

Department of General Psychology
University of Padova
Via Venezia 8,
35121-Padova
ITALY

Tel: +39 320 1745472
+39 349 827 6957
E-mail: lara.bardi@unipd.it
Lifespan Cognitive Neuroscience Lab
<http://lcnl.psy.unipd.it/people/bardi.htm>



Lara Bardi

Research interests

Neural bases of visuo-spatial attention, selective attention and motor preparation in conflict situations. Cognitive control. Cognitive development in early infancy. Detection and recognition of social stimuli: biological motion and faces. The neural bases of face processing in adults.

Education

01/2008-03/2011 University of Padova

PhD School in Psychobiology

Supervisor: Professor Daniela Mapelli

Research project: From perception to action. Neural bases of orienting attention and motor programming in conflict situations. Techniques: Transcranial Magnetic Stimulation (TMS), transcranial Direct Current Stimulation (tDCS).

06/2007 University of Padova

Master's Degree in Experimental Psychology and Cognitive Neuroscience

Thesis: A predisposition for biological motion in the newborn baby

Supervisor: Professor Francesca Simion

Final grade: 110/110 cum laude

02/2005 University of Florence

Bachelor's Degree in General and Experimental Psychology

Thesis: Face recognition in children with autism and normal development.

The effect of inversion of the inner elements of a face

Supervisor: Professor Michela Del Viva

Final grade: 110/110 cum laude

Work experiences

03/2011-02/2012 University of Padova

Post-doc fellowship at the Department of General Psychology

Supervisor: Professor Daniela Mapelli

Project: The Cognitive Reserve. A protective effect against dementia

04/2010-12/2010 University College London

Visiting student at the Institute of Cognitive Neuroscience (ICN)

Supervisor: Professor Vincent Walsh

Research project: Hemispheric asymmetries in the selection of local and global information in complex objects. Technique: Transcranial Direct Current Stimulation (tDCS)

12/2006-02/2008 University of Padova

Internship at the Department of Developmental Psychology

Supervisor: Professor Francesca Simion

Main activities: Data collection and analysis for research projects on biological motion and face detection and recognition in newborns, 3-month-old infants and adults. Technique: Eye tracker system

10/2004-02/2005 University of Florence

Internship at the Department of Psychology

Supervisor: Professor Michela Del Viva

Main activity: Data collection and analysis for research projects on face recognition in children

Teaching University of Padova

- Innate predisposition for social stimuli (2 hours). Development of cognitive processes course - Professor Francesca Simion
- Brain stimulation techniques. General principles and use in cognitive rehabilitation (4 hours). Techniques of neuropsychological rehabilitation course - Professor Daniela Mapelli

Technical skills

- Expert utilization of software relevant for research in psychology: SPSS, R, e-prime, Brainsight Neuronavigation system
- Transcranial Magnetic Stimulation (TMS) and transcranial Direct Current Stimulation (tDCS)
- Eye-tracker system (ASL)
- Classical techniques used in research on cognitive development: Preferential looking and habituation techniques

Courses and workshops

- TMS course Training Workshop. Institute of Cognitive Neuroscience- University College London. London 10-14 January 2009.
- TMS Summer School. Institute of Cognitive Neuroscience- UCL. London 19-30 May 2009.
- International Summer School “Dense array EEG methods for cognitive neuroscience”. Electrical Geodesic, Inc. (EGI). Verona 16-19 June 2009
- Magnetic Resonance-compatible EEG-ERPs and TMS soft- & hardware. Department of General Psychology, Padova 14 December 2009
- MRI course (20 hours). Data collection and data analysis with SPM.

