – 2017
Rampinini, A. C., Handjaras, G., Leo, A., Cecchetti, L., Ricciardi, E., Marotta, G., & Pietrini, P. (2017). Functional and spatial segregation within the inferior frontal and superior temporal cortices during listening, articulation imagery, and production of vowels. *Scientific reports*, *7*(1), 1-13.

Different levels of visual perceptual skills are associated with specific modifications in function

10.1016/j.ijpsycho.2017.10.002
https://www.sciencedirect.com/science/article/pii/S016787601730288X – 2018
Danti, S., Handjaras, G., Cecchetti, L., Beuzeron-Mangina, H., Pietrini, P., & Ricciardi, E. (2018). Different levels of visual perceptual skills are associated with specific modifications in functional connectivity and global efficiency. *International Journal of Psychophysiology*, *123*, 127-135.

Foreground-background segmentation revealed during natural image viewing

10.1523/ENEURO.0075-18.2018
https://www.eneuro.org/content/5/3/ENEURO.0075-18.2018?rss=1&utm_source=TrendMD&utm_medium=cpc&utm_campaign=eNeuro_TrendMD_1 – 2018
Papale, P., Leo, A., Cecchetti, L., Handjaras, G., Kay, K. N., Pietrini, P., & Ricciardi, E. (2018). Foreground-Background Segmentation Revealed during Natural Image Viewing. *eNeuro*, *5*(3).

Vascular Function Is Improved After an Environmental Enrichment Program: The Train the Brain–mind t

10.1161/HYPERTENSIONAHA.117.10066
https://www.ahajournals.org/doi/full/10.1161/hypertensionaha.117.10066 – 2018
Bruno, R. M., Stea, F., Sicari, R., Ghiadoni, L., Taddei, S., Ungar, A., ... & Sbrana, S. (2018). Vascular Function Is Improved After an Environmental Enrichment Program: The Train the Brain–Mind the Vessel Study. *Hypertension*, *71*(6), 1218-1225.

Eight Weddings and Six Funerals: An fMRI Study on Autobiographical Memories

10.3389/fnbeh.2018.00212
https://www.frontiersin.org/articles/10.3389/fnbeh.2018.00212/full – 2018
Benuzzi, F., Ballotta, D., Handjaras, G., Leo, A., Papale, P., Zucchelli, M., ... & Sartori, G. (2018). Eight Weddings and Six Funerals: An fMRI Study on Autobiographical Memories. *Frontiers in behavioral neuroscience*, *12*, 212.

Predictive value of EEG connectivity measures for motor training outcome in multiple sclerosis: an

10.23736/S1973-9087.18.05414-X
https://www.minervamedica.it/en/journals/europa-medicophysica/article.php?cod=R33Y2019N06A0743 – 2018
Tramonti, C., Imperatori, L. S., Fanciullacci, C., Lamola, G., Lettieri, G., Bernardi, G., ... & Chisari, C. (2018). Predictive value of EEG connectivity measures for motor training outcome in multiple sclerosis: an observational longitudinal study. *European journal of physical and rehabilitation medicine, 55(6):743-53*.

To move or not to move? Functional role of ventral Premotor cortex in motor monitoring during limb

10.1093/cercor/bhy134
https://academic.oup.com/cercor/article/29/1/273/5035448 – 2019
Garbarini, F., Cecchetti, L., Bruno, V., Mastropasqua, A., Fossataro, C., Massazza, G., ... & Berti, A. (2019). To move or not to move? Functional role of ventral premotor cortex in motor monitoring during limb immobilization. *Cerebral Cortex*, *29*(1), 273-282.

A case of carbon monoxide-induced delayed neurological Sequelae successfully treated with hyperbari

10.1155/2019/9360542
https://www.hindawi.com/journals/crinm/2019/9360542/ – 2019
Spina, V., Tomaiuolo, F., Celli, L., Bonfiglio, L., Cecchetti, L., & Carboncini, M. C. (2019). A case of carbon monoxide-induced delayed neurological Sequelae successfully treated with hyperbaric oxygen therapy, N-acetylcysteine, and glucocorticoids: clinical and neuroimaging follow-up. *Case Reports in Neurological Medicine*, *2019*.

Brain Hemodynamic Intermediate Phenotype Links Vitamin B12 to Cognitive Profile of Healthy and Mild

10.1155/2019/6874805
https://www.hindawi.com/journals/np/2019/6874805/ – 2019
Cecchetti, L., Lettieri, G., Handjaras, G., Leo, A., Ricciardi, E., Pietrini, P., ... & Train the Brain Consortium. (2019). Brain Hemodynamic Intermediate Phenotype Links Vitamin B12 to Cognitive Profile of Healthy and Mild Cognitive Impaired Subjects. *Neural plasticity*, *2019*.

