BIOGRAPHICAL SKETCH

NAME	POSITION TITLE
Emiliano Ricciardi, MD, PhD	Full Professor in Neuropsychology and Cognitive Neuroscience, IMT School for Advanced Studies Lucca, Italy

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Research ID: E-6929-2011
Scopus Author ID: 8565770200
Loop profile: 18377

URL webpage: www.imtlucca.it/emiliano.ricciardi
http://momilab.imtlucca.it

Posizione attuale: **Professore Ordinario, Scuola IMT Alti Studi Lucca**

Settore concorsuale **11/E1 - Psicologia Generale, Psicobiologia e Psicometria**

Settore scientifico disciplinare **PSIC-01/B Neuropsicologia e neuroscienze cognitive** *(già M-PSI/02 Psicobiologia e psicologia fisiologica)*

Professional Experience

2021-now	Full Professor in Neuropsychology and Cognitive Neuroscience (SSD PSIC-01/B - ex SSD M-PSI/02), IMT School for Advanced Studies Lucca, Italy
2016-2021	Associate Professor in Psychobiology and Physiological Psychology (SSD M-PSI/02), IMT School for Advanced Studies Lucca, Italy
2010-2016	Assistant Professor (with tenure) of Clinical Biochemistry and Molecular Biology (SSD BIO/12), University of Pisa, Pisa, Italy (D.R. n.0013291, Nov 11th, 2010)
	Senior Staff Fellow, O.U. Clinical Pathology, University Hospital Pisa, Italy
2007-2008	Guest Researcher at the Cognitive Brain Mapping Lab, RIKEN - Brain Science Institute, Wako-shi, Saitama, Japan
2006-2009	Fixed-term Assistant Professor of Clinical Biochemistry and Molecular Biology (SSD BIO/12) for the program "In vivo and in vitro biochemical-clinical parameters of brain metabolism in physiological and pathological conditions" (D.R. n.01/14566), University of Pisa, Pisa, Italy
2004-2006	Post-Doc Position at the Laboratory of Clinical Biochemistry and Molecular Biology and the Centro Interdipartimentale di Ricerca "E. Piaggio" at the University of Pisa, Italy
Since 2002	Intern, MRI Lab, Institute of Clinical Physiology, National Research Council, Pisa (Italy)
2001-2002	Special Volunteer in the Section on Functional Brain Imaging, Laboratory of Brain and Cognition (National Institute of Mental Health, NIH, Bethesda, MD)
2000-2012	Intern, PET Center, Institute of Clinical Physiology, National Research Council, Pisa (Italy)

Education

2001-2004	Ph.D. in Neurosciences, Scuola Superiore di Studi Universitari e di Perfezionamento "Sant'Anna", Pisa (Italy), "In vivo and in vitro study of the neurometabolic correlates of cholinergic modulation on memory and attention during physiological and pathological aging"
2001	Italian State Medical Board License
1994-2000	Medical Student - Faculty of Medicine and Surgery, University of Pisa, Italy. Graduation in Medicine 110/110 "magna cum laude" and a special mention for his dissertation thesis "Effects of normal and pathological aging on the parameters of brain metabolism and blood flow in humans. PET study in healthy subjects and in patients with Alzheimer's disease in different condition of sensorial stimulation"
Since 1998	Collaborations with the Laboratory of Neurosciences, NIA (Director, S.I. Rapoport) and with the Laboratory of Brain and Cognition, NIMH (Director, L. Ungerleider; Section Head, J.V. Haxby)
1989-1994	Scientific Secondary School in Pisa, Italy. Degree 60/60

Post-graduate Clinical Training and Experience

2006-2016	Senior Staff Fellow, O.U. Clinical Pathology, University Hospital Pisa, Italy. Clinical responsibilities include laboratory test development, report validation and monitoring of protocols for laboratory information system.
2002-2012	During the internship at the PET Center, Institute of Clinical Physiology, National Research Council, clinical responsibilities included PET o TC/PET brain scans

with ^{18}Fluoride-2-deoxy-D-Glucose in patients with neurological and psychiatric disorders.

Institutional responsibilities

2021-2024	Vice-rector and delegate for Didactics, IMT School for Advanced Studies Lucca
2023-now	Member and Secretary of the Committee for the ASN - National Scientific Habilitation – Topic: 11/E1 - Psicologia Generale, Psicobiologia e Psicometria
2023-now	Director of the Cognitive Computational and Social Neuroscience PhD Program, IMT School for Advanced Studies Lucca
2021-2024	Vice-rector and delegate of the Director for Communication, Third Mission and Disabilities, IMT School for Advanced Studies Lucca
2020-2023	Director of the Cognitive Computational and Social Neuroscience track of the 'Cognitive and Cultural Systems' PhD Program, IMT School for Advanced Studies Lucca
2020-now	Member (IMT School delegate) of the Conjoint Ethical Committee of Scuola Superiore Sant'Anna and Scuola Normale Superiore
2021-now	IMT School Delegate for the Scientific Committee "Lucca Learning Cities UNESCO"
2018-2021	Delegate of the Director for Relations for Alumni, Social Policy and Equal Opportunity, IMT School for Advanced Studies Lucca
2021-2022	Substitute Member 'Collegio di Disciplina', University of Pisa
2018- 2019	Pro-tempore President of the Student and Alumni Association IMT School for Advanced Studies Lucca
2018- 2021	President of the Central Committee for the promotion of equal opportunities, workers' welfare and non-discrimination (CUG)
2017-2022	Council Member, 'Cognitive and Cultural Systems' PhD Program, IMT School for Advanced Studies Lucca
2017-2018	Delegate of the Director for the Special Programs of IMT School for Advanced Studies Lucca
2016-2019	Member of the Academic Council, IMT School for Advanced Studies Lucca, Italy - https://www.imtlucca.it/school/governance/academic-council
2016-2017	Council Member, PhD Track of Cognitive, Computational and Social Neurosciences, IMT School for Advanced Studies Lucca
2015-2016	Designated Responsible for the Departmental Scientific Production (VQR 2011-2014) and Teaching Evaluation, University of Pisa, Italy
2014-2016	Department Member and Department Representative of Assistant Professors, Dept. Surgical, Medical, Molecular Pathology and Critical Care, University of Pisa, Italy
2012–2016	Council Member, PhD Course in 'Biochemistry and Molecular Biology', Regione Toscana, Italy
2012–2016	Council Member, PhD Course in 'Molecular, metabolic and functional exploration of the nervous system and sensory organs', University of Pisa, Italy
2010–2014	Faculty member, University of Pisa, Pisa, Italy

Honors and Awards

2018	'Premio SIPF' – Award from the Italian Society of Psychophysiology and Cognitive Neuroscience

2017-2022	Italian national scientific habilitation for Full Professorship in General Psychology, Psychobiology and Psychometry (11/E1) - ASN 2016
2018	'Fiorino d'argento' from the City of Florence for the promotion of scientific events
2014-2019	Italian national scientific habilitation for Associate Professorship in General Psychology, Psychobiology and Psychometry (11/E1) - ASN 2012
2011	Young Investigator Award, University of Pisa, Italy
2011	Fellow Travel Award (co-author), 17th OHBM Annual Meeting, Quebec City, Canada
2009	Fellow Travel Award (co-author), 15th OHBM Annual Meeting, San Francisco, USA
2008	Fellow Travel Award (co-author), 14th OHBM Annual Meeting, Melbourne, Australia
2006	Young Investigator Award 2006, International Society for Brain Electromagnetic Topography
2003	Fellow Travel Award, 9th OHBM Annual Meeting, New York, NY, USA
2000	Fellow Travel Award, 5th OHBM Annual Meeting, San Antonio, Texas, USA

