

FRANCESCO PAVANI

CURRICULUM VITAE

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Contacts : Center for Mind/Brain Sciences, Università di Trento
Corso Bettini 31, 38068 Rovereto, Italia
Tel: +39 0464 808674. Fax: +39 0464 808602.
E-Mail: francesco.pavani@unitn.it

Affiliations

Center for Mind/Brain Sciences, University of Trento, Italy
Department of Psychology and Cognitive Science, University of Trento, Italy
Associate Member of the IMPACT Unit, Centre de Recherche en Neurosciences de Lyon, France

Education

2000 Ph.D. in Psychology, University of Bologna. Supervisor: Prof. Elisabetta Làdavas
1998 Honorary Research Fellow, Institute of Cognitive Neuroscience, University College London. Supervisor: Prof. Jon Driver
1995 Master equivalent degree (Laurea Magistrale) in Psychology, University of Bologna.
1994 Visitor Scholar at the Center for Neural Engineering, Brain Simulation Laboratory, University of Southern California, Los Angeles (USA). Supervisor: Prof. Micheal A. Arbib

Academic positions and professional habilitations

2017 - present Full Professor of Experimental Psychology (Professore I fascia, ssd M-PSI/01), Dipartimento di Psicologia e Scienze Cognitive, Università di Trento (from 01/10/2017).
2016 - present Associate member and double affiliation professor (professore con doppia appartenenza) at the Centre de Recherche en Neurosciences de Lyon (CRNL, France), Integrative, Multisensory, Perception, Action, Cognition Team (ImpAct), promoted by INSERM (U1028), CNRS (UMR5292), Université Claude Bernard (Lyon 1) and Lyon Civil Hospital (HCL). (from 01/10/16 to present)
2005 - 2017 Associate Professor of Experimental Psychology (Professore II fascia, ssd M-PSI/01), Faculty of Cognitive Science, Università di Trento (from 12/09/2005 to 30/09/2017)

- 2005 Certified Psychologist (listed in the Albo degli Psicologi della Provincia di Trento, from 22/02/2006, ID 438).
- 2004 - 2005 Lecturer of Experimental Psychology (Ricercatore, ssd M-PSI/01), Faculty of Cognitive Science, Università di Trento (from 01/01/2004 to 11/09/2005)
- 2002 - 2004 Post-Doctoral Research Fellow, Cognitive Science Laboratory, University of Trento. Supervisor: Prof. Umberto Castiello (from 01/12/2002 to 31/12/2003)
- 2000 - 2002 Marie Curie Post-Doctoral Research Fellow, Institute of Cognitive Neuroscience, University College London, United Kingdom. Supervisor: Prof. Jon Driver (from 01/11/2000 to 31/10/2002)

Main academic roles

- 2021 - present University of Trento Rector's delegate (Rector Flavio Deflorian) for coordinating PhD programs at the University level (from 22/04/2021)
- 2006 - present Member of the PhD School in Cognitive and Brain Sciences, Center for Mind Brain Sciences (CIMeC), University of Trento (from 01/05/06 to present)
- 2013 - 2019 Head of the PhD School in Cognitive and Brain Sciences, Center for Mind Brain Sciences (CIMeC), University of Trento (from 04/03/13 to 03/03/19; two mandates)
- 2011 - 2013 University of Trento Rector's delegate (Rector Davide Bassi) for coordinating undergraduate and graduate recruiting (from 19/01/2011 to 31/03/2013)
- 2011 - 2013 University of Trento Rector's delegate in the commission for High Apprenticeship of the Autonomous Province of Trento [Rappresentante per l'Università di Trento nella commissione per l'Alta Formazione Professionale della PAT] (from 19/08/2011 to 31/03/2013)
- 2004 - 2006 Member of the PhD School in Cognitive Sciences and Education, Dep. of Cognitive Sciences and Education, University of Trento (from 14/01/2004 to 30/04/06)
- 2004 - 2011 Faculty of Cognitive Science Director's delegate for the recruitment of new bachelor and master students
- 2006 Examiner in the University of Trento Commission for the attribution of internal scientific grants
- 2003 Member of the Departmental group for the development and coordination of the Experimental Psychology Laboratories, Department of Cognitive Sciences and Education, Università di Trento.

Academic and professional memberships

- Member of the Italian Psychology Association (AIP, Sezione di Psicologia Sperimentale)

Member of the Italian Neuropsychological Association (SINP, Società Italiana di Neuropsicologia)

Member of the Italian professional association of Psychologists (Albo degli Psicologi della Provincia di Trento, ID 438)

SCIENTIFIC RESEARCH

Research interests

Since the beginning of my training as a scientist and throughout my career, my research interests have been focused on multisensory aspects of perception and attention, in both typical and atypical populations. Atypical populations include adults and children with hearing loss, and adults who suffered from brain-damage. In my research I combine methods from human psychophysics, neuropsychology and neuroimaging to investigate the cognitive architecture of multisensory perception, attention and language in humans, as well as their neural correlates.

Current research areas include the study of:

- multisensory contributions to language processing
- multisensory and auditory space perception
- multisensory mechanisms of selective attention
- functional and neural plasticity in deaf individuals and in cochlear implant users

Research group

At the Center for Mind/Brain Sciences (CIMEC), University of Trento, I coordinate a research group denominated Cognition Across the Senses (CAtS). The research group includes post-doctoral fellows, PhD students, Master and Bachelor students. CAtS pursues three purposes in parallel: (1) basic and translational research; (2) education for students enrolled in psychology programs and for young scientists at the beginning of their career; (3) communication of cognitive neuroscience results to society.

Grants

Ongoing grants

Research Grant from the Velux Foundation, Switzerland (coordinator) – start on November 1st 2021. 356k euro.

COVID-19 research grant from the University of Trento (coordinator), 58k euro.

Progetti di ricerca di Interesse Nazionale – PRIN (Italia), 2017-2021 (national coordinator), 597K euro.

Completed grants

Agence Nationale de la Recherche (France), 2016-2019 (principal investigator), 550K euro.

CNRS, PICS Projet International de Coopération Scientifique, 2016-2018 (co-investigator), 18K euros

ITMO-Neuroscience & AVIESAN, 2015-2017 (co-investigator) 15K euros.

Free University Bozen-Bolzano, 2016-2017 (co-investigator), 10K euros

Chaire CIC-Cerveau et Santé Mentale, Fondation Neurodis, 2015 (3 months, Lyon, France)

Erasmus Teaching Staff Mobility Fellowship, 2014 (1 month, Maastricht, the Netherlands)

CARITRO Foundation, 2011 (co-investigator), 40K

Italian Ministry of Health, 2009 (co-investigator), 585K euros

Fundacao para a Ciencia e a Tecnologia (Portugal), 2009 (co-investigator), 20K euros

MIUR-PRIN Grant, Italian Government, 2008 (principal investigator), 50K euros

CRS-Funds, University of Trento, 2008 (principal investigator), 50K euros

MIUR-PRIN Grant, Italian Government, 2006 (principal investigator), 41K euros

Comune di Rovereto (principal investigator), 36K euros

Galileo, Italian-French University, 2007 (principal investigator), 8K euros

CIMeC Grants, 2006 (principal investigator), 10K euros

CRS-Funds, University of Trento, 2006 (co-investigator), 15K euros

Galileo, Italian-French University, 2006 (principal investigator), 8K euros

CRS-Funds, University of Trento, 2005 (co-investigator), 20K euros

Marie Curie Individual Fellowship, European Commission, 2000

Travel fellowship, EuroConference on Cognitive and Neural Bases of Spatial Neglect, 2000

Awards

Premio Don Giulio Tarra "Ricerche e studi sulla sordità" Pio Istituto dei Sordi di Milano, 2019

Prix Médisite en Neurosciences - Fondation de France, 2016 (to Alessandro Farné and Francesco Pavani)

Young researchers award, Italian Association of Psychology, 1997

Collaborations

National (Italian)

LACAM Lab, CNR-ISTC, Rome, Italy (Maria Cristina Caselli, Pasquale Rinaldi, Virginia Volterra)

Ear Nose and Throat (ENT) Department, Rovereto Hospital, Italy (Giuseppe Nicolò Frau, reparto di Otorinolaringoiatria)

International

Centre de Recherche en Neurosciences de Lyon (INSERM, CRNS, Université Claude Bernard), Lyon, France (Alessandro Farné; Valerie Gaveau; Alice C. Roy)

CERCO (CRNS), Toulouse, France (Pascal Barone)

Ear Nose and Throat (ENT) Department, Lyon City Hospital, France (Eric Truy)

Bibliometric indicators (last update: 06/09/2021)

ORCID

- 0000-0003-0426-5578

Google Scholar:

- Citations: 5888 (since 2016: 2590), H-index: 41 (since 2016: 29), i10-index: 74 (since 2016: 60)

Scopus:

- Citations: 3595, H-index: 34
- *Most contributed topics (2016-2020, Scopus):* Rubber Hand Illusion; Personal Space; Multisensory Integration (5 documents). Deaf; Cochlea Prosthesis; Cross-Modal (4 documents). Gaze; Headphones; Directional Hearing; Transfer Functions (4 documents)
- For updates see: <https://www.scopus.com/authid/detail.uri?authorId=6603904412>

Publications (in peer-review journals)

In press

97. Valzolgher, C., Giovanelli, E., Sorio, R., Rabini, G., & **Pavani, F.** (2022, aop). Can visual capture of sound separate auditory streams? *Experimental Brain Research*, doi: 10.1007/s00221-021-06281-8 (CiteScore rank 2020: 38th in Neuroscience | General Neuroscience).
96. Visentin, C., Valzolgher, C., Pellegatti, M., Potente, P., **Pavani, F.**, Prodi, N. (2021, aop). A comparison of simultaneously-obtained measures of listening effort: pupil dilation, verbal response time and self-rating. *International Journal of Audiology*. doi: 10.1080/14992027.2021.1921290 (CiteScore rank 2020: 93th in Social Sciences | Linguistics and Language).