Quantitative Susceptibility Mapping of Brain Function During Auditory Stimulation

10.1109/TRPMS.2019.2894262
https://ieeexplore.ieee.org/abstract/document/8620360 – 2019
Costagli, M., Lancione, M., Cecchetti, L., Pietrini, P., Cosottini, M., Ricciardi, E., & Tosetti, M. (2019). Quantitative Susceptibility Mapping of Brain Function During Auditory Stimulation. *IE EE Transactions on Radiation and Plasma Medical Sciences*, *3*(4), 516-522.

Formant Space Reconstruction From Brain Activity in Frontal and Temporal Regions Coding for Heard V

10.3389/fnhum.2019.00032
https://www.frontiersin.org/articles/10.3389/fnhum.2019.00032/full – 2019
Rampinini, A. C., Handjaras, G., Leo, A., Cecchetti, L., Betta, M., Marotta, G., ... & Pietrini, P. (2019). Formant Space Reconstruction From Brain Activity in Frontal and Temporal Regions Coding for Heard Vowels. *Frontiers in human neuroscience*, *13*, 32.

ROI and phobias: The effect of ROI approach on an ALE meta-analysis of specific phobias

10.1002/hbm.24492
https://onlinelibrary.wiley.com/doi/full/10.1002/hbm.24492 – 2019
Gentili, C., Messerotti Benvenuti, S., Lettieri, G., Costa, C., & Cecchetti, L. (2019). ROI and phobias: The effect of ROI approach on an ALE meta-analysis of specific phobias. *Human brain mapping*, *40*(6), 1814-1828.

Common spatiotemporal processing of visual features shapes object representation

10.1038/s41598-019-43956-3
https://www.nature.com/articles/s41598-019-43956-3
Papale, P., Betta, M., Handjaras, G., Malfatti, G., Cecchetti, L., Rampinini, A., ... & Leo, A. (2019). Common spatiotemporal processing of visual features shapes object representation. *Scientific reports*, *9*(1), 1-8.

EEG functional connectivity metrics wPLI and wSMI account for distinct types of brain functional in

10.1038/s41598-019-45289-7
https://www.nature.com/articles/s41598-019-45289-7 – 2019
Imperatori, L. S., Betta, M., Cecchetti, L., Canales-Johnson, A., Ricciardi, E., Siclari, F., ... & Bernardi, G. (2019). EEG functional connectivity metrics wPLI and wSMI account for distinct types of brain functional interactions. *Scientific reports*, *9*(1), 1-15.

Concomitant recovery from left spatial neglect and inflammatory dysfunction of white-matter pathway

10.1016/j.cortex.2019.04.018
https://www.sciencedirect.com/science/article/pii/S0010945219301868 – 2019
Tomaiuolo, F., Campana, S., Cecchetti, L., Galli, R., Zucco, G. M., Lasaponara, S., & Doricchi, F. (2019). Concomitant recovery from left spatial neglect and inflammatory dysfunction of white-matter pathways in a case of acute disseminated encephalo-myelitis (ADEM). *Cortex*, *1 19*, 231-236.

Emotionotopy in the human right temporo-parietal cortex

10.1038/s41467-019-13599-z
https://www.nature.com/articles/s41467-019-13599-z – 2019
Lettieri, G., Handjaras, G., Ricciardi, E., Leo, A., Papale, P., Betta, M., ... & Cecchetti, L. (2019). Emotionotopy in the human right temporo-parietal cortex. *Nature communications*, *1 0*(1), 1-13.

Reductions in perceived stress following Transcendental Meditation practice are associated with inc

10.1016/j.bandc.2020.105517
https://www.sciencedirect.com/science/article/pii/S0278262619304786 – 2020
Avvenuti, G., Leo, A., Cecchetti, L., Franco, M. F., Travis, F., Caramella, D., ... & Pietrini, P. (2020). Reductions in perceived stress following Transcendental Meditation practice are associated with increased brain regional connectivity at rest. *Brain and Cognition*, *139*, 105517.

Variability in the analysis of a single neuroimaging dataset by many teams

10.1038/s41586-020-2314-9
https://www.nature.com/articles/s41586-020-2314-9 – 2020
Botvinik-Nezer, R., Holzmeister, F., Camerer, C. F., Dreber, A., Huber, J., Johannesson, M., ... & Avesani, P. (2020). Variability in the analysis of a single neuroimaging dataset by many teams. *Nature*, 1-7.