Membership of scientific societies

2021-2023	President, Italian Society of Psychophysiology and Cognitive Neuroscience (Italy)
2019-2021	President Elect, Italian Society of Psychophysiology and Cognitive Neuroscience (Italy)
2018-2019	Program Committee Member, Organization for Human Brain Mapping
2016–now	Treasurer, International Organization of Psychophysiology
2015-2017	Scientific and Administrative Secretary, Italian Society of Psychophysiology and Cognitive Neuroscience (Italy)
2013–2016	Member of the Board of Directors, International Organization of Psychophysiology
2012–2015	Council Member, Italian Society of Psychophysiology (Italy)
2011–2013	Member, International Organization of Psychophysiology (USA)
2008–2014	Member, International Society of Magnetic Resonance in Medicine (USA)
1999–now	Member, Organization for Human Brain Mapping (USA)
1999–now	Member, Society for Neurosciences (USA)

Organization of scientific meetings

2024	Workshop "Modeling the interacting brain in naturalistic settings", February 3-4, 2024, Lucca (Italy)
2023	Chair, Annual Meeting of the Italian Association of Psychology- Experimental Section, September18-20, 2023, Lucca (Italy)
2022	Organizing Committee Member, 'The 2022 Joint Workshop on MR Phase, Magnetic Susceptibility and Electrical Properties Mapping' -16-19 October 2022, Lucca (Italy)
2020	Organizing Committee Member, Annual Meeting of the Italian Chapter ISMRM – Pisa (Italy)
2019	Co-Chair, 25th Annual Meeting of the Human Brain Mapping Organization, Rome (Italy)

2019	LOC Member, Italian Association of Cognitive Sciences (AISC) midterm conference 2019, May 22-24, Lucca (Italy)
2019	"AFNI and SUMA Bootcamp" – June 3-9, Lucca (Italy)
2018	Co-organizer, The Blind Brain Workshop on the Sensory Deprived Brain, Lucca (Italy), October 11-13, 2018
2018	Chair, 18th World Congress of the International Organization of Psychophysiology, Lucca (Italy), Sept 4-8, 2018
2016	Organizing Committee Member, "The Fresco Conference on Synaptic Plasticity: from bench to bedside", Sept 12-14, Lucca (Italy)
2015	Chair, 22nd Annual Meeting of Italian Society of Psychophysiology, November 19-21, Lucca (Italy)
2013	Co-Chair, The Blind Brain Workshop, Pisa (Italy), October 16th-18th, 2013 http://theblindworkshop.com/
2012	Scientific Program Responsible and Member of the LOC, 16th World Congress of the International Organization of Psychophysiology, Pisa (Italy) Sept 13-17, 2012
2010-2011	Member, Local Organizing Committee Chair of the 17th Annual Meeting of the Human Brain Mapping Organization, 2011 – Quebec City, Canada
2009-2010	Local Organizing Committee Chair of the 16th Annual Meeting of the Human Brain Mapping Organization, June 6-10, 2010 – Barcelona, Spain
2005-2006	Member, Local Organizing Committee Chair of the 12th Annual Meeting of the Human Brain Mapping Organization, June 11-15, 2006 – Florence, Italy
2000-2010	Main responsible of the four Italian editions of the "AFNI and SUMA software analyses for fMRI" classes (IBRO supported events), attended by more than 120 international students

Languages

Italian (mother tongue)

English (understanding: excellent – speaking: excellent – writing: excellent)

Spanish (understanding: basic – speaking: basic – writing: basic)

Major Collaborations

- Tomaso Vecchi, psychophysiology in blindness, University of Pavia, Italy
- Silvestro Micera, motor control, Sant'Anna School/EPFL, Italy/Switzerland
- Marco Santello, motor control, Arizona State University, Tempe, Arizona
- Antonio Bicchi, grasping and action representation, University of Pisa, Italy
- Giulio Tononi, sleep and blindness, University of Madison, Wisconsin, USA
- James Haxby, multivoxel pattern analyses, Dartmouth College, Hanover, NH, USA
- Francesca Garbarini, neuropsychology of motor control, University of Turin, Italy
- Viviana Betti, psychophysiology of motor control, University of 'La Sapienza' Rome, Italy
- Mario Rosanova, EEG-TMS protocols in blind, University of Milan, Italy
- Luca Turella, MEG studies in supramodality, University of Trento, Italy
- Michele Emdin, sleep-wake cycle, Sant'Anna School, Pisa, Italy
- Lotfi Merabet, sensory-deprivation, Harvard Medical School, Boston, MA, USA
- Maurice Ptito, sensory deprivation in animals and humans, Université de Montrèal, Canada
- Olivier Collignon, sensory deprivation and brain plasticity, Institute of Psychology (IPSY) & Institute of Neuroscience (IoNS)- University of Louvain (UcL)
- Corrado Sinigaglia, action representation, University of Milan, Italy

- Kent Kiehl, clinical brain imaging, Mind Research Network, Albuquerque, NM, USA
- Francesca Siclari, sleep in sensory deprivation, Lausanne University Hospital, Switzerland
- Simone Rossi, motor control, University of Siena, Italy
- Giovanna Marotta and Alessandro Lenci, semantic representation, University of Pisa, Italy
- Zaira Cattaneo, sensory deprivation, University of Bergamo, Italy

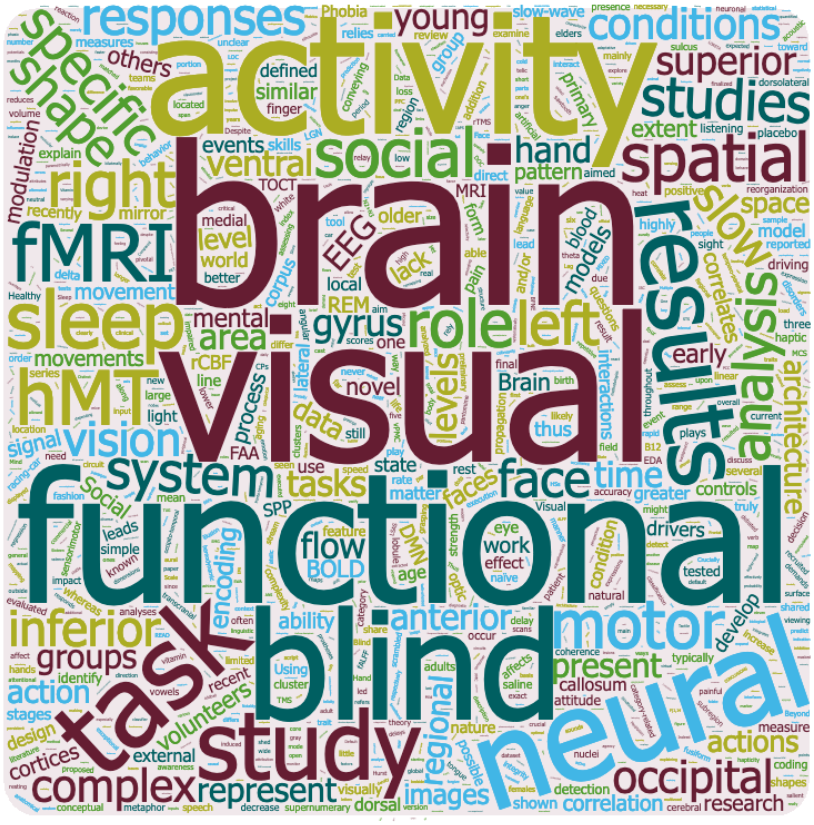
Fields of Interest

For many years, research protocols have been conducted in the fields of Cognitive Neuroscience and Psychophysiology, and, particularly, in the assessment of *in vivo* behavioral, structural and functional correlates of physiological and pathological brain function.

His research group MoMiLab integrates basic neuroscience methods with experimental psychophysiology, cognitive neuroscience and structural/functional brain imaging, and develops its own lines of research on the topics of perception and representation of the external world, and on the interaction with it. In the thematic context of the ERC SH4 '*The Human Mind and Its Complexity*', the research areas of the MoMiLab include integrated and multidisciplinary aspects that focus on the study of mental activities and cognitive functions.