2021

95. Turri, S., Rizvi, M., Rabini, G., Melonio, A., Gennari, R., & **Pavani, F.** (2021). Orienting Auditory Attention through Vision: the Impact of Monaural Listening. *Multisensory Research*, 35(1), 1–28. <https://doi.org/10.1163/22134808-bja10059>. (CiteScore rank 2020: 54th in Psychology | Experimental and Cognitive Psychology).
94. Bednaya, E., **Pavani, F.**, Ricciardi, E., Pietrini, P., & Bottari, D. (2021). Oscillatory signatures of Repetition Suppression and Novelty Detection reveal altered induced

visual responses in early deafness. *Cortex*, 142, 138-153. 10.1016/j.cortex.2021.05.017 (CiteScore rank 2020: 89nd in Psychology | Experimental and Cognitive Psychology).

93. Coudert, A., Gaveau, V., Gatel, J., Verdelet, G., Salemme, R., Farné, A., **Pavani, F.**, Truy, E. (2021). Spatial hearing difficulties in reaching space in bilateral cochlear implant children improve with head movements. *Ear and Hearing*, 43(1), 192-205. 10.1097/AUD.0000000000001090 (CiteScore rank 2020: 97th in Health Professions | Speech and Hearing).
92. Giovanelli, E., Valzolgher, C., Gessa, E., Todeschini, M., & **Pavani, F.** (2021). Unmasking the difficulty of listening to talkers with masks. *i-Perception*, 12(2), 1–11. <https://doi.org/10.1177/2041669521998393>. (CiteScore rank 2020: 61th in Psychology | Experimental and Cognitive Psychology).
91. Bonmassar, C., **Pavani, F.**, Di Renzo, A., Caselli, M. C., & van Zoest, W. (2021). Eye-movement patterns to social and non-social cues in early deaf adults. *Quarterly journal of experimental psychology*, 74(6), 1021–1036. <https://doi.org/10.1177/1747021821998511>. (CiteScore rank 2020: 81th in Psychology | General Psychology).
90. Amenta, S., Artesini, L., Musola, D., Frau, G. N., Vespignani, F., & **Pavani, F.** (2020). Probing language processing in cochlear implant users with visual word recognition: effects of lexical and orthographic word properties. *Language, Cognition and Neuroscience*, 36(2), 187-198. doi: <https://doi.org/10.1080/23273798.2020.1804600>. (CiteScore rank 2020: 95th in Social Sciences | Linguistics and Language).
89. **Pavani, F.** (2021). Percepire la scena acustica con l'impianto cocleare. *Logopedia e Comunicazione*, 17, 105-127. (CiteScore rank 2019: N/A).

2020

88. Bonfiglioli, C., & **Pavani, F.** (2020). L'impianto cocleare come potenziatore cognitivo? Una prospettiva neuroetica sulle obiezioni della comunità sorda. *Rivista Internazionale di Filosofia e Psicologia*, 11(3), 283-306. doi: <https://doi.org/10.4453/rifp.2020.0020>. (CiteScore rank 2019: 3rd in Arts and Humanities | Philosophy).
87. Valzolgher, C., Verdelet, G., Salemme, R., Lombardi, L., Gaveau, V., Farné, A., & **Pavani, F.** (2020). Reaching to sounds in virtual reality: A multisensory-motor approach to promote adaptation to altered auditory cues. *Neuropsychologia*, 149, 107665. doi: <https://doi.org/10.1016/j.neuropsychologia.2020.107665>. (CiteScore rank 2019: 83rd in Psychology | Experimental and Cognitive Psychology).
86. Valzolgher, C., Alzhaler, M., Gessa, E., Todeschini, M., Nieto, P., Verdelet, G., Salemme, R., Gaveau, V., Marx, M., Truy, E., Barone, P., Farné, A., & **Pavani, F.** (2020). The impact of a visual spatial frame on real sound-source localization in virtual reality. *Current Research in Behavioral Sciences*, 1, 100003. doi: <https://doi.org/10.1016/j.crbeha.2020.100003>. (CiteScore rank not available: the journal was launched in 2020).
85. Valzolgher, C., Campus, C., Rabini, G., Gori, M., & **Pavani, F.** (2020). Updating spatial hearing abilities through multisensory and motor cues. *Cognition*, 204, 104409. doi:

<https://doi.org/10.1016/j.cognition.2020.104409>. (CiteScore rank 2019: 89th in Psychology | Experimental and Cognitive Psychology).

84. Rabini, G., Lucin, G., & **Pavani, F.** (2020). Certain, but incorrect: on the relation between subjective certainty and accuracy in sound localisation. *Experimental Brain Research*, 238(3), 727-739. doi: <https://doi.org/10.1007/s00221-020-05748-4>. (CiteScore rank 2019: 39th in Neuroscience | General Neuroscience).
83. Zeni, S., Laudanna, I., Baruffaldi, F., Heimler, B., Melcher, D., & **Pavani, F.** (2020). Increased overt attention to objects in early deaf adults: an eye-tracking study of complex naturalistic scenes. *Cognition*, 194: 104061. doi: [10.1016/j.cognition.2019.104061](https://doi.org/10.1016/j.cognition.2019.104061). (CiteScore rank 2019: 89th in Psychology | Experimental and Cognitive Psychology).
82. Mazzurega, M., Marisa, J., Zampini, M., & **Pavani, F.** (2020). Thinner than yourself: self-serving bias in body size estimation. *Psychological research*, 84(4), 932-949. doi: <https://doi.org/10.1007/s00426-018-1119-z>. (CiteScore rank 2019: 83th in Psychology | Developmental and Educational Psychology).

2019

81. Verdelet, G., Desoche, C., Volland, F., Farné, A., Coudert, A., Hermann, R., Truy, E., Gaveau, V., **Pavani, F.**, & Salemme, R. (in press). Assessing Spatial and Temporal Reliability of the Vive System as a Tool for Naturalistic Behavioural Research. *IEEE. 2019 International Conference on 3D Immersion (IC3D)*. doi: [10.1109/IC3D48390.2019.8975994](https://doi.org/10.1109/IC3D48390.2019.8975994). (CiteScore rank 2019: N/A).
80. **Pavani, F.**, Venturini, M., Baruffaldi, F., Caselli, M.C., & van Zoest, W. (2019). Environmental learning of social cues: evidence from enhanced eye-gaze cueing in deaf children. *Child Development*, 90:1525-1534. doi: [10.1111/cdev.13284](https://doi.org/10.1111/cdev.13284). (CiteScore rank 2019: 97th in Psychology | Developmental and Educational Psychology).
79. Amadeo, M.B., Campus, C., **Pavani, F.**, & Gori, M. (2019). Spatial cues influence time estimation in deaf individuals. *iScience*, 19:369-377. doi: [10.1016/j.isci.2019.07.042](https://doi.org/10.1016/j.isci.2019.07.042). (CiteScore rank 2019: 82nd in Multidisciplinary | Multidisciplinary).
78. Ventre-Dominey, J., Gilbert, G., Bosse-Platiere, M., Farné, A., Dominey, P.F., & **Pavani, F.** (2019). *Scientific Reports*, 9(1):10083. doi: [10.1038/s41598-019-46528-7](https://doi.org/10.1038/s41598-019-46528-7). (CiteScore rank 2019: 93nd in Multidisciplinary | Multidisciplinary).
77. Rabini, G., Altobelli, E., & **Pavani, F.** (2019). Interactions between egocentric and allocentric spatial coding of sounds revealed by a multisensory learning paradigm. *Scientific Reports*, 9(1): 7892. doi: [10.1038/s41598-019-44267-3](https://doi.org/10.1038/s41598-019-44267-3). (CiteScore rank 2019: 93nd in Multidisciplinary | Multidisciplinary).
76. Bonmassar, C., **Pavani, F.**, van Zoest, W. (2019). The role of eye movements in manual responses to social and non social cues. *Attention, Perception and Psychophysics*, 81(5): 1236-1252. doi: [10.3758/s13414-019-01669-9](https://doi.org/10.3758/s13414-019-01669-9). (CiteScore rank 2019: 94th in Social Sciences | Linguistics and Language).
75. Patané, I., Cardinali, L., Salemme, R., **Pavani, F.**, Farné, A., Brozzoli, C. (2018). Action planning modulates peripersonal space. *Journal of Cognitive Neuroscience*. 31(8),

1141-1154. doi: doi:10.1162/jocn_a_01349. (CiteScore rank 2019: 63th in Neuroscience | Cognitive Neuroscience).

