

POSIZIONE

2015 ad oggi: Assegnista di Ricerca presso il Social and Cognitive Neuroscience Laboratory (Head: Prof. Salvatore Maria Aglioti).

2013-2014: Borsista presso IRCCS Fondazione Santa Lucia

EDUCAZIONE

11/2009 – 11/2012

Sapienza Università di Roma - PhD in "Cognitive Plasticity and Rehabilitation" presso il Social and Cognitive Neuroscience Laboratory, Sapienza Università di Roma, Italia.

10/2006 - 11/2008

Università di Bologna - NeuroPsicologia e Recupero Funzionale nell'Arco di Vita (Laurea Specialistica): *Il ruolo del giro frontale inferiore e della giunzione temporo parietale nella deteazione di azioni ingannevoli: studi di stimolazione magnetica transcranica ripetitiva.* Voto: 110/110 cum laude. Supervisor: Prof. Alessio Avenanti, PhD; Prof. Giuseppe di Pellegrino, MD PhD.

10/2003 - 11/2006

Università di Bologna - Scienze del Comportamento e delle Relazioni Sociali (Laurea Triennale): *L'effetto della clown terapia in bambini ospedalizzati.* Voto: 100/110. Supervisor: Prof. Fiorella Monti, PhD; Prof. Francesca

LINGUE

Italiano

Inglese

ABILITÀ TECNICHE

Sistema Operativo: Windows, Mac

Tecniche: TMS, CAVE system, Head Mounted Displays, Biopac MP-35, ADInstruments, Motion Capture systems (optic and inertial), BCI (P300, SSVEP, Motor Imagery).

Software Scientifici: Biopac Student Lab (EMG analysis), LabChart (EMG analysis), SofTactic Optic 1.2 (3D brain neuronavigation), Ledalab (Skin conductance), g.tec BCI (Simulink models).

Linguaggi di Programmazione: Microsoft Visual Studio, XVR, Matlab, Dreamweaver, E-Prime, R project.

Analisi Statistica: Statistica, R

Audio/Video editing: Adobe Photoshop, 3DS Max, Audacity, Adobe Premiere Pro.

BREVE SUMMARY DELLA ATTIVITÀ SCIENTIFICA

(supportata da pubblicazioni)

I miei interessi di ricerca scientifica ruotano intorno alla valutazione multimodale del senso di avere un corpo con particolare riguardo ad agenti artificiali (robot e virtuali) utilizzando tecniche comportamentali, la realtà virtuale e approcci neurofisiologici. Ho lavorato sul ruolo dei segnali multisensoriali nella rappresentazione dell'azione e del corpo in persone sane (Tieri & Tidoni et al, 2015; Tidoni et al, 2014) e persone con tetraplegia (Tidoni et al, 2014, Scandola et al 2014). Ho studiato il ruolo delle contingenze audiovisive per il controllo di un robot umanoide BCI-teleoperato (Tidoni et al., 2015; Tidoni & Gergondet et al., 2014). Inoltre negli ultimi quattro anni il mio lavoro si è legato alla fisiologica e sulla correlazione tra osservazione ed esecuzione di azioni utilizzando i dati cinematici (Sacheli et al, 2012; Sacheli et al, 2013) e di TMS (Urgesi et al, 2010; Tidoni et al., 2013).

Ho partecipato attivamente a progetti nazionali (PARMS-SEED 2009; Avvio alla Ricerca 2012, finanziato da Sapienza Università di Roma, C26N12SRA7, Embodied (e)mozioni, Cogito Fondazione, R-117/13; GR2012, Ministero della Salute, Prot. GR-2011-02351798) e progetti europei internazionali (TANGO [FP7-ICT-2009-C] e VERE [FP7-ICT-2009-5]). Ho ricevuto finanziamenti da BIAL Foundation (2014/150, €47.000; Ruolo: PI).