Main topics of research:

- Cognitive and social neuroscience, psychophysiology, neuroimaging, cerebral biochemistry and metabolism;
- Neural correlates of multimodal perception and recognition in sighted and sensory-deprived individuals (such as blind and deaf individuals). Supramodal brain functional organization: sensory-independent object form perception, motion discrimination, spatial localization, event representation and semantic knowledge. Cross-modal plastic reorganization following sensory-deprivation;
- Action recognition and representation, behavioral and functional correlates of motor control, representation of the space for action;
- Influencing elements of brain plasticity: behavioral and functional correlates of experience/learning-induced neural plasticity and functional recovery; pharmacological modulation on memory and attention;
- Use and development of brain functional exploration methodologies, such as positron emission tomography (PET), functional magnetic resonance imaging (fMRI) and high-resolution electroencephalography and magnetoencephalography (M/EEG);
- Application of advanced approaches to brain functional data analysis (including multivariate and machine learning-derived tools such as multivoxel pattern analyses, representational similarities analyses, etc.) and functional/effective connectivity approaches to link neuronal activity to representational content and cognitive theories;



[Word cloud created with abstracts' content to represent main topics of research]

Further information on research topics developed by his research group could be find at https://momilab.imtlucca.it/

Furthermore, in the specific context of IMT School, the lines of research of the neural correlates of the mind and human behavior are offering new tools to focus attention on interdisciplinary questions. Recently, together with the creation of an international collaborative network and a highly qualified interdisciplinary group, research interests broadened to understand the behavioral and functional correlates of social interactions (from prosocial behavior in social contexts to the characterization of emotions in psychophysiological disorders), the psychophysical characterization of aesthetic experiences and perceptual processing in visual arts, the translation of psychophysiological experiences into motor control action to bioengineering and robotics, the most advanced interdisciplinary approaches of cognitive, computational and social neuroscience to the sciences and strategic and managerial areas of companies, business organization and human resources, the study of the psychophysiological indices of sleep as markers of neuroplasticity. Proof of this are the numerous publications on the various research topics, the definition of new joint laboratories and the participation in multidisciplinary research projects.

Furthermore, from a more methodological perspective, Prof. Ricciardi has been interested in the application of new advanced data-driven tools applied to neuroimaging, including connectivity algorithms or multivariate approaches. Note that these algorithms not only facilitate a more detailed characterization of brain organization in cognitive neuroscience, but also improve interdisciplinary approaches, as brain responses can be related to individual behavioral and social performance.

Editorial Functions

Year	Journal	Role
Since 2024	*Frontiers in Neurology - Cognitive and Behavioral Neurology*	Associate Editor
Since 2023	*Scientific Reports*	Academic Editor
Since 2022	*Neuroscience and Biobehavioral Reviews*	Academic Editor
Since 2020	*Frontiers in Psychology - Quantitative Psychology and Measurement*	Review Editor
2019-2021	*Neuroscience and Biobehavioral Reviews*	Guest Editor of Special Issue "Rethinking the sensory-deprived brain: hints from the Blind Brain Workshop 2018"
Since 2019	*Experimental Results*	Reviewing Editor
Since 2018	*Neural Plasticity*	Academic Editor
2018	*International Journal of Psychophysiology*	Proceedings of the 18th World Congress of the International Organization of Psychophysiology (IOP) Lucca, Italy - September 4-8, 2018
Since February 2012	*Frontiers in Psychology-Cognitive Science*	Review Editor
2012	*International Journal of Psychophysiology*	Proceedings of the 16th World Congress of the International Organization of Psychophysiology (IOP) Pisa, Italy - September 13-17, 2012 http://www.sciencedirect.com/science/issue/271907-1-s2.0-S0167876012X00096
Since 2007	*Archives Italiennes de Biologie*	Managing Editor and Editorial Board Member
1999 - 2010	*Brain Research Bulletin*	Assistant of the Section Editor "Normal and Pathological Human Brain Function"

- Regular reviewer for several peer-reviewed journals, including Nature Neuroscience, Current Biology, Trends in Cognitive Sciences, Neurobiology of Aging, Journal of Neuroscience, Neuroscience & Biobehavioral Reviews, Human Brain Mapping, Neuroimage, Cerebral Cortex, Cortex, The American Journal of Psychiatry, European Journal of Neuroscience, International Journal of Psychophysiology, Neural Plasticity, Brain Research Bulletin, Frontiers in Psychology, Frontiers in Human Neuroscience, Transaction in Haptics.
- Since 2007, regular reviewer of the abstracts submitted to the Annual Meetings of the Human Brain Mapping Organization.

Teaching

-- Master's degree courses--

2023-now Appointed Course of 'Functional Neuroanatomy and Neurophysiology for the Forensic Sciences' for the Master Degree in Forensic Psychology and Criminology, University of Padova and IMT School for Advanced Studies Lucca, Italy

2015-now Appointed Course of 'Behavioral and Cognitive Neurosciences', Class of Applied Brain Science for the Master Degree in Bionics Engineering, University of Pisa, Italy

2010-2019 Appointed Course of Neural Basis of Cognitive Functions for the Master Degree in Sciences and Techniques of Clinical and Health Psychology, University of Pisa, Italy

2010-2016 Appointed teachings in Clinical Biochemistry and Clinical Molecular Biology for the Master Degree in Methodologies in Biomedical Laboratory, University of Pisa, Italy

2006-2010 Appointed Course of Integrative seminars and experimental activities I and II for the Master Degree in Sciences and Techniques of Health Psychology, University of Pisa, Italy

2005-2006 Appointed Course of Psychodiagnostics of Cognitive Functions for the Master Degree in Sciences and Techniques of Psychology, University of Pavia, Italy

2004-2016 Lectures and seminars for the Internship and Laboratory Experiences at the University of Pisa for the Course of Laboratory Medicine of the Master Degree in Medicine, Course of Biomedical Signals of the Master Degree in Bioengineering, Exogenous Modulation of Brain Activity of the Master Degree in Occupational Therapy.

Since 2004, supervision of >30 undergraduate in the preparation of their final dissertation of the Master Degree Courses of Medicine and Surgery, Clinical Psychology, Biology, Bioengineering at the University of Pisa, Italy

-- Residency programs --

2010-2016 Lectures and Seminars of Clinical Biochemistry, Residency program in Clinical Biochemistry, University of Pisa, Italy

2008-2016 Seminars in Cognitive Neuroscience, Residency programs in Neurology and Psychiatry, University of Pisa, Italy

-- PhD Courses --

2016-now appointed courses of the Cognitive, Computational and Social Neurosciences PhD Track of the 'Cognitive and Cultural Systems' PhD Program at IMT School for Advanced Studies Lucca:

- Basic Principles and Applications of Brain Imaging Methodologies to Neuroscience
- Neural Bases of Perception/Neuroscience of Perception and Experience-Dependent Plasticity
- Introduction to Cognitive and Social Neurosciences
- Research Seminars

Advisor or Co-advisor of the following IMT School PhD students: Giacomo Handjaras, Paolo Papale, Laura Sophia Imperatori, Francesca Setti, Laura

Muscatello, Gabriele Valvano, Francesca Simonelli, Adam Peter Frederick Reynolds, Battaglini Chiara, Yara Richard El Rassi, Cemal Koba, Onicas Adrian Ioan, Federici Alessandra Enrica Chiara, Martinelli Alice, Evgenia Bednaya, Adam Peter Reynolds, Stefania Oresta, Lorenzo Teresi

2004-2016 supervision of >10 PhD students in the preparation of their final dissertation of the PhD Courses (including 'Molecular, metabolic and functional exploration of the nervous system and sensory organs') at the University of Pisa, Italy

Referee for PhD Thesis for the University of Pisa (Italy), University of Modena-Reggio Emilia (Italy), University of Milano-Bicocca (Italy), École polytechnique fédérale de Lausanne (Switzerland), University of Turin (Italy)

-- Master --

Invited lectures at several masters:

- 2020-now Corsi di Formazione e Perfezionamento "Psicofisiologia e neuroscienze cognitive" - II edition LUMSA University, Italy (supported by the Società Italiana di Psicofisiologia e Neuroscienze Cognitive)
- 2019-now Master II level "Neuroimaging: from Methods to Neuroscience Applications", course 'D1. Neuroimaging of perception and action' – University of Chieti-Pescara 'G. d'Annunzio', Italy
- 2020-2021 Corso di Perfezionamento "La circolazione dell'opera d'arte. Tra cultura, tutela e investimento", University of Brescia, Italy
- 2016-now Master II level "Clinical application of Mindfulness in Empathy and Compassion" – University of Pisa, Italy
- 2016-2017 Master II level 'Neuropsychology: Evaluation, Diagnosis and Rehabilitation' – Catholic University of Milan, Italy
- 2007-2010 Master II level 'Psicoterapia Integrata ad Orientamento Interpersonale' – University of Pisa, Italy
- 2012-2015 Master II level 'Management per le Funzioni di Coordinamento nell'Area delle Scienze delle Professioni Sanitarie Tecniche Diagnostiche' – University of Pisa, Italy

-- Residential Courses --

2016 Lecture on 'Brain connectivity and resting state' at Summer School 'Integration of methodologies and techniques for research, clinic and rehabilitation in psychophysiology and neuroscience' – Catholic University of Milan, Italy

2015 Lecture on 'Brain connectivity and resting state' at Summer School 'Integration of methodologies and techniques for research, clinic and rehabilitation in psychophysiology and neuroscience' – Catholic University of Milan, Italy

2013 Lecture at Summer School "Advances in Cardiovascular Medicine", University of Pisa, Italy

2008 Lecture "EmotivaMente: le basi molecolari della vita emotiva" at Residential Course ECM "Farmacoterapia e Neuroscienze: Quale Integrazione", Bologna, Italy

2008 Lecture "Le metodologie di esplorazione funzionale del cervello: quale ruolo per la diagnosi?" at Residential Course ECM 'La Gestione delle Emergenze-Urgenze Neurologiche dell'Adulto', Portoferraio (LI), Italy

2003 Lecture "Brain imaging al femminile" at Residential Course ECM "Una psichiatria al femminile", Casa di Cura Park Villa Napoleon Preganziol (TV), Italy

Grants and Funding

Project Title	Duration (months)	Amount (€)	Role
PR FESR Toscana 2021-2027 - Bando RS 2 2023 - Azione 1.1.4 - Sviluppo di soluzioni ed algoritmi dedicati per la valutazione della stanchezza sul lavoro e in ambito di collaudo di sistemi ADAS per l'automotive	36	63,657.50	Co-PI
'Touch to see: neural and functional effects of crossmodal remapping', Italian Ministry of Education, Universities and Research, Programmi di Ricerca Scientifica di Rilevante Interesse Nazionale 2022, Protocol 20223K8B3X (2023-2025)	24	202,666	Responsible of Local Unit
Tuscany Health Ecosystem (THE), Piano Nazionale di Ripresa e Resilienza, Missione 4, Componente 2 "Dalla ricerca all'impresa", Funded by the European Union - Next Generation EU	36	451.971,82	Responsible of IMT Unit, Spoke 8
Collaborative Projects with Innovation Center – Intesa Sanpaolo (2018-2024) – Ricerca collaborativa di nuovi modelli di profilazione cliente basati su Neuroscienze – Ricerca collaborativa su nuovi modelli di apprendimento in ambito formazione – Innovation Trend report neuroscience – ricerca collaborativa di nuovi modelli di comunicazione e ingaggio emotivo basati su neuroscienze – ricerca collaborativa dell'applicazione di virtual reality e neuroscienze nella formazione aziendale. – Ricerca collaborativa nello studio dell'interazione tra uomo e computer utilizzando modelli di neuroscienze – Valutazione della riconoscibilità e dei valori affettivi nelle nuove strategie di rebranding del logo Intesa Sanpaolo – Cognitive Profiles and Data Processing – Emotional Regulation and Investment Decision Making – Valutazione del carico cognitivo e dell'ingaggio visivo nell'esplorazione della nuova piattaforma ABC e della scheda prodotti (ABC) – Neuroscienze per Formazione - nuovi modelli di apprendimento con VR fase 2 Memorizzazione – Valutare l'impatto delle strategie di mobilità interna e di riqualificazione nella soddisfazione dei colleghi e sviluppare un modello predittivo e analitico delle caratteristiche individuali e di area associate – Studio neuroscientifico del comportamento di risparmio nei ragazzi in età scolare. – Valutazione dell'impatto della pandemia Covid-19 e gli effetti dell'isolamento sociale sul benessere dei colleghi – Analisi dell'impatto di strategie di intervento di carattere neuroscientifico sul benessere aziendale – Art therapy a supporto del programma Female Leadership Acceleration – Valutazione degli stili decisionali e della flessibilità cognitiva a supporto del processo di negoziazione – Analisi comportamentale e della User Experience del sito di gruppo Intesa Sanpaolo	60	3,400,000	Principal Investigator or Scientific Supervisor

Bando per Progetti di Alta Formazione Attraverso L'attivazione di Assegni di Ricerca – Regione Toscana (anno 2021)	24	40,000	Principal Investigator
'The role of cochlear implantation and bimodal bilingualism in early deafness: a window into the neurofunctional mechanisms of human language, Italian Ministry of Education, Universities and Research, Programmi di Ricerca Scientifica di Rilevante Interesse Nazionale 2017, Protocol 20177894ZH_004 (2019-2024)	24	131,000	Responsible of Local Unit (since 14/02/2022)
2019-2021 Call for Scientific Research Fondazione Cassa di Risparmio di Lucca – Project 'REMIND- - REal-time MIND'	36	50,000	Co-Principal Investigator
2019-2021 Call for Scientific Research Fondazione Cassa di Risparmio di Lucca – Project "Meditare per crescere: effetti della meditazione trascendentale sul benessere psico-sociale e sulla qualità del sonno nell'adolescenza"	36	50,000	Co-investigator
Commissioned Research - Kedrion Biopharma SpA, 'Psychological profilation of plasma donors in the Hungarian population'	12	40,000	Principal Investigator
Commissioned Research - Kedrion Biopharma SpA, 'Psychological profilation of plasma donors in the Italian population'	12	38,000	Principal Investigator
'Aesthetics in the Brain: an interdisciplinary investigation on the functional and neural mechanisms mediating aesthetic experience' – Italian Ministry of Education, Universities and Research, Programmi di Ricerca Scientifica di Rilevante Interesse Nazionale 2015, Protocol 2015WXAXJF (2017-2019)	36	70,020	Principal Investigator-Unit Scientific Responsible
'*Meditate Lucca*' Research grant by the Fondazione Cassa di Risparmio di Lucca (Italy) – call 2016-2017	24	40,000	Principal Investigator
"*SoftPro-Synergy-based Open-source Foundations and Technologies for Prosthetics and RehabilitatiOn*", Horizon 2020 Call 2 for Robotics CT 24-2015.2.a Cognitive Systems and Robotics 2016-2019	48	7,440,023 (overall)	Unit PI
"*Synergies in the Brain: measuring brain activity for complex finalized hand movements*", Clinical Research and Innovation 2014 Call, MIT – University of Pisa	12	15,000	Co-investigator
Research Award University of Pisa 2015 – '*Mens sana in corpore sano? Impact of chronic exercise on psychophysical well-being during aging*'	24	55,000	Co-investigator
'*Be-Tasty-Molecular, behavioral and neural correlates of food taste perception in blind people*' Research grant by the Fondazione Cassa di Risparmio di Lucca (Italy) – call 2015-2016	24	55,000	Co-investigator