2018

74. Perna, F., **Pavani, F.**, Zampini, M., & Mazza, V. (2018). Behavioral Dynamics of Rhythm and Meter Perception: The Effect of Musical Expertise in Deviance Detection. *Timing and Time Perception*. 6(1).
73. Valzolgher, C., Mazzurega, M., Zampini, & **Pavani, F.** (2018). Incongruent multisensory stimuli alter bodily self-consciousness: Evidence from a first-person perspective experience. *Acta Psychologica*, 191, 261-270.

2017

72. Engelen, T., Watson, R., **Pavani, F.**, & de Gelder, B. (2017). Affective vocalizations influence body ownership as measured in the Rubber Hand Illusion. *PLoS One*. 12(10), e018009. doi: 10.1371/journal.pone.0186009
71. Heimler, B., Baruffaldi, F., Bonmassar, C., Venturini, M., & **Pavani, F.** (2017). Multisensory Interference in Early Deaf Adults. *Journal of Deaf Studies and Deaf Education*. 22(4), 422-433. doi: 10.1093/deafed/enx025
70. Benetti, S., van Ackeren, M.J., Rabini, G., Zonca, J., Foa, V., Baruffaldi, F., Rezk, M., **Pavani, F.**, Rossion, B., & Collignon, O. (2017). Functional selectivity for face processing in the temporal voice area of early deaf individuals. *Proc Natl Acad Sci U S A.*, 114(31), E6437-E6446. doi: 10.1073/pnas.1618287114.
69. **Pavani, F.**, Venturini, M., Baruffaldi, F., Artesini, L., Bonfioli, F., Frau, G.N., & van Zoest, W. (2017). Spatial and non-spatial multisensory cueing in unilateral cochlear implant users. *Hearing Research*, 344, 24-37. doi: 10.1016/j.heares.2016.10.025.
68. Kanayama, N., Morandi, A., Hiraki, K., & **Pavani, F.** (2017). Causal Dynamics of Scalp Electroencephalography Oscillation During the Rubber Hand Illusion. *Brain Topography*, 30(1), 122-135. doi:10.1007/s10548-016-0519-x.
67. van Zoest, W., Heimler, B., & **Pavani, F.** (2017). The oculomotor salience of flicker, apparent motion and continuous motion in saccade trajectories. *Experimental Brain Research*, 235(1), 181-191. doi: 10.1007/s00221-016-4779-1.
66. Tamè L, Wühle A, Petri CD, **Pavani F**, Braun C. (2017). Concurrent use of somatotopic and external reference frames in a tactile mislocalization task. *Brain and Cognition*, 111, 25-33. doi: 10.1016/j.bandc.2016.10.005.

2016

65. Tamè, L., Braun, C., Holmes, N.P., Farnè, A., & **Pavani, F.** (2016). Bilateral representations of touch in the primary somatosensory cortex. *Cognitive Neuropsychology*, 33, 48-66. doi: 10.1080/02643294.2016.1159547.

2015

64. Heimler, B., van Zoest, W., Baruffaldi, F., Rinaldi, P., Caselli, M.C., & **Pavani, F.** (2015). Attentional orienting to social and non-social cues in early deaf adults. *Journal of Experimental Psychology: Human Perception and Psychophysics*, 41, 1758-1771. doi: 10.1037/xhp0000099.

63. **Pavani, F.**, & Galfano, G. (2015). The multisensory body revealed through its cast shadows. *Frontiers in Psychology*, 6, 666. doi: 10.3389/fpsyg.2015.00666
62. Heimler, B., van Zoest, W., Baruffaldi, F., Donk, M., Rinaldi, P., Caselli, M.C., & **Pavani, F.** (2015). Finding the balance between capture and control: oculomotor selection in early deaf adults. *Brain and Cognition*, 96, 12-27. doi: 10.1016/j.bandc.2015.03.001.
61. Tamè, L., **Pavani, F.**, Braun, C., Salemme, R., Farnè, A., & Reilly, K.T. (2015). Somatotopy and temporal dynamics of sensorimotor interactions: evidence from double afferent inhibition. *European Journal of Neuroscience*, 41(11), 1459-1465. doi: 10.1111/ejn.12890
60. Tamè, L., **Pavani, F.**, Papadelis, C., Farnè, A., & Braun, C. (2015). Early integration of bilateral touch in the primary somatosensory cortex. *Human Brain Mapping*, 36(4), 1506-1523.
59. Navarrete, E., Caccaro, A., **Pavani, F.**, Mahon, B.Z., Peressotti, F. (2015). With or without semantic mediation: Retrieval of lexical representations in sign production. *Journal of Deaf Studies and Deaf Education*, 20(2), 163-171

2014

58. Mazzurega, M., Paladino, M.P., **Pavani, F.** (2014). Sincronia interpersonale: Conseguenze sociali, fattori di influenza e meccanismi responsabili. *Giornale Italiano di Psicologia*, 41(2), 295-320.
57. **Pavani, F.**, Rigo, P., & Galfano, G. (2014). From body shadows to bodily attention: Automatic orienting of tactile attention driven by cast shadows. *Consciousness and Cognition*, 29, 56-67.
56. Bottari, D., Heimler, B., Caclin, A., Dalmolin, A., Giard, M.-H., & **Pavani, F.** (2014). Visual change detection recruits auditory cortices in early deafness. *Neuroimage*, 94, 172-184.
55. Heimler, B., & **Pavani, F.** (2014). Response speed advantage for vision does not extend to touch in early deaf adults. *Experimental Brain Research*, 232, 1335-1341.
54. Heimler, B., **Pavani, F.**, Donk, M., van Zoest, W. (2014). Stimulus- and goal-driven control of eye movements: Action videogame players are faster but not better. *Attention, Perception & Psychophysics*, 76, 2398-2412.

2013

53. Tamè, L., Farnè, A., & **Pavani, F.** (2013). Vision of the body and the differentiation of perceived body side in touch. *Cortex*, 49(5), 1340-1351.
52. Nava, E., & **Pavani, F.** (2013). Changes in sensory dominance during childhood: converging evidence from the Colavita effect and the sound-induced flash illusion. *Child Development*, 84(2), 604-616.
51. Heimler, B., & **Pavani, F.** (2013). L'integrazione con l'ambiente nei bambini e negli adulti sordi: aspetti percettivi ed attentivi. *Giornale Italiano di Psicologia*, 15(3), 493-512.
50. Garappa, L., Bottari, D., Grimaldi, M., Calabrese, A., **Pavani, F.**, De Benedetto, M., Vitale, S., Monastero, P., Greco, M. (2013). High vowel processing in deaf Italian children with unilateral cochlear implants: A neurophysiologic and behavioural study.

Proceedings of the 14th Annual Conference of the International Speech Communication Association (ISCA), Interspeech, "Speech in Life Sciences and Human Societies", Lyon, France. [peer-reviewed article in proceedings]

2012

49. Bottari, D., Valsecchi, M., & **Pavani, F.** (2012). Prominent reflexive eye-movement orienting associated with deafness. *Cognitive Neuroscience*, 3(1), 8-13.
48. Magnani, B., **Pavani, F.**, & Frassinetti, F. (2012). Changing auditory time with prismatic goggles. *Cognition*, 125(2), 233-243.
47. Kanayama, N., Tamè, L., Ohira, H., & **Pavani, F.** (2012). Top down influence on visuo-tactile interaction modulates neural oscillatory responses. *Human Brain Mapping*, 59(4), 3406-3417.
46. Tamè, L., Braun, C., Lingnau, A., Schwarzbach, J., Demarchi, G., Li Hegner, Y., Farnè, A., & **Pavani, F.** (2012). The contribution of primary and secondary somatosensory cortices to the representation of body parts and body sides: an fMRI adaptation study. *Journal of Cognitive Neuroscience*, 24(12), 2306-2320.

2011

45. Bottari, D., Caclin, A., Giard, M-H., & **Pavani, F.** (2011). Changes in early cortical visual processing predict enhanced reactivity in deaf individuals. *PloS One*, 6, e25607.
44. Parise, C.V., & **Pavani, F.** (2011). Evidence of sound symbolism in simple vocalizations. *Experimental Brain Research*, 214, 373-380.
43. Mazzurega, M., **Pavani, F.**, Paladino, M.P., & Schubert, T.W. (2011). Self-other bodily merging in the context of synchronous but arbitrary-related multisensory inputs. *Experimental Brain Research*, 213, 213-221.
42. Tamè, L., Farnè, A., & **Pavani, F.** (2011). Spatial coding of touch at the fingers: Insights from double simultaneous stimulation within and between hands. *Neuroscience Letters*, 487, 78-82.