Foreign language

English: Very Good written and spoken

French: Basic skills

Scientific works

- **Bardi, L.**, Kanai, R., Mapelli, D., & Walsh, V. Transcranial magnetic stimulation of the Frontal Eye Fields interferes with spatial conflict. *Journal of Cognitive Neuroscience* (under revision)
- Mapelli, D., **Bardi, L.**, Mojoli, M., Volpe, B., Gerosa, G., Amodio, P., & D'Antonio, L. Neuropsychological profile in a large group of heart transplant candidates. *Plos One* (in press).
- Schiff, S., **Bardi, L.**, Basso, D., & Mapelli, D. Timing spatial conflict within the parietal cortex: a TMS study. *Journal of Cognitive Neuroscience* (in press)
- **Bardi, L.**, Regolin, L., & Simion, F. (2011). Biological motion preference in humans at birth: Role of dynamic and configural properties. *Developmental Science*. 14: 353-359
- Simion, F., Di Giorgio E., Leo I., & **Bardi, L.** The processing of social stimuli in early infancy: From faces to biological motion perception. In Olivier Braddick, Janette Atkinson and Giorgio M. Innocenti, editors: Progress in Brain Research, Vol. 189. Burlington: Academic Press, 2011, pp. 173-193
- Turati, C., Di Giorgio, E., **Bardi, L.**, & Simion F. (2010) Holistic Face Processing in newborns, 3-month-old infants and adults: Evidence from the Composite Face Effect. *Child Development* 81:1894-1905
- Schiff, S., Balistreri, E., **Bardi, L.**, Volpato, C., Caregaro, L., & Mapelli D. (2011). Direct current stimulation of the right inferior frontal cortex modulates control of the location-based information in the Simon task. *Archives Italiennes de Biologie. A journal of Neuroscience* 149: S17.
- **Bardi, L.**, Kanai, R., & Walsh, V. (2010). Parietal asymmetry in local/global and salience-based selection: a tDCS study. *Neuropsychological Trends* 8:107-109
- **Bardi, L.**, Bulf, H., Regolin L., & Simion, F. (2008). I neonati riconoscono i movimenti biologici (Newborns detect biological motion). *Science Web News. Neuroscience*, 19 March 2008
- Schiff, S., **Bardi, L.**, Massironi, M., Basso, D., & Mapelli, D. (2008). The role of posterior parietal cortex in the Simon effect: A TMS study. *Brain stimulation: Basic, Translational, and Clinical Research in Neuromodulation* 1: 306-307

Submitted papers

- **Bardi, L.**, Regolin, L., & Simion, F. The first time ever I saw your feet: gravity bias in newborns' sensitivity to biological motion. *Cognition*
- **Bardi, L.**, Kanai, R., Mapelli, D., & Walsh, V. Direct Current Stimulation (tDCS) reveals parietal asymmetry in local/global and salience-based selection. *Cortex*

- **Bardi, L.**, Schiff, S., Basso D., & Mapelli, D. Response activation and selection in the dorsal Premotor cortex. *Experimental Brain Research*

**International
conferences**

- **Lara Bardi**, Daniela Mapelli. Response selection in the dorsal premotor cortex. Conference of the European Society of Cognitive Psychology (ESCOP). San Sebastian, Basque Country. September, 2011

Poster

- **Lara Bardi**, Lucia Regolin, Francesca Simion. Inversion effect in newborns' sensitivity to biological motion. International Conference on Infant Studies (ICIS). Baltimore, Maryland. March, 2010
- **Lara Bardi**, Demis Basso, Sami Schiff, Daniela Mapelli. Correspondence sequence in a combined Simon-SNARC task: a rTMS study. 28th European Workshop on Cognitive Neuropsychology (EWCN). Bressanone. January, 2010
- Elisa Di Giorgio, **Lara Bardi**, Chiara Turati, Francesca Simion. Holistic face processing in newborns, 3 month-old infants and adults: Evidence from the composite face illusion. Workshop on Cognition and Evolution (COGEVO). Rovereto. June, 2009
- **Lara Bardi**, Demis Basso, Sami Schiff, Daniela Mapelli. TMS on the posterior parietal cortex modulates the Simon effect. 27th European Workshop on Cognitive Neuropsychology (EWCN). Bressanone. January, 2009
- **Lara Bardi**, Francesca Simion, Lucia Regolin. Sensitivity to biological motion in newborn babies: Role of configural information. Biennial Meeting of the Society for Research in Child Development (SRCD). Denver, Colorado. April, 2009
- **Lara Bardi**, Lucia Regolin, Francesca Simion. The inversion effect in biological motion perception in newborn babies. Workshop on Cognition and Evolution (COGEVO). Rovereto. June, 2009
- **Lara Bardi**, Elisa Di Giorgio, Hermann Bulf, Francesca Simion. Newborns' sensitivity to biological motion. 39th European Brain and Behaviour Society (EBBS). Trieste. September, 2007
- Elisa Di Giorgio, **Lara Bardi**, Hermann Bulf, Francesca Simion. Newborn babies prefer biological motion displays. 30th European Conference on Visual Perception. Arezzo. August, 2007. Perception 36, ECVF Abstract Supplement
- Francesca Simion, Lucia Regolin, Hermann Bulf, **Lara Bardi**, Elisa Di Giorgio (2008). Newborns prefer biological motion. (Symposium on biological motion). International Conference on Infant Studies (ICIS).