Progetti di Ricerca Giovani Ricercatori - Ricerca Finalizzata 2011-2012 Italian Minister of Health: '*Development and validation of novel methods for the in vivo assessment of distinct patterns of connectivity in the disorders of consciousness*' (GR-2011-02347383)	48	360,088	Principal investigator
Research Program 7th Framework IST Program: "*THE: The hand embodied*" (http://www.thehandembodied.eu). Cognitive Systems and Robotics (ICT-2009.2.1), 2010	48	7,175,691	Project Task Leader
Research grant by the Fondazione Cassa di Risparmio di Lucca (Italy) "*Mens sana in corpore sano? L'importanza dell'attività fisica cronica sulla salute fisica e mentale*", call 2012-2013	24	55,000	Project Task Leader
"*Classificare le azioni: un approccio neurofunzionale per decodificare la rappresentazione degli atti motori nel cervello umano*" - Bando Ricercatori Facoltà di Medicina Università di Pisa, 2011	24	18,000	Principal Investigator
Research grant by the Fondazione Cassa di Risparmio di Pisa (Italy) "*TRAIN THE BRAIN 2.0: studio clinico e sperimentale dell'efficacia di un intervento di training cognitivo e fisico nella demenza*", 2011	24		Co-investigator
Research grant by the 'Ricerca 2011' call by Fondazione Pisa (Italy) – "*Studio clinico, psicometrico e psicobiologico della efficacia comparata di stimolazione magnetica transcranica (TMS) e di stimolazione a corrente elettrica continua (tDCS) in pazienti depressi farmacoresistenti*"	36	300,000	Co-investigator
Research grant by the Fondazione Cassa di Risparmio di Lucca (Italy) "*Le basi genetiche e cerebrali delle abilità psicomotorie e degli effetti dell'allenamento specifico*", 2010	12	30,000	Project Task Leader
Research grant by the Fondazione Cassa di Risparmio di Lucca (Italy) "*Le basi genetiche e cerebrali delle abilità psicomotorie e degli effetti dell'allenamento specifico*", 2011	12	40,000	Project Task Leader
Progetto ordinario del Ministero della Salute "*Laboratory medicine, genetic, neuropsychological and clinical assessment for the early detection, prediction of course and response to therapy in subjects at risk for Alzheimer's disease*", 2008	36	270,000	Project Task Leader
Italian Ministry of Education, Universities and Research, Programma di Ricerca Scientifica di Rilevante Interesse Nazionale 2009: *"Correlati Cerebrali della Rappresentazione ed Elaborazione Sopramodale delle Azioni in Individui Vedenti e Non-Vedenti Studiati mediante Risonanza Magnetica Funzionale (fMRI)"*, 2009	24	63,000	Co-investigator
Research grant by Montreal Reasearch Institute,	24	US$ 20,000	Co-

Canada: *"Neuronal correlates of the Mangina-Test: a functional magnetic resonance imaging study in young healthy adults"*, 2007			investigator
Research grant by the Fondazione Cassa di Risparmio di Pisa (Italy): "*e-SMILER – experimental brain Study on eMotional Interaction Leading to Enhanced Robots*", 2006	24	65,000	Co-investigator
European Community Grant Immersence, IST-2006-027141, Call FP6-2004-IST-4-FET (Presence): "Immersence: Immersive Multi-Modal Interactive Presence" (http://www.immersence.info)	48	5,500,000	Executive Board Member, Co-investigator
Research grant by the Italian Ministry of Education, University and Research (MIUR) – PRIN Program 2004: "*Brain Activity Associated with Mental Representation of Spatial Information acquired through Visual and/or Tactile Sensory Modalities in Sighted and Blind Individuals Assessed by Functional Magnetic Resonance Imaging (fMRI)*", 2004	24	42,500	Co-investigator
Research grant by the Fondazione Cassa di Risparmio di Pisa (Italy):"*EASY.GOV: Progettazione di servizi on-line per enti pubblici, di facile accesso per ampie fasce di utenti eterogenei*", 2004	24		Project Task Leader
Research grant by the Fondazione Gio.I.A., Pisa (Italy) "*In vivo study of brain and genetic correlates of maternal behavior in humans. II year of study*" 2004	12	65,000	Collaborator
Research grant by the 5th Framework IST Program of the European Union: "*Touch-hapsys: brain correlates of human haptic perception*" (http://www.touch-hapsys.org). IST-2002-6.1.1, 2002	48	2,794,996	WP Responsible
Research grant by the Fondazione Gio.I.A., Pisa (Italy) "*In vivo study of brain and genetic correlates of maternal behavior in humans*". 2003	12	55,000	Collaborator
Research grant by the Fondazione Cassa di Risparmio di Lucca (Italy) "*Neuropsychological and in vivo brain correlates of decision-making process in humans*", 2002	12	25,000	Collaborator
Research grant by the Italian Ministry of Education, University and Research (MIUR) – FIRB Neuroscience Program "*Methodologies for the functional exploration of the brain in the study of cortical function in humans*" RBNE018ET9_003, 2002	12	86,000	Collaborator
Research grant by the Fondazione IRIS, Livorno: "*In vivo study of brain correlates of emotional processing during healthy aging in humans*", 2002	12	13,000	Collaborator
Research grant John Templeton Foundation-Campaign for Forgiveness Research (#5103): "*Study of the brain functional correlates of forgiveness and unforgiveness in humans by using Positron Emission*	36	US$ 125,000	Collaborator

Tomography (PET) in conjunction with neuropsychological probes", 2002			
Research grant by the Italian Health Minister program "*Correlation between neurometabolic pattern and cognitive performance in young and older Down subjects*", 2000	24	89,000	Collaborator
Research grant by the Italian Health Minister program "*Effects of Cholinergic Modulation on Human Memory and Attention: Functional Brain Studies in Healthy Aging and in Patients with Alzheimer's Disease*", 2000	24	100,000	Collaborator

Occasional Grant reviewer for the Alzheimer's Association (U.S.A.) and for the Virginia Center on Aging (U.S.A.), Romanian National Research Council (Romania), Israel Science Foundation (Israel), for scientific applications (PRIN program) and for the Italian Ministry of Education, University and Research (MIUR).

Main Invited Lectures and Symposia

- Oral presentation: "Effect of cholinergic modulation on brain response to visual working memory (VWM) as task difficulty increases in young and older subjects" 33rd Annual Meeting of the Society for Neuroscience, New Orleans, USA - November 8-12, 2003
- Oral presentation: "Le basi neuronali delle attività cognitive ed emotive nella comprensione dei rapporti corpo-mente", XVII Congresso Nazionale della Società Italiana per lo Studio delle Cefalee, Pisa, Italy - 2003
- Invited lecture: "Molecular correlates of emotional and aggressive behavior in the male and female human brain. International Conference on Sex, Brain, and Human Aggression", Hanse Institute for Advanced Study, Delmenhorst (Germany) -September 23-26, 2004
- Oral presentation: E. Ricciardi, C. Gentili, M.I. Gobbini, M. Guazzelli, P. Pietrini. Le basi cerebrali della percezione delle emozioni nell'uomo Simposio - Espressione delle emozioni, sviluppo e psicopatologia. 10th Meeting of the Italian Society of Psychopathology. Rome, Italy - February 22-26, 2005
- Oral presentation: E. Ricciardi - Seeing With One's Hands. Mini-symposium A. Pascual-Leone, P. Pietrini, E. Ricciardi, K. Sathian, B. Roeder, A. Amedi, M. Lassonde, L. Merabet. What Have We Learned About Seeing From The Blind? Program No. 807. 2005 Abstract Viewer/Itinerary Planner. Washington, DC: Society for Neuroscience, 2005
- Oral presentation: E. Ricciardi. Esplorazione funzionale del cervello nello studio della percezione del mondo esterno. XIII Congresso Società Italiana di Psicofisiologia Marina di Carrara, Italy – December 2-4, 2005
- Invited lecture: "Esplorazione funzionale del cervello nella percezione del mondo esterno: l'organizzazione sopramodale delle vie corticali "visive", Neurological Clinica Ospedale Sant'Agostino - Modena, Italy - 2006
- Invited lecture: "Seeing With One's Hands: Supramodal Organization of the "Visual" Extrastriate Cortex" Institute of Neuroradiology, University of Zurich, Zurich, Switzerland, April 26 2006
- Oral presentation: E. Ricciardi. "Vedere con le mani: organizzazione sopramodale della corteccia "visiva" extrastriata". XV Edizione del Congresso della Fisiologia Clinica. Area di Ricerca del CNR, Pisa, May 24, 2006