2010

41. Paladino, M.P., Mazzurega, M., **Pavani, F.**, & Schubert, T. (2010). Synchronous multisensory stimulation blurs self-other boundaries. *Psychological Science*, 21, 1202-1207.
40. Bottari, D., Nava, E., Ley, P., & **Pavani, F.** (2010). Enhanced reactivity of profound deaf in detection and discrimination tasks. *Restorative Neurology and Neuroscience*, 28, 167-79.
39. Brozzoli, C., Cardinali, L., **Pavani, F.**, & Farnè, A. (2010). Action-specific remapping of peripersonal space. *Neuropsychologia*, 48, 796-802.
38. Jacquin-Courtois, S., Rode, G., **Pavani, F.**, Giard, M.H., Fischer, C., Boisson, D., & Rossetti, Y. (2010). Effect of prism adaptation on left dichotic listening deficit in neglect patients: Glasses to hear better? *Brain*, 133, 895-908.

2009

37. Brozzoli, C., **Pavani, F.**, Urquizar, C., Cardinali, L., & Farnè, A. (2009). Grasping actions remap peripersonal space. *NeuroReport*, 20, 913-917.

36. Folegatti, A., de Vignemont, F., **Pavani, F.**, Rossetti, Y., & Farnè, A. (2009). Losing one's hand: visual-proprioceptive conflict affects touch perception. *PLoS One*, 7, e6920.
35. Frassinetti, F., **Pavani, F.**, Zamagni, E., Fusaroli, E., Vescovi, M., Benassi, M., Avanzi, S., & Farnè, A. (2009). Visual processing of moving and static self body-parts. *Neuropsychologia*, 47: 1988-1993.
34. Nava, E., Bottari, D., Bonfioli, F., Beltrame, M.A., & **Pavani, F.** (2009). Spatial hearing with a single cochlear implant in late-implanted adults. *Hearing Research*, 255, 91-98.
33. Nava, E., Bottari, D., Portioli, G., Bonfioli, F., Beltrame, M.A., Formigoni, P., & **Pavani, F.** (2009). Hearing again with two ears: Recovery of spatial hearing after bilateral cochlear implantation. *Neuropsychologia*, 47, 928-932.
32. Tabarelli, D., Vilardi, A., Begliomini, C., **Pavani, F.**, Turatto, M., & Ricci, L. (2009). Statistically robust evidence of stochastic resonance in human auditory perceptual system. *European Physical Journal B*, 69, 155-159.

2008

31. Bottari, D., Turatto, M., Bonfioli, F., Abbadessa, C., Selmi, S., Beltrame, M.A., & **Pavani, F.** (2008). Change blindness in profound deaf individuals and cochlear implant recipients. *Brain Research*, 1242, 209-218.
30. **Pavani, F.**, & Turatto, M. (2008). Change perception in complex auditory scenes. *Perception and Psychophysics*, 70, 619-629.
29. Nava, E., Bottari, D., Zampini, M., & **Pavani, F.** (2008). Visual temporal order judgment in profoundly deaf individuals. *Experimental Brain Research*, 190, 179-188.
28. **Pavani, F.**, Husain, M., & Driver, J. (2008). Eye-movements intervening between two successive sounds. *Experimental Brain Research*, 189, 435-449.

2007

27. **Pavani, F.**, Zampini, M. (2007). On the role of hand-size in the fake-hand illusion. *Perception*, 36, 1547-1554.
26. **Pavani, F.**, Galfano G. (2007). Self-attributed body-shadows modulate tactile attention. *Cognition*, 104, 73-88.
25. Faes, L., Nollo, G., Ravelli, F., Ricci, L., Vescovi, M., Turatto, M., **Pavani, F.**, Antolini, R. (2007). Small-sample characterization of stochastic approximation staircases in forced-choice adaptive threshold estimation. *Perception and Psychophysics*, 69, 254-262.

2006

24. Brozzoli, C., Demattè, M.L., **Pavani, F.**, Frassinetti, F., Farnè, A. (2006). Neglect and extinction: Within and between sensory modalities. *Restorative Neurology and Neuroscience*, 24, 217-232.

2005

23. **Pavani, F.**, Farné, A., Ládavas, E. (2005). Poor hand-pointing to sounds in right brain-damaged patients: Not just a problem of spatial hearing. *Brain and Cognition*, 59, 215-224.

22. Galfano, G., **Pavani, F.** (2005). Long-lasting capture of tactile attention by body shadows. *Experimental Brain Research*, 166, 518-527.
21. **Pavani, F.**, Làdavas, E., Driver, J. (2005). Gaze direction modulates auditory spatial deficits in stroke patients with neglect. *Cortex*, 41, 181-188.

2004

20. Bonfiglioli, C., **Pavani, F.**, Castiello, U. (2004). Differential effects of cast shadows on perception and action. *Perception*, 33, 1291-1304.
19. **Pavani, F.**, Castiello, U. (2004). Binding personal and extra-personal space through body shadows. *Nature Neuroscience*, 7, 14-16.
18. **Pavani, F.**, Husain, M., Làdavas, E., Driver, J. (2004). Auditory deficits in visuospatial neglect patients. *Cortex*, 40, 347-365.
17. Spence, C., **Pavani, F.**, Driver, J. (2004). Spatial constraints on visual-tactile crossmodal distractor congruency effects. *Cognitive, Affective and Behavioral Neuroscience*, 4, 148-169.
16. Spence, C., **Pavani, F.**, Maravita, A., Holmes, N. (2004). Multisensory Contributions to the 3-D Representation of Visuotactile Peripersonal Space in Humans: Evidence from the Crossmodal Congruency Task. *Journal of Physiology (Paris)*, 98, 171-189.

2003

15. **Pavani, F.**, Làdavas, E., Driver, J. (2003). Auditory and multisensory aspects of visuospatial neglect. *Trends in Cognitive Sciences*, 7, 407-414.
14. **Pavani, F.**, Farné, A., Làdavas, E. (2003). Task-dependent visual coding of sound position in visuospatial neglect patients. *NeuroReport*, 14, 99-103.

2002

13. **Pavani, F.**, Làdavas, E., Driver, J. (2002). Selective deficits of auditory localisation in patients with visuospatial neglect. *Neuropsychologia*, 40, 291-301.
12. **Pavani, F.**, Macaluso, E., Warren, J.D., Driver, J., Griffiths, T.D. (2002). A common cortical substrate activated by horizontal and vertical sound-movement in the human brain. *Current Biology*, 12, 1584-1590.
11. Frassinetti, F., **Pavani, F.**, Làdavas, E. (2002). Acoustical vision of neglected stimuli: Interaction among spatially converging audio-visual inputs in neglect patients. *Journal of Cognitive Neuroscience*, 14, 62-69.

2001

10. **Pavani, F.**, Meneghello, F., Làdavas, E. (2001). Deficit of auditory space perception in patients with visuospatial neglect. *Neuropsychologia*, 39, 1401-1409.
9. Làdavas, E., **Pavani, F.**, Farnè, A. (2001). Auditory peripersonal space in humans: a case of auditory-tactile interaction. *Neurocase*, 7, 97-103.
8. **Pavani, F.**, Spence, C., Driver, J. (2000). Visual capture of touch: Out-of-the-body experiences with rubber gloves. *Psychological Science*, 11, 353-359.

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7. Davis, G., Driver, J., **Pavani, F.**, Shepherd, A. (2000). Reappraising the apparent costs of attending two separate visual objects. *Vision Research*, 40, 1323-1332.
6. Spence, C., **Pavani, F.**, & Driver, J. (2000). Crossmodal links in spatial attention between vision and touch: Allocentric coding revealed by crossing the hands. *Journal of Experimental Psychology: Human Perception & Performance*, 26, 1298-1319.
5. Bertelson, P., **Pavani, F.**, Làdavas, E., Vroomen, J., deGelder, B. (2000). Ventriloquism in patients with unilateral visual neglect. *Neuropsychologia*, 38, 1634-1642.
4. Farnè, A., **Pavani, F.**, Meneghello, F., Làdavas, E. (2000). Left tactile extinction following visual stimulation of a rubber hand. *Brain*, 123, 2350-2360.

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3. **Pavani, F.**, Boscagli, I., Benvenuti, F., Rabuffetti, M., Farné, A. (1999). Are perception and action affected differently by the Titchener circles illusion? *Experimental Brain Research*, 127, 95-101.

1998

2. Làdavas, E., **Pavani, F.** (1998). Neuropsychological Evidence of the Functional Integration of Visual, Auditory and Proprioceptive Spatial Maps. *NeuroReport*, 9, 1195-1200.
1. Giusberti, F., Iachini, S., **Pavani, F.** (1998). Moving around objects and recognizing them. *Perceptual and Motor Skills*, 86, 267-276.

Books

- Bruno, N., & **Pavani, F.** (in press). *Perception: a multisensory perspective*. Oxford University Press.
- Bruno, N., **Pavani, F.** & Zampini, M. (2010). *La percezione multisensoriale*. Il Mulino: Bologna.

Book chapters (peer-reviewed)

- Rinaldi, P., Pavani, F., & Caselli, M.C. (2020). Developmental, cognitive and neurocognitive perspectives on language development in children who use cochlear implants. In: M. Marschark & H. Knoors (Eds.) *The Oxford Handbook of Deaf Studies in Learning and Cognition* (pp. 33-45). Oxford: Oxford University Press.
- Heimler, B., **Pavani, F.**, Amedi, A. (2019). Implications of cross-modal and intra-modal plasticity for the education and rehabilitation of deaf children and adults. In H. Knoors

& M. Marschark, *Evidence-based practices in deaf education*. Oxford University Press. ISBN: 9780190880545

Rinaldi, P., Caselli, M.C., & **Pavani, F.** (2017). Sviluppo del linguaggio e processi cognitivi nei bambini sordi. In S. Vicari & M.C. Caselli, *Neuropsicologia dell'età evolutiva*, Il Mulino: Bologna. ISBN: 978-88-15-27204-1.