Sono attivamente in collaborazione con Ricercatori nazionali (Alessio Avenanti, Università di Bologna, Franco Tecchia, laboratori PERCRO, Sant'Anna dell'Università di Pisa, Antonio Frisoli, laboratori PERCRO, Sant'Anna dell'Università di Pisa, Ilaria Bufalari, Università di Roma) e Ricercatori internazionali (Abder Kheddar, Centre national de la recherche scientifique, CNRS, Angelika Peer, Technische Universität München, TUM, Michael Madary, Johannes Gutenberg-Universität Mainz).

INDICI

Google Scholar

Citations: 168

H-index: 5

i10-index: 4

Scopus

Citations: 126

H-index: 4

My total IF is about 34.202.

My total SCJ is about 24.689.

NEWS

2013

- 1) Quotidiano Sanità.it about Tidoni et al. 2013:
http://www.quotidianosanita.it/scienza-e-farmaci/articolo.php?articolo_id=13576
- 2) Unibo Magazine about Tidoni et al. 2013:
http://www.magazine.unibo.it/archivio/2013/01/09/riconoscere_le_intenzioni
- 3) SuperAbile INAIL about the VERE project:
http://www.superabile.it/web/it/CANALI_TEMATICI/Politiche_e_Buoni_Esempi/News/info1676100766.html

ATTIVITÀ DI LAVORO ED ESPERIENZE

2010-2011

- 1) 12/2010 - 10/2011: Co-Organizzazione del primo VERE PhD Symposium, Barcelona, 8-10-2011.
- 2) 12/2010 - 4/2011: Visiting Student presso i laboratori PERCRO, Scuola Superiore Sant'Anna, Pisa, Italy.
Supervisor: Prof. Franco Tecchia, PhD; Prof. Marcello Carrozzino, PhD; Sandro Bacinelli, MsC.

2008-2009

- 1) 10/2008 - 10/2009: Tirocinio presso il CNC Cesena, Italy. Supervisor: Prof. Alessio Avenanti, PhD; Prof. Giuseppe di Pellegrino, MD PhD.

2005-2006

- 1) 10/2005 - 09/2006: Tirocinio presso Ospedale Pediatrico Bufalini, Cesena, Italy. Supervisor: Dr. Francesca Gobbi.

INSEGNAMENTO

2014-2015

- 1) Lecture su tecniche di BCI. Corso di Neuroscienze Sociali. Department of Psychology, Sapienza University of Rome, Italy. 2014-2015

2013-2014

- 1) Lecture su tecniche di BCI. Corso di Neuroscienze Sociali. Department of Psychology, Sapienza University of Rome, Italy. 2013-2014

TUTORAGGIO

- 1) Supervisione di 2 PhD students (Mr. Gabriele Fusco, Mr. Gaetano Tieri)
- 2) Tutor di 2 Teisiti (Triennale: Mr. Francesco Walker, Mr. Simone Badini).

SPEAKER

2013

- 1) Virtual Reality in Social Neuroscience Research, Brain Awareness Week, 11-12 March, 2013, Rome, Italy.

FELLOWSHIPS, RESEARCH GRANTS AND AWARDS

2015

- 1) Elsevier Reviewer Recognition
- 2) PlosOne Reviewer Recognition
- 3) Italian Society of Neuropsychology (SINP) Travel Award [€500].

2014

- 1) BIAL Foundation Research Grant (Num. 150/14) - "Measuring the Self: behavioural and neural correlates of bodily awareness". €47.000 [Role: PI]

- 2) Best Abstract Prize [€500 Awarded to Gaetano Tieri] for Tieri G, Tidoni E, Pavone EF, Aglioti SM "Body visual discontinuity affects feeling of ownership and skin conductance responses" V.E.R.E PhD Symposium 2014 - Barcelona, Spain, 23-24 October 2014.
- 3) Research fellowship at Santa Lucia Foundation, funded by Collaborative Project VERE - "Virtual Embodiment and Robotic Re-Embodiment" [7PQ-ICT-2009.8.4 - GA no. 257695; PI: SLATER Mel]