National conferences Posters

- **Lara Bardi**, Ryota Kanai, Vincent Walsh. Parietal asymmetry in local/global and salience-based selection. Workshop: Nuove prospettive nell'utilizzo della tDCS. 12 Novembre 2010
- **Lara Bardi**, Daniela Mapelli, Alessandra Finisguerra, Andrea Di Rosa, Maria Elena Risitano, Sami Schiff, Demis Basso. Il ruolo della Corteccia Premotoria dorsale nella selezione della risposta in un compito Simon. XVI Congresso nazionale AIP- Sezione di Psicologia Sperimentale. Bologna, 2-3 settembre 2010
- Cristina Fonte, **Lara Bardi**, Matteo Cavalletti, Daniela Mapelli. Decision-making and emotività nel trauma cranico grave stabilizzato. Workshop: il trattamento dei disturbi cognitivi: Neuroriabilitazione, Neuromodulazione, Neuroplasticità. Rovereto 3-4 Dicembre 2010
- Mapelli, Alessandra Dodici, Matteo Cavalletti, **Lara Bardi**, Sami Schiff. L'effetto Simon verticale: il ruolo della posizione della risposta. XIV Congresso Nazionale dell'Associazione Italiana di Psicologia (AIP) – Sezione di Psicologia Sperimentale, Padova. Settembre, 2008
- Elisa Di Giorgio, **Lara Bardi**, Chiara Turati, Francesca Simion. Il ruolo dei movimenti oculari nel riconoscimento dei volti: uno studio sull'effetto composite negli adulti e a tre mesi di vita. Il ruolo dei movimenti oculari nel riconoscimento dei volti: uno studio sull'effetto composite negli adulti e a tre mesi di vita. XIV Congresso Nazionale dell'Associazione Italiana di Psicologia (AIP) – Sezione di Psicologia Sperimentale, Padova. Settembre, 2008

Oral presentations

- **Lara Bardi**, Francesca Simion, Lucia Regolin. La sensibilità al movimento biologico nei neonati: il ruolo della forma (Simposio: “Il ruolo dell'informazione cinetica nell'organizzazione percettiva”). XXII Congresso Nazionale dell'Associazione Italiana di Psicologia (AIP) – Sezione di Psicologia dello Sviluppo, Padova. Settembre 2008
- Sami Schiff, **Lara Bardi**, Demis Basso, Daniela Mapelli. Il ruolo del lobo parietale nell'effetto Simon: uno studio TMS. XIV Congresso Nazionale dell'Associazione Italiana di Psicologia (AIP) – Sezione di Psicologia Sperimentale, Padova. Settembre 2008
- **Lara Bardi**, Sami Schiff, Demis Basso, Valentina N Di Chiaro. Asimmetria parietale nell'effetto Simon: uno studio TMS a singolo impulso. XV Congresso Nazionale dell'Associazione Italiana di Psicologia (AIP) – Sezione di Psicologia Sperimentale, Chieti. Settembre 2009.
- **Lara Bardi**, Daniela Mapelli. La stimolazione magnetica dei Frontal Eye Fields interferisce con il conflitto spaziale. XVII Congresso Nazionale dell'Associazione Italiana di Psicologia (AIP) – Sezione di Psicologia Sperimentale. Catania, Settembre 2011.