Pavani, F. (2016). Lingue dei segni, sordità e plasticità cerebrale. *Lingue dei Segni, Società, Diritti*. Maziale, B., & Volterra, V. (Eds). Roma: Carocci. ISBN: 9788874667444

Bacci, F., & **Pavani, F.** (2014). "First hand" not "first eye" knowledge. In Levent N., & Pascual-Leone, A. (Eds). *The Multisensory Museum: Cross-disciplinary perspectives on touch, sound, smell, memory and space*. Lanham, Maryland: Rowman & Littlefield. ISBN: 978-0759123540

Pavani, F. & Röder, B. (2012). Crossmodal plasticity as a consequence of sensory loss: Insights from blindness and deafness. In Stein, B.E. (Ed.), *The New Handbook of Multisensory Processes*, Cambridge, MA: MIT Press. ISBN: 9780262017121

Pavani, F., & Bottari, D. (2012). Visual abilities in individuals with profound deafness: a critical review. In Murray, M.M., & Wallace, M. (Eds). *Frontiers in the Neural Bases of Multisensory Processes*, Boca Raton, FL: CRC Press. ISBN: 978-1439812174

Spence, C., **Pavani, F.**, Maravita, A., & Holmes, N. (2008). Multi-sensory interactions. In M. Lin & M. Otaduy (Eds.), *Haptic rendering: Foundations, algorithms, and applications*. Wellesley, MA: AK Peters. ISBN: 978-1568813325

Publications (not peer-reviewed)

Pavani, F. (2016). Corpo, spazio e azione. Alcuni costrutti delle neuroscienze cognitive ad uso della riabilitazione. *Riabilitazione Neurocognitiva*, 1:9.

Pavani, F. (2014). La LIS nell'era degli impianti cocleari. Contributi alla discussione. *Psicologia Clinica dello Sviluppo*, 18(3), 428-470.

Pavani, F. (2014). La magnifica occasione. *La magnifica ossessione. Catalogo della mostra*. Milano: Mondadori Electa. ISBN: 978883709609 [Art Exhibition Catalogue]

Pavani, F., Murray, M.M., Schroeder, C.E. (2007). Rethinking mind, brain and behaviour through a multisensory perspective (Editorial). *Neuropsychologia*, 45, 467-468.

Pavani F. (2005). Aspetti multisensoriali e plastici dello schema corporeo: nuovi paradigmi di ricerca dalle neuroscienze cognitive. *Saggi Child Development & Disabilities*, 31, 53-60.

Publications (proceedings)

Valzolgher, C., Todeschini, M., Verdelet G., Salemme, R., Gaveau, V., Truy, E., Farnè, A., & **Pavani, F.** Reaching to sounds to improve spatial hearing: A visual virtual reality

- approach. *Cogn Process* 22, 3–67 (2021). <https://doi.org/10.1007/s10339-021-01058-x>
- Zeloni, G., & **Pavani, F.** (2019). A commonly shared code for sadness in human vocalizations and music revealed by human infant cries. *Models and analysis of vocal emissions for biomedical applications: 11th international workshop* (p. 97). Firenze University Press.
- Bonmassar, C., **Pavani, F.**, Caselli, M.C., Di Renzo, A., & van Zoest, W. (2019). Eye movement patterns to social and non-social cues in early deaf adults. *Journal of Vision*, 19, 214-214.
- Bonmassar, C., **Pavani, F.**, Caselli, C., Di Renzo, A., Lamano, L., Lucioli, T., & van Zoest, W. (2019). Covert and Overt Orienting to Social and Non-Social Cues in Early Deaf Adults. *Perception*, 48, 69-69.
- Bonmassar, C., **Pavani, F.**, Frau, G.N., Spinella, D., & van Zoest, W. (2019). Investigating Consequences of Age-Related Hearing Loss on Attention and Executive Control *Perception*, 48, 165-165.
- Gori, M., Amadeo, M. B., Valzolgher, C., Baruffaldi, F., **Pavani, F.**, & Campus, C. (2019). Temporal Visual Representation Elicits Early Auditory Responses in Normal Hearing but Not in Deaf Individuals. *Perception*, 48, 213-213.
- Amadeo, M.B., Campus, C., **Pavani, F.**, & Gori, M. (2019). Space Is Used to Infer Time in Deaf Individuals. *Perception*, 48, 124-124.
- Gennari, R., **Pavani, F.**, & Rizvi, M. (2016). Tangible design for inclusive conversation with deaf or hard-of-hearing children. 1st International Symposium on Emerging Technologies for Education (SETE 2016), Oct 26-29, 2016, Sapienza University, Roma.
- Heimler, B., van Zoest, W., Baruffaldi, F., Rinaldi, P., Caselli, M.C., & **Pavani, F.** (2013). The impact of saliency on overt visual selection in early-deaf adults. *Multisensory Research* 26, 142-142.
- Heimler, B., Baruffaldi, F., Taddei, R., & **Pavani, F.** (2013). Multisensory flexibility within a perceptual system reorganized by crossmodal plasticity. *Multisensory Research*, 26, 85-85.
- Kanayama, N., Morandi, A., Didino, D., Cannella, S., Hiraki, K., & **Pavani, F.** (2013). Cortical dynamics during rubber hand illusion. *Multisensory Research*, 26, 151-151.
- van Zoest, W., Heimler, B., & **Pavani, F.** (2013). Increased impact of saliency in action video game players: evidence from eye movements. *Journal of Cognitive Neuroscience*. 1, 239-239.
- Targher, S., Fracasso, A., Zampini, M., & **Pavani, F.** (2012). Spatial localization of sounds under free-field and dichotic presentation: The role of eye movements. *Perception* 41, 165-165.
- Cannella, S., Folegatti, A., Zampini, M., & **Pavani, F.** (2012). Multisensory integration in body perception is unaffected by concurrent interoceptive and exteroceptive tasks. *Seeing and Perceiving*, 25 (s1), 33-33.

- Demattè, M.L., Zampini, M., Spence, C., & **Pavani, F.** (2009). Do odour-colour associations bias the orienting of visual attention. *Chemical Senses*, 34, E42-E42.
- Bottari, D., Nava, E., Ley, P., & **Pavani, F.** (2008). Space and time modulate faster visual detection in the profound deaf. *Perception*, 37, 136-136.
- Galfano, G., & **Pavani, F.** (2007). The time-course of attention shifts between extra-personal and personal space triggered by body shadows. *Perception*, 36, 127-127.
- Gilles, J.C., Lingnau, A., Schwarzbach, J.V., **Pavani, F.**, & Eagleman, D.M. (2007). Accepting banknotes: A mixture of visual perception, tactility, and trust. *Perception*, 36, 127-127.
- Nava, E., Bottari, D., Zampini, M., & **Pavani, F.** (2007). Comparable visual temporal-order-judgment abilities in profoundly deaf and normal-hearing individuals. *Perception*, 36, 163-163.
- Pavani, F.** (2006). Cast shadows of our own body. *Perception*, 35, 228-228.
- Pavani, F.**, Làdavas, E., Driver, J. (2001). Selective deficit of auditory localisation in visuospatial neglect patients. *Journal of Cognitive Neuroscience*, supplement.
- Spence, C., Driver, J., **Pavani, F.** (2000). Crossmodal influences on tactile perception: The role of attention in multimodal integration. *International Journal of Psychology*, 35, 220-220.
- Pavani, F.**, Spence, C., Driver, J. (1999). Visual capture of touch (tactile ventriloquism); out-of-the-body experiences with rubber gloves. *Journal of Cognitive Neuroscience*, Suppl.S., 14-14.
- Spence, C., **Pavani, F.**, Driver, J. (1998). What crossing the hands can reveal about visuotactile links in spatial attention. *Abstract of the Psychonomic Society*, 3, 13.
- Làdavas, E., **Pavani, F.** (1997). The influence of visual perceptual bias on pointing responses to auditory stimuli. *Experimental Brain Research*. 177, supplement, 57.

Publications (communication of science)

- Pavani, F., & Zampini, M. (2007). C'è chi crede di avere 4 braccia. *La Stampa*, 3 ottobre 2007.
- Pavani, F. (2006). Nuova luce sulle ombre del corpo. *Il Monocolo*, giornale letterario, 3.
- Pavani, F. (2005). Occhi che annusano, mani che ascoltano, orecchie che toccano. *UNITN. Periodico di informazione, politica e cultura dell'Università degli Studi di Trento*, 75, 5.
- Pavani, F. (2003). Guardare i confini del corpo. *UNITN. Periodico di informazione, politica e cultura dell'Università degli Studi di Trento*, 57, 3.

Patent

- Salemme, R., Farne, A., Gaveau, V., Belle, A., Eric, K. O. U. N., & **Pavani, F.** (2021). *U.S. Patent No. 11,176,727*. Washington, DC: U.S. Patent and Trademark Office.