- Oral presentation: E. Ricciardi, "Neurometabolic basis of cognitive impairment", Symposium S207 Cognitive function from health to dementia, 26th International Congress of Applied Psychology, Athens, July 16-21, 2006
- Invited lecture: "Seeing With One's Hands: Supramodal Organization of the "Visual" Extrastriate Cortex" Brain Science Institute Retreat, Riken, Japan November 26-28, 2007
- Oral presentation: "Modulation of specific brain activity by very subtle geometrical perceptual relationships of the Mangina-Test: A functional magnetic resonance imaging study in young healthy adults" e "Cholinergic modulation on brain response to working memory as task difficulty increases in young and older subjects", 14th World Congress of Psychophysiology - The Olympics of the Brain - of the International Organization of Psychophysiology (I.O.P) St. Petersburg, Russia, September 8-13, 2008
- Invited lecture: "Neuroimaging e neuro fenomenologia: le basi neurali della coscienza", Facoltà di Medicina, Università di Pisa, Italy - February 29, 2008
- Invited lecture: "Towards an in vivo biochemistry of the mind" - Multidisciplinary Conference, Pisa Italy, October 26-30, 2008
- Invited lecture: "Come si comporta il cervello al buio: l'organizzazione funzionale dell'apprendimento e dell'elaborazione delle informazioni nei soggetti non vedenti dalla nascita", Simposio "Nuove Conoscenze Sulle Basi Neurali Della Coscienza e Dei Suoi Disturbi", 13th Annual Meeting of the Italian Society of Psychopathology, Roma, February 2009
- Invited lecture: "La risonanza magnetica funzionale", Corso di Aggiornamento "Esplorazione funzionale del cervello" 15th Annual Meeting of the Italian Society of Psychophysiology, Siena, Italy - October 2009
- Invited lecture: "fMRI of the mirror system: how blind people "see" the actions of others", Risonanza Magnetica in Medicina: dalla ricerca tecnologica avanzata alla pratica clinica, Roma, Italy - April 1, 2011
- Invited lecture: "What could we learn from the blind brain", Institute of Neuroscience & Pharmacology, Panum Institute University of Copenhagen, Copenhagen, Denmark – May 10, 2011
- Invited lecture: "Neurosemantic decoding in the dark", International Conference on 'Semantic Representations in the Blind', Pisa (Italia), October 5-6, 2012
- Invited lecture: Università degli Studi di Messina, Messina (Italia), October 10 2012
- Invited lecture: "Una rappresentazione sopramodale e topografica delle azioni nel cervello umano", Dipartimento di Filosofia, University of Milan, Milan (Italia), 21 maggio 2013
- Invited lecture: 'L'immagine nella mente, tra neuroscienze e pensiero' nell'ambito del ciclo di incontri 'Fine dell'immagine: tra media, neuroscienze e filosofia', Palazzo Ducale, Genova (Italia), June 3, 2013
- Invited lecture: "Experimental Methods: Theory and Application of Functional Neuroimaging", 10th Research Training Seminarin Child & Adolescent Psychiatry, Bocca di Magra (Italia), June 23-28, 2013
- Oral presentation: "The functional neuroanatomy of the blind brain: is there a supramodal cortical functional architecture?"- The Blind Brain Workshop, Pisa (Italia), October 16-18, 2013
- Invited lecture: Harvard Medical School, Boston, December 5, 2013
- Invited lecture: "Porgere l'altra guancia? Il ruolo biologico del perdono tra comportamento prosociale e vendetta", 3° Convegno di neuroscienze, neuropsicologia e psicoterapia, Performat Salute, Pisa, March 1, 2014
- Invited lecture: "Experimental Methods: Theory and Application of Functional

Neuroimaging", 11th Research Training Seminar in Child & Adolescent Psychiatry, Camposampiero (Italia), May 25-30, 2014

- Invited lecture: "Neuroscienze e architettura", Facoltà di Architettura, University of Florence, June 25, 2014
- Invited lecture: "Decoding and encoding approaches to fMRI data: from supramodal perception to cognitive and motor representations", Brain Information Communication Research Laboratory Group, Advanced Telecommunications Research Intitute International, Kyoto (Japan), September 22, 2014
- Oral presentation: "Towards a supramodal organization of conceptual knowledge", 17th World Congress of Psychophysiology, September 25, 2014, Hiroshima, Japan
- Invited lecture: "Il ruolo delle metodologie di esplorazione funzionale in vivo del nell'inquadramento dei pazienti con disordini di coscienza" durante il Convegno "La coscienza e i suoi disordini in neuroriabilitazione" Pisa, October 04, 2014
- Invited lecture: "The 'alphabet' of human hand movements: a multimodal protocol to assess the cortical encoding of postural synergies", Human Centered And Rehabilitation Robotics Workshop, Istituto Italiano di Tecnologia, Genova, Italy - March 24, 2015
- Invited lecture: "Neuroscienze e architettura 2.0", Faculty of Architecture, University of Florence - June 19, 2015
- Invited lecture: "Come la mancanza della vista influenza l'architettura morfologica e funzionale del cervello" at the Scientific Workshop "Oltre lo Sguardo: il cervello amico. Disabilità visiva e plasticità cerebrale", Padova, Italia - June 26, 2015
- Invited lecture: "Luci ed ombre delle neuroimmagini nello studio della coscienza" at the Workshop 'Le alterazioni della Coscienza: Fisiologia e Clinica', Pisa, Italy – October 16, 2015
- Oral presentation: 'Constructing models of perception, cognition, and action: Novel decoding and encoding approaches to brain functional data', XXIII Annual Meeting of the Italian Society of Psychophysiology, Lucca, Italy – November 20, 2015
- Invited lecture: 'The blind brain. How (lack of) vision shapes the development of the morphological and functional architecture of the human brain', Center for Mind/Brain Sciences (CIMeC), University of Trento, Italy – December 4, 2015
- Invited lecture: 'Multivariate approaches in brain imaging: from motor encoding to action representation decoding', First European Seminar on Sport Psychology "Sport & Exercise Psychology Under the Leaning Tower", Pisa, Italy - March 7, 2016
- Invited Lecture: 'Oltre le immagini sensoriali: percezione e cognizione sociale nella cecità', IRCSS C. Mondino, Pavia (Italy) - March 15, 2016
- Invited Lecture: 'New light from the dark: understanding the sighted brain by studying the blinds', 10th Workshop 'Concepts, Actions and Objects: Functional and Neural Perspectives, Rovereto (Italy) – May 6th, 2016
- Invited Lecture: 'Valore diagnostico e prognostico delle metodologie di esplorazione funzionale in vivo del cervello nei pazienti con disordini di coscienza', 65th Annual Meeting of the Italian Society of Clinical Neurophysiology, Latina (Italy) – May 25th, 2016
- Oral presentation: "Decoding and encoding approaches to brain imaging data: from cognition to robotics", 18th World Congress of Psychophysiology, September 1st, 2016, La Habana, Cuba
- Invited Lecture: "How concepts are encoded in the human brain: a supramodal cortical organization of semantic knowledge", XXII Congresso Nazionale della Sezione di Psicologia Sperimentale dell'AIP, Rome (Italy) – September, 20th-22nd, 2016
- Invited Lecture: "Contributo delle neuroimmagini allo studio della working memory", 5th

Workshop “Aggiornamenti sulla Clinica dei Disordini di Coscienza”, Pisa, October 14th, 2016 – Pisa (Italy)