2013

- 1) Research fellowship at Santa Lucia Foundation, funded by Collaborative Project VERE - "Virtual Embodiment and Robotic Re-Embodiment" [7PQ-ICT-2009.8.4 - GA no. 257695; PI: SLATER Mel]

2012

- 1) Progetto Nazionale "Sincronizzarsi a uno scopo comune: studi di cinematica e stimolazione magnetica transcranica in compiti motori interattivi". Progetto per Avvio alla Ricerca 2012, Finanziato da Sapienza University of Rome. (Prot. Num. C26N12SRA7). [**Role: Member** of the Research Unit; PI: SACHELI Lucia]

PROGETTI INTERNAZIONALI

2010

- 1) Collaborative Project "VERE - Virtual Embodiment and Robotic Re-Embodiment" (Grant Agreement Number 257695) [**Role: Member** of the Research Unit lead by Prof. Salvatore Maria Aglioti; PI: SLATER Mel].
- 2) Collaborative Project "Tango - Emotional Interaction grounded in unrealistic context" (Grant Agreement Number 249858). [**Role: Member** of the Research Unit lead by Prof. Salvatore Maria Aglioti; PI: DE GELDER Beatrice].

PROGETTI NAZIONALI

2014

- 1) Young Researcher Grant Award to Ilaria Bufalari funded by the Italian Ministry of Health (Bando Giovani Ricercatori 2012). Project title: "Combined behavioral and non invasive brain stimulation interventions for treating body image distortions in Anorexia Nervosa". [**Role: Member** of the Research Unit. Prot. GR-2011-02351798; PI: BUFALARI Ilaria]

2013

- 1) Research Grant "Embodied (e)motions: brain mechanism and their socio-cultural modulation". Funded by Cogito Foundation. [**Role: Member** of the Research Unit; PI: AVENANTI Alessio]

2009

- 1) Project Seed 2009, Istituto Italiano di Tecnologia. Titolo progetto: "PARMS – Predictive Action-perception Resonance and Mental Simulation". [**Role: Member** of the Research Unit lead by Prof. Salvatore Maria Aglioti; PI: AGLIOTI Salvatore Maria].

AD HOC REVIEWER

Cortex, Scientific Report, Experimental Brain Research, PlosOne, Frontiers in Human Neuroscience, Sensors, Frontiers in System Neuroscience, Neuropsychologia, The Journal of Pain.

PRESENTAZIONI

2015

- 1) **Tidoni E** "Bodily illusions and control of virtual and robotic agents after spinal cord injury - From the body to the brain: changes in body, space and action representations due to body disorders" (Symposium organized by Valentina Moro and Michele Scandola), European Society of Neuropsychology, Tampere, Finland (with peer review) September 2015

2014

- 1) Fusco G, **Tidoni E**, Barone N, Pilati C "Illusion of movement in patients with Spinal Cord Injury (SCI)" V.E.R.E PhD Symposium 2014 - Barcelona, Spain, 23-24 October 2014.
- 2) Tieri G, **Tidoni E**, Pavone EF, Aglioti SM "Body visual discontinuity affects feeling of ownership and skin conductance responses" V.E.R.E PhD Symposium 2014 - Barcelona, Spain, 23-24 October 2014.

2013

- 1) Scandola M, **Tidoni E**, Grisoni L, Moro V, Aglioti SM. "L'illusione della mano di gomma dopo stimolazione del volto in persone con lesione al midollo spinale" Brain Awareness Week, Rome-Italy, March 13-15, 2013.
- 2) Scandola M, **Tidoni E**, Grisoni L, Moro V, Aglioti SM "The Rubber Hand Illusion after face stimulation in Spinal Cord Injured people" Cognitive Science Arena for Beginners, Bressanone-Italy, February 8-9, 2013.