Invited seminars

Keynote lectures

Associazione Italiana di Psicologia (Sezione di Psicologia Sperimentale), Milano (Italy), 18/09/19

4° Convegno Nazionale LIS, Roma (Italy), 11/11/18

CLASTA (Communication and Language Acquisition Studies in Typical and Atypical populations). Annual Conference, Bologna (Italy), 17/05/2014

Centre de Recherche en Neuropsychologie et Cognition (16th Journée Scientifique), Montreal (Canada), 30-31/03/2007.

Presentation in symposia (invited)

Terza conferenza nazionale sulla sordità, ENS, Napoli, 20-22/02/2020

"La multisensorialità nelle persone sorde. Evidenze scientifiche e opportunità per lo sviluppo", Giornate di Neuropsicologia dell'età evolutiva (XIII Edizione), Bressanone (Italia), 19/01/2018.

"Sensing beyond deafness", Université de Grenoble (France), 29/06/2015

Mini-Symposium, Society for Neuroscience, San Diego (USA), 13/11/2013

"The listening brain", Centro Studi e Ricerche Amplifon, Milano (Italia), 24-25/11/2011.

Giornate di Neuropsicologia dello Sviluppo, Simposio "Plasticità, sviluppo, ambiente". Bressanone (Italy), 21-23/01/2010

Annual Autumn School in Cognitive Neuroscience, Oxford (UK), 02/10/2008

"Shadow/Illumination", European Conference of Visual Perception (29th Meeting), St.Petersburg (Russia), 25/08/2006.

European Societies of Neuropsychology (2nd Meeting), Toulouse (France), 20/10/2006.

European Workshop on Cognitive Neuropsychology (19th Meeting), Bressanone (Italy), 21-26/01/2001.

Annual Meeting of the Cognitive Neuroscience Society (7th Meeting), Graduate Student Symposium, Washington DC (USA), 11-13/04/1999.

Other invited seminars (selection)

Dipartimento di Ingegneria, Università di Ferrara (Italia), 08/02/2018

Dipartimento di Psicologia, Università di Milano-Bicocca (Italy), 11/01/2016

Italian Institute of Technology (IIT), Genova (Italy), 02/05/2016

Fondation Neurodys, Lyon (France), 17/12/2015

CERCO, Toulouse (France), 16/06/2015

University of Maastricht (the Netherlands), 28/08/2014

ISTC-CNR, Roma (Italy), 05/06/2014
Università Statale di Milano, Milano (Italy), 23/09/2013
ISTC-CNR, Roma (Italy), 13/06/2012
Beijing Normal University, Beijing (China), 18/10/2011
University of Hamburg, Hamburg (Germany), 04/04/ 2011
Laboratoire Psychologie de la Perception, UMR8158, Paris (France), 29/03/2010
Giornate di neuropsicologia dell'età evolutiva, Bressanone (Italy), 20-23/01/2010
Summer School "Sense of Body", Bologna (Italy), 19/06/2008.
INSERM U864 "Espace et Action", Lyon (France), 07/12/2006.
INSERM U821 "Brain Dynamics and Cognition", Lyon (France), 18/11/2006.
Neuropsychology Unit, Dep. of Neurology, University Hospital, Zurich (Switzerland),
30/05/2006.
Division de Neuropsychologie and Service de Radiodiagnostic, Centre Hospitalier
Universitaire Vaudois, Lausanne (Switzerland), 15/12/2005.
Brain and Mind Institute, EPFL, Lausanne (Switzerland), 14/12/2005.
BPS Body Workshop, Oxford (UK), 30/09/2005.
Dipartimento di Psicologia, Università di Milano Bicocca (Milano), 12/05/2004.
Italian-Israeli Cognitive Neuroscience Workshop, Ben-Gurion University of the Negev
(Israel), 19-21/10/2003.
Dipartimento di Scienze Neurologiche e della Visione, Università degli Studi di Verona,
03/09/2003.
Division de Neuropsychologie and Service de Radiodiagnostic, Centre Hospitalier
Universitaire Vaudois, Lausanne (Switzerland), 01/2003.
International Multisensory Research Forum, 3rd Annual Meeting, Ginevra (Svizzera), 24-
26/05/2002.
NTT-UCL Joint Workshop, Institute of Cognitive neuroscience, University College London,
London (UK), 2-3/09/2002.
NTT-UCL Joint Workshop on Human Information Processing, NTT Research and
Development Centre, Atsugi (Japan), 10-11/04/2001.
Department of Psychology, University of Amsterdam (Netherlands), 04/2000.
Department of Psychology, Royal Holloway, University of London (UK), 11/2000.
Dipartimento di Scienze Neurologiche e della Visione, Università degli Studi di Verona,
03/09/1999.

Poster presentations

I regularly present my work also in the form of posters at national and international conferences. National conferences from the last 5 years include annual meetings of the

Italian Psychological Association [Associazione Italiana di Psicologia], editions 2012-2016. International conferences from the last 5 years include the International Multisensory Research Forum (2013) and the Society for Neuroscience (2013). A selection of the poster presentation at conferences is available at: <http://webapps.unitn.it/Ugcvp/it/Web/ProdottiAutore/PER0003828>

Conference presentations (last year)

Oral communications

Valzolgher, C., Todeschini, M., Verdelet G., Salemme, R., Gaveau, V., Truy, E., Farnè, A., & Pavani, F. (2021). Reaching to sounds to improve spatial hearing: A visual virtual reality approach. *International Conference on Spatial Cognition (ICSC 2021) - "Cognition and Action in a Plurality of Spaces"*, September 13-17 2021, online conference.

Editorial activity

Ad-hoc reviewer for scientific journals

Attention and Performance (volume XXII), Attention, Performance and Psychophysics, Brain, Brain Research, Cerebral Cortex, Cognition, Cognitive Affective and Behavioural Neuroscience, Current Biology, Developmental Science, Brain Research, Cognitive Neuropsychology, Consciousness and Cognition, Experimental Brain Research, European Psychologist, Frontiers in Psychology, Giornale Italiano di Psicologia, Hearing Research, Journal of the Acoustical Society of America, Journal of Deaf Studies and Deaf Education, Journal of Neurology Neurosurgery and Psychiatry, Journal of Neuroscience, Journal of Psychophysiology, Laterality, Multisensory Research, Nature Communication, Neurocase, Neuropsychologia, Neuroscience Letters, Perception, Proceedings of the Royal Society (Biological Sciences), Psychological Science, Psychonomic Bulletin and Review, Plos One, Restorative Neurology and Neuroscience, Ricerche di Psicologia, Rivista Italiana di Psicologia e Filosofia, Scientific Reports, Trends in Neuroscience, Vision Research

Guest editorial activity for scientific journals

Guest Editor for the Special Issue of Neuropsychologia "Advances in Multisensory Research" (2016)

Grant review and career reviews

Grant review

Ministero della Ricerca e dell'Università (MIUR, Italy)
Agenzia Nazionale di Valutazione del Sistema Universitario e della Ricerca (ANVUR, Italy)
European Research Council (EU)
Swiss Science Foundation (Switzerland)
Agence Nationale de la Recherche (France)
Agir Pour l'Audition (France)

National Science Foundation (USA)
Action on Hearing Loss (UK)
Marsden Fund (New Zealand)

Career review

University of Milano-Bicocca (Italy)
University of California, San Diego (USA)

Organisation of conferences and symposia

- 2018 La multisensorialità nelle persone sorde. Evidenze scientifiche e opportunità per lo sviluppo, Giornate di Neuropsicologia dell'età evolutiva (XIII Edizione), Bressanone (Italia), 19/01/2018. [simposio co-organizzato con Maria Cristina Caselli]
- 2016 Dalla sordità alla struttura della mente [translation: "From deafness to mental structure"]. Annual meeting of the Italian Psychological Association (21/09/2016, Roma, Italy). [symposium co-organised with Francesca Peressotti]
- 2014 Le conseguenze cognitive della sordità, dell'impianto cocleare e della lingua dei segni [translation: "Cognitive consequences of deafness, cochlear implant and sign language"]. Annual meeting of the Italian Psychological Association (16/09/2014, Pavia, Italy). [symposium co-organised with Francesca Peressotti]
- 2014 La persona sorda di fronte al linguaggio e all'ambiente [translation: "The deaf person facing language and the environment"] (16/01/2014, Rovereto, Italy). [conference co-organised with Maria Cristina Caselli and Francesca Baruffaldi]
- 2009 Rovereto Workshop on Crossmodal Plasticity (27-29/08/2009, Rovereto, Italy). <http://www.cimec.unitn.it/events/rwcp/09/> [conference organiser]
- 2007 Body Representation Workshop (8-10/10/2007, Rovereto, Italy). <http://www.cimec.unitn.it/events/brw/index.htm> [conference co-organised with Massimiliano Zampini]
- 2007 "Multisensory aspect of neglect", Italian Society for Neuroscience (Verona, 25/09/2007) [symposium organiser]
- 2006 Annual Meeting of the International Multisensory Research Forum (IMRF) [member of the organising committee]
- 2005 6th International Multisensory Research Forum (IMRF) (5-8/06/2005, Rovereto, Italy). <http://www.imrf.info/2005> [conference organiser]
- 2004 Annual Meeting of the International Multisensory Research Forum (IMRF) [member of the organising committee]

TEACHING AND SUPERVISIONS

University courses

Main courses taught at the University of Trento, Italy

Neuroscienze Cognitive [Cognitive Neuroscience]
(ssd M-PSI/01, 63 hours, 9 CFU)

Master degree in Psychology, Dipartimento di Psicologia e Scienze Cognitive, Università di Trento. Academic years: 2011-2012, 2012-2013, 2013-2014, 2014-2015, 2015-2016, 2016-2017, 2017-2018, 2018-2019, 2019-2020 (only 20 hours due to sabbatical leave), 2020-2021, 2021-2022.