- Invited Lecture: "It’s not all in your car! The efficient brain of professional car racers", XXIV Congresso Nazionale della Società Italiana di Psicofisiologia, Milan (Italy) – October, 27th-29th, 2016
- Invited Lecture: “How concepts are encoded in the human brain: a supramodal cortical organization of semantic knowledge” – Department of Physiology, University of Verona, Verona (Italy) – January 30th, 2017
- Invited Lecture: ‘Beware of brain reading: current advantages and limitations of multivariate pattern analysis in fMRI' – Workshop “Reading The Deceptive Brain And Mind” – Lucca (Italy) – March 16th – 18th, 2017
- Invited Lecture: “How concepts are encoded in the human brain: a supramodal cortical organization of semantic knowledge” – Department of Phylosophy, University of Turin, Turin (Italy) – March 29th, 2017
- Teaching Course on “Ruolo delle neuroimmagini in riabilitazione”, XVII Congresso Nazionale Società Italiana di Riabilitazione Neurologica, Pisa (Italy), April 7th, 2017
- Oral presentation: “Supramodality and cross-modal plasticity as the “yin and yang” of (the blind) brain development”; Symposium: ‘Supramodality and cross-modal plasticity in blindness: Their balance and the implications for rehabilitation’ - International Multisensory Research Forum (IMRF) 2017 – Nashville (TN, USA), May 19th-22nd, 2017
- Oral presentation: “How blindness improved our vision on brain function: towards a supramodal morphofunctional organization of the brain”; Symposium: ‘How visual experience affects (or not) the functional organization of the “visual” cortex’ – 23rd Annual Meeting of the Human Brain Mapping Organization - Vancouver (BC, Canada), June 25th-29th, 2017
- Oral presentation: “Cecità e processi cognitivi: lo studio della sovra modalità”; Symposium: ‘Processi cognitivi nel nonvedente’ – XXVI Congresso Nazionale AIRIPA – Conegliano Veneto (TV, Italy), September 30th, 2017
- Invited Lecture: “How blindness improved our vision on brain function”, Ten Years of Mind/Brain Sciences at the University of Trento, October 19th- 21st, 2017 – CIMeC Rovereto, Trento, Italy
- Oral presentation: “A modality-independent cortical organization of semantic knowledge”; Nanosymposium: ‘Perception and Imagery: Semantic and Abstract Representation’ – 2017 Annual Meeting of the Society for Neurosciences- Washington (DC, USA), November 13th, 2017
- Invited Lecture: “How blindness improved our vision on brain function: towards a supramodal morphofunctional organization of the brain” – Dept. Psychology, Università La Sapienza Rome, December 15th, 2017
- Invited lecture: “Introduction to Structural and Functional Imaging”, 15th Research Training Seminarin Child & Adolescent Psychiatry, Bertinoro (Italia), April 16, 2018
- Invited lecture: “How blindness improved our vision on brain function: towards a supramodal morphofunctional organization of the brain; Medical School, University of Pisa), May 25, 2018
- Invited Lecture: ‘What is wrong with fMRI?’ – Satelite Symposium SIPF-SINC, Bari, Italy – June 27th, 2018
- Invited Lecture – Blind Brain Workshop: ‘on the Sensory Deprived Brain’ – Lucca, Italy, October 11-13, 2018
- Invited Lecture: ‘Uno, nessuno e centomila’ voxels: from brain activation to information content. XXVI Annual Meeting of the Italian Society of Psychophysiology and Cognitive

Neuroscience, Turin Italy, November 16th, 2018

- Invited Lecture: Roundtable 'Le scoperte scientifiche e tecnologiche al servizio dell'umanità: dall'esperienza del Kuwait all'esperienza dell'Italia', Lucca, Italy - Jan 12, 2019
- Invited Lecture: "Introduction to Structural and Functional Imaging", 16th Research Training Seminars in Child & Adolescent Psychiatry, Rome (Italia), May 13, 2019
- Oral presentation: "Dalla deprivazione sensoriale alla riabilitazione: cosa abbiamo imparato dal cervello dei ciechi congeniti? in "Simposio S16: Il mondo della disabilità visiva: stato dell'arte e nuove frontiere di ricerca", XXV Congresso AIP Sezione Sperimentale Università Vita-Salute San Raffaele, Milano 18-20 Settembre 2019
- Invited Lecture: "La rappresentazione più astratta dell'azione: il contributo delle neuroimmagini" – Convegno Nazionale Scientifico Associazione Italiana Disprassie dell'Età Evolutiva, Rome (Italy), November 17-18, 2019
- Invited Lecture: "Rethinking the sensory deprived brain", University of Bologna, Cesena, April 7, 2020
- Invited Lecture: " 'One, no one and one thousand' voxels: from brain activation to information content" - International Society for Neuroregulation & Research 2020 Meeting, July 31, 2020
- Invited Lecture: "La neurobiologia delle emozioni: verso una nuova rappresentazione funzionale" - IX Convegno Nazionale di Neuroscienze, Performat Salute, Pisa (Italy) - October 26, 2020
- Invited Lecture: "Multivariate approaches in neuroimaging: from supramodal to cognitive and motor representations" - Symposium on "*New technologies for rehabilitatition"* organised by ETH Zurich, Volterra (Italy), September 9, 2021
- Invited Lecture: "Una visione neuroscientifica della Disprassia: ipotesi e interpretazioni da studi di neuroscienze" – Convegno Nazionale Scientifico Associazione Italiana Disprassie dell'Età Evolutiva, Rome (Italy), October 11, 2021
- Invited Lecture: "La neurobiologia delle emozioni: verso una nuova rappresentazione funzionale" - 3° Congresso Internazionale in Neuroscienze ed Educazione: dalla teoria alla pratica educativa, Brescia (Italy), October 22 – 23, 2021
- Invited Lecture: "Rethinking the sensory deprived brain", Neurowebinars, April 1, 2022
- Invited Lecture: "Rethinking the sensory deprived brain: how blindness improved our vision on brain function" – August 15, 2022 – Georgetown University, Washington DC, USA
- Invited Lecture: "A modality independent proto-organization of human multisensory areas", XIII Congresso Nazionale Associazione Italiana Risonanza Magnetica in Medicina, November 24, 2022 – Pisa, Italy
- Invited Lecture: "Rethinking the sensory deprived brain: how blindness improved our vision on brain function" – November 17, 2022 – Department of Psychology, University of Turin
- Invited Lecture: Rethinking the sensory deprived brain: how blindness improved our vision on brain function" – November 23, 2023 – ETH, Zurich, Switzerland
- Invited Lecture: Rethinking the sensory deprived brain: how blindness improved our vision on brain function" – December 14, 2023 – IRCSS Medea, Bosisio Parini
- Oral presentation 'fMRI and naturalistic stimulation in sensory-deprivation to study modality-(in)dependent brain organization' - Workshop "Modeling the interacting brain in naturalistic settings" – Lucca, Feb 3-4, 2024

Science Popularization Activities

Public talks on brain imaging and neurosciences have been presented to college and undergraduate students (Galileo Project Regione Toscana 2014-2015, IMT School for Advanced Studies Lucca, University of Pisa, Ufficio Territoriale Scolastico Lucca Livorno e Massa-Carrara,) or general audience (e.g., Brain Awareness Week, Science Festivals, etc.).

Public engagement and dissemination activities with local cultural association, such as UNIDEA Pisa, Università 50&più Lucca, Unidel Lucca, Agorà Scienza Lucca, etc.

Here are some examples:

https://www.avistoscana.it/vis-art/196239/Stili-di-vita-sport

https://www.fondazionecarilucca.it/news/alla-scuola-imt-torna-la-settimana-del-cervello

https://www.quilivorno.it/news/cronaca/questura-e-scuole-contro-la-droga-con-la-vita-non-e-stupefacente/

https://cascinanotizie.it/associazione-le-fionde-di-cascina-e-il-progetto-nelle-scuole-contro-il-gioco-dazzardo

https://www.quinewspisa.it/pisa-emiliano-ricciardi-ussero-neuroimmagini.htm

http://ecodelmontepadule.com/2019/10/avvio-del-progetto-se-davvero-fosse-un-gioco-dallassociazione-le-fionde-per-i-ragazzi-delle-scuole-medie/

https://questure.poliziadistato.it/it/Livorno/articolo/11766419de7e2eda9628778924

https://www.iltelegrafolivorno.it/cronaca/droga-livorno-81f41920

Four specific episodes of the series of introductory videos about the brain called 'Il Cervello a fumetti' has been created together with the IMT Press Office and the designer Matteo Farinella

https://youtu.be/x6gTXuhtqzQ

A 'Lezione Disegnata: Ma che cosa avete in testa? Potenzialità e fragilità (incluse le dipendenze) nel cervello adolescente"

https://www.youtube.com/watch?v=gD002UXmdw4

Interviews have been broadcasted to local and national newspaper, radio and TV (e.g., SuperQuark, Voyager, etc.)

https://www.youtube.com/watch?v=kgdGM7hfVn4 - Sportivamente: cosa rende speciale il cervello degli atleti – March 16, 2016

https://www.youtube.com/watch?v=ko5dgxRDuaY – Masterclass ' Scrivere Cinema 2018'

https://www.youtube.com/watch?v=r9SRXX0LaIg&t=908s - Il cervello dipendente - March 13, 2019

https://www.raiplay.it/video/2018/02/Morning-Voyager-29c32cc9-6548-4c81-990d-62d712d9903c.html

Lectures for the Brain Awareness Week reported on the IMT School YouTube channels.