2012

- 1) Sacheli LM, Candidi M, Pavone EF, **Tidoni E**, Aglioti SM "You are in my (motor) plans: Shared representations and predictive simulation reflected in the kinematics of a joint-grasping task" Collective Intentionality VIII, Manchester (UK), Aug 28-31,2012.

POSTERS

2014

- 1) **Tidoni E**, Fusco G, Leonardis D, Frisoli A, Bergamasco M "Illusory movements induced by tendon vibration in right and left handed people" AIP 2014 -Pavia, Italy, 15-17 September 2014.
- 2) **Tidoni E**, Abu-Alqumsan M, Leonardis D, Kapeller C, Fusco G "Interacting with my Virtual and Robotic surrogate: a study on healthy and spinal cord injured people" London Virtual Social Interaction Workshop 2014, Institute of Cognitive Neuroscience UCL London, UK, 4-5 September 2014.
- 3) Tieri G, Pavone EF, Rizza G, **Tidoni E**, Grisoni L, Aglioti SM "Combination of EEG and immersive virtual reality to explore the embodiment of avatars and of their errors". London Virtual Social Interaction Workshop 2014, Institute of Cognitive Neuroscience UCL London, UK, 4-5 September 2014.

2013

- 1) Scandola M, **Tidoni E**, Grisoni L, Moro V, Aglioti SM. "The Rubber Hand Illusion after face stimulation in Spinal Cord Injured people" Aegina Summer School 2013 - Embodied Inter-subjectivity: the 1st person and the 2nd person perspective - Aegina, Greece, June 2013.
- 2) Sacheli LM, Candidi M, Pavone E, **Tidoni E**, Aglioti SM. "Kinematic fingerprints of social interaction: a TMS study". Poster presentation at Social and Affective Neuroscience Society (SANS) Annual Meeting, San Francisco, CA, USA, April 11th - 13th 2013.

2012

- 1) Tieri G, Pavone EF, Rizza G, **Tidoni E**, Grisoni L, Aglioti SM "Brain monitoring of erroneous actions performed by an avatar: An EEG study in immersive virtual reality" 5th ICSC, Rome-Italy, September 4-8, 2012.
- 2) Sacheli LM, Candidi M, Pavone E, **Tidoni E**, Aglioti SM "Social grasp: interpersonal perception modulates predictive simulation and mutual adjustment during a joint-grasping task" Mirror neurons: new frontiers 20 years after their discovery, Erice (TP)-Italy, Aug 31-Sep 6, 2012.

2011

- 1) Avenanti A, **Tidoni E**, Borgomaneri S, di Pellegrino G "Action simulation plays a critical role in deceptive action recognition" 8th IBRO Conference, Florence-Italy, July 14-18, 2011.
- 2) Sacheli L, Candidi M, Pavone EF, **Tidoni E**, Aglioti SM "Impacts of social variables on the kinematics of on-line cooperative-competitive interactions" Joint Action Meeting, Vienna-Austria, July 7-9, 2011.
- 3) Annella L, di Tante F, Mancini D, **Tidoni E**, Avenanti A "Suppression of left ventral premotor cortex impairs action prediction: transcranial direct current stimulation" CAOS Workshop, Rovereto-Italy, May 19-22, 2011.

2010

- 1) Cecere R, Annella L, **Tidoni E**, Avenanti A "Motor resonance and dispositional empathy: single pulse transcranial magnetic stimulation" Magstim/University of Oxford TMS Summer School, Oxford.
- 2) Valchev N, **Tidoni E**, Hamilton A, Gazzola V, Avenanti A "Feeling of weight: feeling of weight in the somatosensory cortex" Cognitive Neuroscience Society Meeting, Montréal, April 17-20, 2010.