Fondamenti di Neuropsicologia [Foundation of Neuropsychology]
(ssd M-PSI/01, 48 hours, 6 CFU)

BA degree in Scienze e Tecniche di Psicologia Cognitiva, Dipartimento di Psicologia e Scienze Cognitive, Università di Trento. Academic Years: 2013-2014, 2014-2015, 2015-2016, 2017-2018, 2018-2019, 2020-2021.

Neuropsicologia Cognitiva [Cognitive Neuropsychology]
(ssd M-PSI/01, 64 hours, 8 CFU)

Master degree in Psychology, Dipartimento di Psicologia e Scienze Cognitive, Università di Trento. Academic years: 2008-2009, 2009-2010, 2010-2011

Basi biologiche del comportamento [Biological Basis of Behaviour]
(ssd M-PSI/02, 63 hours, 9 CFU)

BA degree in Scienze e Tecniche di Psicologia Cognitiva, Facoltà di Scienze Cognitive, Università di Trento. Academic Years: 2011-2012, 2012-2013

Basi neurali della cognizione [Biological Basis of Cognition]
(ssd M-PSI/02, 72 hours, 12 CFU)

BA degree in Scienze e Tecniche di Psicologia Cognitiva, Facoltà di Scienze Cognitive, Università di Trento. Academic Years: 2007-2008, 2008-2009, 2009-2010, 2010-2011

Psicobiologia e Neuropsicologia [Psychobiology and Neuropsychology]
(ssd M-PSI/02, 64 hours, 8 CFU)

BA degree in Scienze e Tecniche di Psicologia Cognitiva Applicata, Facoltà di Scienze Cognitive, Università di Trento. Academic Years: 2004-2005, 2005-2006, 2006-2007

Neuroscienze Cliniche e Cognitive [Cognitive and clinical neuroscience]
(ssd M-PSI/02, 24 hours, 3 CFU)

BA degree in Scienze e Tecniche di Psicologia Cognitiva Applicata, Facoltà di Scienze Cognitive, Università degli Studi di Trento. 2003-2004, 2004-2005

Modules taught at the University of Trento, Italy

Metodi della ricerca in psicologia [Research Methods in Psychology]
(ssd M-PSI/01, 6 hours module), BA degree in Scienze e Tecniche di Psicologia Cognitiva, Dipartimento di Scienze Cognitive, Università di Trento. Academic Year: 2015-2016

Corso Sostegno per Bisogni Educativi Speciali [Course on Support for Special Education Needs]
(10 hours module). Academic Year: 2015-2016

Modules taught at other Universities

The Cognitive Neuroscience of Everyday Life. Università Luigi Bocconi, Milan.(Italy).
(6 hours module, in a course taught with David Melcher and Jens Schwartzbach).

Supervisions (master, bachelor, internships)

Starting from 2004 I have supervised over 45 internships of master and bachelor students on the topics of multisensory processes, auditory perception, tactile perception, attention, crossmodal plasticity and applied cognitive psychology.

I have also supervised over 12 internship projects for becoming a certified psychologist (tirocinio professionalizzante), and two 6-months internships of students coming from the University of Hamburg (Germany) and the Nagoya University (Japan).

Supervisions (PhD Students)

Elena Gessa (XXXVII ciclo). On-going.

Elena Giovanelli (XXXVII ciclo). On-going.

Chiara Valzolgher (Dottorato di Ricerca in Co-Tutela con l'Università Claude Bernard, Lyon 1, Lyon, Francia). Currently post-doc at CIMeC.

Giuseppe Rabini (XXXI ciclo). Thesis: "Neurofunctional multisensory mechanisms involved in auditory spatial training". Currently post-doc at CIMeC.

Luca Artesini (XXX ciclo). Thesis: "EEG indicators of written language processing in deaf individuals with and without cochlear implant". Currently employed in a private company as researcher.

Benedetta Heimler (XXV ciclo). Thesis: "Mechanisms of learning and plasticity across sensory modalities: Insights from bilateral deafness and intense visual training". Currently employed in a research hospital, Israel.

Elena Nava (XXII ciclo). Thesis: "Unisensory and multisensory perception in cochlear implant recipients". Currently RTD-B at the University Milan-Bicocca, Italy.

Luigi Tamè (XXII ciclo). Thesis: "Multiple Spatial Representations for Haptic Perception". Currently Lecturer at Kent University, UK.

Davide Bottari (XXI ciclo). Thesis: “La percezione visiva nei sordi profondi e nei pazienti con impianto cocleare”. Currently RTD-A, IMT-Lucca.

Maria Luisa Demattè (XIX ciclo). Thesis: “Olfaction and the other senses”.

Other roles related to PhD programs at the University of Trento

- Member of 5 oversight committees (i.e., the committee that follows the progresses of a specific PhD student during the 3-4 years of research)
- Examiner for the admission to the PhD program in Cognitive and Brain Sciences, Università di Trento (XXII cycle) and for the admission to the PhD program in ‘Scienze della Cognizione e della Formazione’, Università di Trento (XXI cycle).

PhD Examiner (selection)

2017 Université Grenoble-Alpes (France)

2017 Dipartimento di Psicologia, Università di Milano-Bicocca (Italy)

2015 Dipartimento di Psicologia, Università di Milano-Bicocca (Italy)

2010 Université Claude-Bernard, Lyon (France)

2009 Ecole Polytechnique Fédérale de Lausanne (Switzerland).

2008 Dipartimento di Psicologia, Università di Milano-Bicocca (Italy)

2007 Faculté de Biologie et de Médecine, Université de Lausanne (Switzerland).

2006 Facoltà di Psicologia, Università di Padova (Italy).

2000 Faculté de Psychologie et des Sciences de l'Education, Université de Geneve (Switzerland).

Supervisions (Post-Doctoral Fellows)

Stefania Benetti. Post-doctoral fellow on a PRIN grant.

Simona Amenta. Post-doctoral fellow on a CIMEC grant

Mara Mazzurega. Post-doctoral fellow on a CARITRO Foundation Grant.

Luigi Tamé. Post-doctoral fellow on a Marie-Curie Fellowship.

Alessia Folegatti. Post-doctoral fellow on a grant from Ministero della Salute (co-supervised with Massimiliano Zampini)

Davide Bottari. Post-doctoral fellow on a grant from Comune di Rovereto.

Gabriella Gloria Scala. Post-doctoral fellow on a grant from Comune di Rovereto.

Maria Luisa Demattè. Post-doctoral fellow supported by CIMEC.

SCIENCE OUTREACH

Events organised (selection)

Pensa trasversale [translation: 'Think Transversal']

In 2010, while I was the Rector's delegate for the recruitment of new bachelor and master students for the Faculty of Cognitive Science, I created and organised a new event for top high-school students, in which colleagues from all the faculties at the University of Trento tackled a single topic (for example, in the first year it was "Music") from different perspectives. This event has now become one of the regular initiatives for high-school students offered by the University of Trento, and it is now in its 7th edition (for further information see the website of the current edition: <http://events.unitn.it/pensatrasversale2016>). For a presentation of the initiative (in Italian) see: www.youtube.com/watch?v=kfNp6iA18WM

Lo studio della mente e l'arte dell'insegnare [translation: 'The study of the mind and the art of teaching']

In 2010, while I was the Rector's delegate for the recruitment of new bachelor and master students for the Faculty of Cognitive Science, I co-organised with Dott. Claudia Cattani a new event aimed at teachers and school head-masters. This event has now become one of the regular initiatives offered by the Department of Psychology and Cognitive Science, and it is now in its 8th edition (for further information see the website of the current edition: <http://webmagazine.unitn.it/evento/cogsci/10767/lo-studio-della-mente-e-larte-dellinsegnare>).

Since its beginning I have regularly participated in this event, by teaching classes on: attention, multisensory perception, auditory and visual disabilities, and cognitive perspectives on approaches to technology.

AttrattivaMente [translation: 'Attractive Mind']

In 2006, I co-organised with Massimiliano Zampini, the scientific event 'AttrattivaMente' (Rovereto, 28/04/2006 – 10/06/2006) to introduce key concepts of cognitive science to the general public.

Teaching to students, teachers and school head-masters

Since 2004 I regularly teach to high-school students, teachers (from primary to secondary school), and school head-masters about the advances in mind and brain sciences, and the notion of cognitive neuroscience that could contribute to improve educational activities. In particular, in the last 5 years I gave lectures on the topics of multisensory attention and

cognitive control, learning disabilities related to sensory deprivations and the relationship between technology and cognition.