Updates could also be found at https://momilab.imtlucca.it/press-release

Results obtained in technology transfer in terms of participation in the creation of new businesses (spin off), development, use and marketing of patents

In the context of various research projects funded by national and international calls, admitted to funding based on competitive calls, my research activity has significantly contributed to:

- the establishment of Koeus S.r.l. (http://www.koeus.it/ - founding partner together with Nicola Lattanzi and Andrea Malizia and Linfastem S.r.l.), a spin-off of the IMT School that aims at improving organizational processes by recognizing human behavior with a neuro-data driven innovation in management consulting; Koues relies on distinct B2C and B2B business opportunities are aimed at large organizations leaders in a wide range of industries and sectors, including Human Resources, Marketing, Training and Development, Cognitive Ergonomics;

- the establishment of N2-Neurolaw & Neurotechnology (founding partner together with Pietro Pietrini, Giuseppe Sartori and Cristina Scarpazza), a spin-off of the IMT School for Advanced Studies Lucca and the University of Padua for forensic neuroscience services;

- from the scientific partnership with Formula Medicine S.r.l. (Viareggio, Italy – www.formulamedicine.com) and relying on the scientific observations in elithe athlethes (published in Bernardi G, Ricciardi E., et al., Frontiers of Human Neuroscience, 8: 888, 2014 and Bernardi G, Ricciardi E, et al PLoS ONE 8 (10), art. E77764, 2013) the Mental Economy Training® (http://www.formulamedicine.it/it/storia/) has been developed;

- EU-funded projects SoftPro (www.softpro.eu) and THE (www.thehandembodied.eu) have studied and designed robotics technologies based on soft synergies to develop new prostheses, exoskeletons and assistive devices for upper limb rehabilitation , which are greatly improving efficacy and accessibility to a greater number of patients with upper limb movement disorders. Building on solid neuroscientific and methodological foundations, which the candidate helped to achieve (e.g., Handjaras et al., Human Brain Mapping, 2015, Leo et al., ELife, 2016; Santello et al., Physics of Life Reviews, 2016), SoftPro and THE have produced a significant social impact by promoting advanced prosthetic and support robot technology "from bench to bed"

- The technology transfer action then developed into the definition of the joint laboratory of the Neuroscience Lab, an initiative of the Intesa Sanpaolo Innovation Center and collaborates with the IMT Alti Studi Lucca School for applied research projects. A full description of the research topics and activities can be found at https://nslab.imtlucca.it/ . It is also worth noting that this technology transfer action was selected by the School as an evaluation case for the 'Third Mission' item of the VQR 2015-2019.
The action of knowledge enhancement and transfer of the IMT School towards the local and national socio-economic context found support and alignment in the strategic action of Intesa Sanpaolo Innovation Center SpA, a company created by Banca Intesa in 2015 and dedicated to Innovation and Technology Transfer toward the Bank and its customers. Given the proven tradition of studies in economic fields and the solid experience of its researchers in the use of psychophysiological methodologies, the School has thus adhered to the request to develop a joint laboratory - Neuroscience Lab - to combine, through research cases applied and translational, the most advanced interdisciplinary approaches of cognitive, computational and social neuroscience to the sciences and strategic and managerial fields of companies, business organization and human resources: from the understanding of perceptual, cognitive-affective and decision-making processes, from the characterization of personological and psychometric profiles, towards the conception and design and validation of new products and services by companies aimed at workers or consumers.

Publications

Peer-reviewed journals

1. Pietrini P, Furey M.L, Ricciardi E, Gobbini M.I, Wu H-WC, Cohen L, Guazzelli M, Haxby J.V. Beyond sensory images: Object-based representation in the human ventral pathway. *Proceedings of the National Academy of Sciences U.S.A.* 101(15): 5658-5663, 13, 2004
2. Freo U, Ricciardi E, Pietrini P, Schapiro MB, Rapoport S, Furey ML. Cholinergic Modulation Influences Different Cortical Regions during Working Memory in Young and Older Humans". *American Journal of Psychiatry* 162(11): 2061-2070, 2005
3. Ricciardi E, Bonino D, Gentili C, Sani L, Pietrini P, Vecchi T. Neural Correlates Of Spatial Working Memory In Humans: A Functional Magnetic Resonance Imaging Study Comparing Visual And Tactile Processes. *Neuroscience*, 139(1): 339-49, 2006
4. Ricciardi E, Vanello N, Sani L, Gentili C, Scilingo EP, Landini L, Guazzelli M, Bicchi A, Haxby J.V, Pietrini P. The effect of visual experience on the development of functional architecture in hMT+. *Cerebral Cortex*. 17 (12): 2933-9, 2007
5. Furey ML, Ricciardi E, Schapiro MB, Rapoport SI, Pietrini P. Cholinergic Enhancement Eliminates Modulation of Neural Activity by Task Difficulty in the Prefrontal Cortex during Working Memory. *Journal of Cognitive Neuroscience*; 20(7): 1342-53, 2008
6. Bicchi A, Scilingo EP, Ricciardi E, Pietrini P. Tactile flow explains haptic counterparts of common visual illusions. *Brain Research Bulletin*, 75(6): 737-741, 2008
7. Cattaneo Z, Vecchi T, Cornoldi C, Mammarella I, Bonino D, Ricciardi E, Pietrini P. Imagery and spatial processes in blindness and visual impairment. *Neuroscience and Biobehavioral Reviews*, 32(8): 1346-60, 2008
8. Casarotto S, Bianchi AM, Ricciardi E, Gentili C, Vanello N, Guazzelli M, Pietrini P, Chiarenza GA, Cerutti S. Spatiotemporal dynamics of single-letter reading: a combined ERP-FMRI study. *Archives Italiennes de Biologie*, 146(2): 83-105, 2008
9. Vanello N, Hartwig V, Tesconi M, Ricciardi E, Tognetti A, Zupone G, Gassert R, Chapuis D, Sgambelluri N, Scilingo EP, Giovannetti G, Positano V, Santarelli, MF, Bicchi A, Pietrini P, De Rossi D, Landini L. Sensing glove for brain studies: Design and assessment of its compatibility for fMRI with a robust test. *IEEE/ASME Transactions on Mechatronics* 13(3): 345-354, 2008
10. Gentili C, Gobbini M.I, Ricciardi E, Vanello N, Pietrini P, Haxby J.V, Guazzelli M. Differential modulation of neural activity throughout the distributed neural system for face perception in patients with Social Phobia and healthy subjects. *Brain Research Bulletin*, 77(5): 286-292, 2008
11. Bonino D, Ricciardi E, Sani L, Gentili C, Vanello N, Guazzelli M, Vecchi T, Pietrini P. Tactile spatial working memory activates the dorsal extrastriate cortical pathway in congenitally blind individuals. *Archives Italiennes de Biologie*, 146(3/4): 133-146, 2008
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Il sottoscritto Emiliano Ricciardi consapevole che le dichiarazioni false comportano l'applicazione delle sanzioni penali previste dall'art. 76 del D.P.R. 445/2000, dichiara che le informazioni riportate nel seguente curriculum vitae corrispondono a verità.

Autorizzo al trattamento dati ai sensi del GDPR 2016/679 del 27 aprile 2016 (Regolamento Europeo relativo alla protezione delle persone fisiche per quanto riguarda il trattamento dei dati personali.

Lucca, Nov 20th, 2024

Prof. Emiliano Ricciardi