CONTRIBUTI IN PEER REVIEWED JOURNALS

2015

- 1) **Tidoni, E.** (2015). NextGen's tools for the future - BIG Generate big ideas! Science (Top Online Essays) 348, 32–35 (2015) <http://www.sciencemag.org/content/348/6230/32/suppl/DC1> IF 31.48 SJR 12.465

PUBBLICAZIONI (*indicates co-first authorship)

2015

- 1) **Tidoni, E.**, Tieri, G., & Aglioti, S. M. (2015). Re-establishing the disrupted sensorimotor loop in deafferented and deafferented people: The case of spinal cord injuries. *Neuropsychologia*. IF 3.302 SJR 1.967
- 2) *Tieri, G., ***Tidoni, E.**, Pavone, E. F., & Aglioti, S. M. (2015). Mere observation of body discontinuity affects perceived ownership and vicarious agency over a virtual hand. *Experimental Brain Research*. doi:10.1007/s00221-015-4202-3 IF 2.168 SJR 1.514

2014

- 1) **Tidoni, E.**, Fusco, G., Leonardis, D., Frisoli, A., Bergamasco, M., & Aglioti, S. M. (2014). Illusory movements induced by tendon vibration in right- and left-handed people. *Experimental Brain Research*. doi:10.1007/s00221-014-4121-8 IF 2.168 SJR 1.514

- 2) **Tidoni, E.**, Grisoni, L., Liuzza, M. T., & Aglioti, S. M. (2014). Rubber hand illusion highlights massive visual capture and sensorimotor face-hand remapping in a tetraplegic man. *Restorative Neurology and Neuroscience*. doi:10.3233/RNN-130385 IF 4.179 SJR 1.999
- 3) ***Tidoni, E.**, *Gergondet, P., Kheddar, A., & Aglioti, S. M. (2014). Audio-visual feedback improves the BCI performance in the navigational control of a humanoid robot. *Frontiers in Neurorobotics*, 8(June), 20. doi:10.3389/fnbot.2014.00020 IF n.a. SJR 1.094
- 4) Scandola, M., **Tidoni, E.**, Avesani, R., Brunelli, G., Aglioti, S. M., & Moro, V. (2014). Rubber hand illusion induced by touching the face ipsilaterally to a deprived hand: evidence for plastic “somatotopic” remapping in tetraplegics. *Frontiers in Human Neuroscience*, 8(June), 404. doi:10.3389/fnhum.2014.00404 IF 2.91 SJR 2.21
- 2013**
- 1) Sacheli, L. M., **Tidoni, E.**, Pavone, E. F., Aglioti, S. M., & Candidi, M. (2013). Kinematics fingerprints of leader and follower role-taking during cooperative joint actions. *Experimental Brain Research*, 226(4), 473–86. doi:10.1007/s00221-013-3459-7 IF 2.168 SJR 1.514
- 2) **Tidoni, E.**, Borgomaneri, S., di Pellegrino, G., & Avenanti, A. (2013). Action simulation plays a critical role in deceptive action recognition. *The Journal of Neuroscience : The Official Journal of the Society for Neuroscience*, 33(2), 611–23. doi:10.1523/JNEUROSCI.2228-11.2013 IF 6.747 SJR 5.766
- 2012**
- 1) Sacheli, L. M., Candidi, M., Pavone, E. F., **Tidoni, E.**, & Aglioti, S. M. (2012). And yet they act together: interpersonal perception modulates visuo-motor interference and mutual adjustments during a joint-grasping task. *PloS One*, 7(11), e50223. doi:10.1371/journal.pone.0050223 IF 3.73 SJR 1.724
- 2010**
- 1) Urgesi, C., Maieron, M., Avenanti, A., **Tidoni, E.**, Fabbro, F., & Aglioti, S. M. (2010). Simulating the future of actions in the human corticospinal system. *Cerebral Cortex (New York, N.Y. : 1991)*, 20(11), 2511–21. doi:10.1093/cercor/bhp292 IF 6.83 SJR 5.387