In December 2015, I have promoted a lecture in collaboration with Dr. Sara Dellantonio (Dep. of Psychology and Cognitive Science, University of Trento) on the modularity of the mind debate, in the framework of an initiative organised by SIFA (Società Italiana di Filosofia Analitica). The lecture was broadcasted live and followed in high-schools across Italy. A link to my lecture is available at: <https://www.youtube.com/watch?v=PPD9dgEornI>

Other related initiatives include (selection):

- 2015 Lo studio della mente e l'arte dell'insegnare (6th edition). Course promoted by the Department of Cognitive Science and Education. Lectures: "Le nicchie cognitive: attenzione, controllo cognitivo e intelligenza fluida". 16-23/03/2015
- 2014 Lo studio della mente e l'arte dell'insegnare (5th edition). Course promoted by the Department of Cognitive Science and Education. Lectures: "Empatia sensoriale: come mettersi nei panni di un ipoacusico ed un ipovedente". 03-10-17-24/02/2014.
- 2013 Lo studio della mente e l'arte dell'insegnare (4th edition). Course promoted by the Department of Cognitive Science and Education. Lectures: "Attenzione e apprendimento: riflessioni della psicologia cognitiva per la pratica didattica". 07-14/02/2013
- 2012 Lo studio della mente e l'arte dell'insegnare (3rd edition). Course promoted by the Department of Cognitive Science and Education. Lecture: "Cinque cose che pensate di sapere sul cervello e che sono sbagliate". 13-14/02/2012.
- 2010 Pensa Trasversale (1st edition). Lecture: "Ho una musica in testa: le neuroscienze cognitive della musica"
- 2011 Lo studio della mente e l'arte dell'insegnare (2nd edition). Course promoted by the Department of Cognitive Science and Education. Lecture: "Fate attenzione! Il problema di come catturare e facilitare l'attenzione nella didattica quotidiana". 28-29/01/2011.
- 2010 Lo studio della mente e l'arte dell'insegnare (1st edition). Course promoted by the Department of Cognitive Science and Education. Lectures: *Le capacità limitate del nostro sistema cognitivo: il problema dell'attenzione.* 25-26/02/2010.

Teaching to medical doctors, speech-therapists and rehabilitators

I am regularly invited to give lectures in courses aimed at improving training for medical doctors, speech therapists and rehabilitators. These invitations are typically related to my expertise in multisensory perception and attention, and in the cognitive and neural aspects of deafness and cochlear implantation. As with the training aimed at teachers, I consider training to clinicians an essential part of my science outreach activity.

In April 2016 I have been invited to participate as lecturer in the workshop: "Sordità: lingua dei segni, impianto cocleare e riabilitazione linguistica" [Deafness: sign language, cochlear implant and language rehabilitation]. The workshop was organised by the Department of Developmental Psychology and Socialisation of the University of Padova, in collaboration with the Lions Club Padova "Elena Cornaro Piscopia" and the

“Magarotto” Institute specialised in deaf education. The aim of the workshop, open to specialists as well as the general public, was to discuss the potentials of sign language for deaf rehabilitation. April 2016.

Other related initiatives include (selection):

- 2016 Conference "Diagnosi precoce e trattamento della sordità e delle apnee notturne ostruttive nella prevenzione del decadimento cognitivo, dell'alzheimer e delle demenze" [Early diagnosis and treatment of deafness and obstructive apneas in the prevention of cognitive decline, Alzheimer disease and other dementias], Rovereto (Italy). October 2016.
- 2015 Conference "Disturbi dell'udito e del linguaggio nell'infanzia", Bolzano (Italy). 27/11/2015.
- 2015 Conference "L'esercizio di integrazione multisensoriale per il recupero dello spazio dell'azione", Centro Studi di Riabilitazione Neurocognitiva, 12-13-14 Novembre 2015, Santorso (VI, Italy).
- 2014 Conference "La lingua dei segni come strumento di cittadinanza", Department of Psychology and Cognitive Science, University of Trento, Rovereto (Italy), 17/10/2014. See video of the presentation at the following link: www.youtube.com/watch?v=wmAkWTKfP8M
- 2014 Conference "La persona sorda di fronte al linguaggio e all'ambiente", Department of Psychology and Cognitive Science, University of Trento, Rovereto (Italy), 16/01/2014. See video at: <https://www.youtube.com/watch?v=yNkOaHjW4E8>
- 2011 Conference "Otologia ieri oggi domani", Rovereto (Italy), 25/09/2011
- 2011 Conference "The listening brain", Centro Studi e Ricerche Amplifon, Milano (Italy), 24-25/11/2011.
- 2011 Conference "Comunicazione, formazione e cognizione nella sordità: quale ruolo per le tecnologie?", Trento (Italy), 21/05/2011.
- 2010 Conference "I sordi tra lingua ed identità: percorsi di bilinguismo", Treviso (Italy), 16/10/2010. See media coverage at: www.youtube.com/watch?v=RWOJLkvz6B4
- 2010 Second National Conference on Deafness: "La sordità dalla prevenzione alla riabilitazione", Verona (Italy), 25-26/06/2010

Lectures and activities for the general public

Science festivals

In September 2016, I have been invited as speaker in a symposium on 'deafness and sign language' organised at the Genova Science Festival. Media coverage of this lecture is available at: <https://www.youtube.com/watch?v=AozluoN5mfQ>.

Furthermore, I have coordinated laboratories for Researcher's Night activities for four consecutive editions, and served as general coordinator for CIMEC in two editions.

Other initiatives include (selection):

- 2016 'Chiamata alle Arti' (2nd edition), promoted by the Rovereto association ARTEA, comprising hands-on activities on the notion of body perception
- 2015 Researcher's Night. My research group (Cognition Across the Senses, CATS) has coordinated a series of demonstration aimed at raising awareness on the cognitive nature of body perception.
- 2015 'Chiamata alle Arti' (1st edition), promoted by the Rovereto association ARTEA, comprising hands-on activities on the notion of body perception
- 2013 Verona Science Festival 'Infinitamente'. Lecture
- 2012 Pergine Spettacolo Aperto. Lecture.
<http://www.perginefestival.it/dettaglio.aspx?ID=ELE0002617&L=en>.
- 2011 Researcher's Night. Scientific café: "Sensazionali sensi" [Sensational senses]. 23/09/2011
- 2010 Researcher's Night. Hands-on activity: "Le illusioni multisensoriali" [Multisensory illusions]. 24/09/2010

Initiatives bridging cognitive science and arts

In March 2016 I have been invited to participate in an multidisciplinary initiative at the Museum of Contemporary Art of Bolzano – Bozen (MUSEION). The initiative entitled "Il corpo al museo: arte e neuroscienze della multisensorialità" [The body in the museum: art and neuroscience of multisensory processing] was a conversation with the art historian Francesca Bacci, curator of Special Projects at MART (Rovereto).

Other initiatives include (selection):

- 2015 Interview bridging dance and cognitive science organised by Dance Company Abbondanza/Bertoni 2015
- 2011 Arte-Mente [translation: 'Art and the Mind'] (2011). Interviews bridging art and cognitive science, organised by the Museo di Arte Contemporanea di Trento e Rovereto (MART) linked to the exhibition "Modigliani Scultore" [Modigliani Sculptor]. 02/02/2011
- 2009 Arte-Mente [translation: 'Art and the Mind'] (2009). Interviews bridging art and cognitive science, organised by the Museo di Arte Contemporanea di Trento e Rovereto (MART) linked to the exhibition "Giuseppe Uncini e Collezione Permanente" [Giuseppe Uncini and the permanent exhibition]. 24/02/2009.

Other initiatives for institutions and the general public

In April 2016 I have been invited to present the perspective of cognitive neuroscience on sign language at the Italian Senate of the Republic (Senato della Repubblica, Commissione Affari Costituzionali), in the context of the ongoing discussions about a law on Italian Sign Language. This follows from a previous invitation to participate in a national meeting on deafness and cochlear implants organised at Camera dei Deputati (03/10/2014, see below).

Other initiatives include (selection):

- 2016 I participated in the event promoted by "Bar Senza Nome" in Bologna, the first bar in Italy coordinated by deaf people, to present the book "Lingua dei

Segni, società, diritti” edited by Benedetta Marziale e Virginia Volterra (Ed. Carocci). July 2016.

2014 Conference “Affrontiamo la sordità insieme a 360 gradi”, Camera dei Deputati, Rome (Italy), 03/10/2014

Consultant activities for companies or public institutions

2012 - 2013 Consultant for the Province Institute for Research, Training and Education Innovative Strategies (Istituto provinciale per la ricerca, l'aggiornamento e la sperimentazione educativi, IPRASE, Provincia Autonoma di Trento). (from 27/06/2012 to 01/07/2013).

2006 - 2008 Consultant for the European Central Bank for a project on the multisensory (visuo-tactile) features of the new Euro banknotes, and the role of visible symbols in attracting attention and preventing fraud.

Autorizzo il trattamento dei miei dati personali presenti nel curriculum vitae ai sensi del Decreto Legislativo 30 giugno 2003, n. 196 e del GDPR (Regolamento UE 2016/679).