ONORIFICENZE E RICONOSCIMENTI

10/06/2019
OHBM Merit Award – Organization for Human Brain Mapping

25th Annual meeting of the Organization for Human Brain Mapping - OHBM (Rome, Italy). Abstract title: "Emotional experience timecourse
explains brain connectivity dynamics during naturalistic stimulation". - Last Author

02/05/2019
Best Poster Award – Social and Affective Neuroscience Society

12th Annual meeting of the Social and Affective Neuroscience Society - SANS (Miami - FL, US). Abstract title: "Emotionotopy: gradients encode emotion dimensions in right temporo-parietal territories". - Last Author

15/11/2018
Best Scientific Contribution – Italian Society of Psychophysiology and Cognitive Neuroscience

26th annual meeting of the Italian Society of Psychophysiology and Cognitive Neuroscience - SIPF (Turin, Italy). Abstract title: "Perceived emotional experience explains brain activity elicited by an emotionally-charged movie". - Last Author

06/04/2017
Best Abstract Award – Italian Society for Neurological Rehabilitation

17th Congress of the Italian Society for Neurological Rehabilitation - SIRN (Pisa, Italy). Abstract title: "Valore prognostico di alcuni indici neuroradiologici di danno cerebrale negli esiti di trauma cranico severo, correlazione con l'outcome". - Co-Author

05/05/2016

Abstract Award – CAOS Organizing Committee

10th Concepts, Actions and Objects Workshop, Rovereto (Trento, Italy). Abstract title: "The functional role of ventral premotor cortex in motor monitoring: an fMRI study during movement execution and mechanic limb immobilization". - Co-Author

PROGETTI

21/01/2019 – ATTUALE

Chain the Brain: the Endophenotype of Serotonin Dysfunction in Violent Offenders and Psychopaths

Finanziamento dei Programmi di Attività Integrata (PAI) - Junior 2018.
Bando per il finanziamento su base competitiva di progetti per ricercatori RTDa e RTDb della Scuola IMT Alti Studi Lucca
Titolo: "Chain the Brain: the Endophenotype of Serotonin Dysfunction in Violent Offenders and Psychopaths" (Miglior progetto PAI Junior)
Ruolo: Principal Investigator
Finanziamento ottenuto: € 35,000

26/05/2020 – ATTUALE

Rehabilitation and Polymorphisms in Regione Toscana (REPORT)

Bando Ricerca Salute 2018.
Bando per il finanziamento di progetti di ricerca e sviluppo per il sostegno ai processi di innovazione clinica e organizzativa del Sistema Sanitario Regionale
Titolo: "Rehabilitation and Polymorphisms in Regione Toscana" (REPORT)
Ruolo: Responsabile Scientifico di Unità Partner
Finanziamento ottenuto: € 588,400 / Finanziamento Unità Partner: € 70,400

CONFERENZE E SEMINARI

14/11/2019 – 14/11/2019 – Ferrara

Decoding brain activity: classification accuracy and related issues

Satellite Workshop of the 27th Annual Conference of the Italian Society of Psychophysiology and Cognitive Neuroscience
Ruolo: Speaker

08/09/2018 – 08/09/2018 – Lucca

Disorders of Consciousness: New insights on clinical evaluation and neural correlates

19th World Congress of Psychophysiology
Ruolo: Speaker e Organizzatore del Simposio

13/03/2018 – 13/03/2018 – Lucca

Le potenzialità del cervello nell'adolescente: un acceleratore senza freni

Brain Awareness Week
Ruolo: Speaker

15/11/2017 – 15/11/2017 – Roma

Brain training and brain biomarkers: powerful tools in the quest for healthy ageing

25th National Congress of the Italian Society of Psychophysiology
Ruolo: Speaker

29/09/2017 – 29/09/2017 – Volterra (PI)

Utilizzo della risonanza magnetica funzionale per coadiuvare la diagnosi nei disordini di coscienza

Workshop: Protocolli clinici e neurofisiologici di valutazione dei pazienti con disordine della coscienza
Ruolo: Speaker

16/09/2016 – 16/09/2016 – Roma

Approaching diagnosis in disorders of consciousness: the contribution of a longitudinal single-case

28th National Congress of Clinical and Dynamic Psychology
Ruolo: Speaker

19/11/2015 – 19/11/2015 – Lucca

How lack of vision shapes the morphological architecture of the human brain

23rd National Congress of the Italian Society of Psychophysiology
Ruolo: Speaker

18/11/2015 – 18/11/2015 – Lucca

Statistical approaches for the study of brain connectivity

Satellite Workshop of the 23rd National Congress of the Italian Society of Psychophysiology
Ruolo: Speaker

ORGANIZZAZIONE CONGRESSI ED EVENTI

03/06/2019 – 07/06/2019

AFNI Bootcamp

Organizing Committee

04/09/2018 – 08/09/2018

XIX World Congress of Psychophysiology

Organizing Committee

11/10/2018 – 13/10/2018

The Blind Brain Workshop on the Sensory Deprived Brain

Organizing Committee

19/09/2014 – 21/09/2014

XVI Congresso Nazionale della Sezione di Psicologia clinica e dinamica

Organizing Committee

16/10/2013 – 18/10/2013

The Blind Brain Workshop

Organizing Committee

FUNZIONI EDITORIALI

01/09/2015 – ATTUALE

Archives Italienne de Biologie - Section Editor

http://www.architalbiol.org/index.php/aib/about/editorialTeam

26/05/2020 – ATTUALE

Frontiers in Psychology - Review Editor

https://www.frontiersin.org/journals/psychology#editorial-board

08/02/2018 – ATTUALE

Frontiers in Neurology - Review Editor