

Marcello Costantini, Ph.D.

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Academic Qualifications

- **2006:** PhD in Biotechnical Technologies and Functional Bioimaging, University “G. d’Annunzio” Chieti-Pescara, Italy.
- **2001:** Master Degree in Experimental Psychology. University “La Sapienza” Rome, Italy.

Academic Positions

- **2017 – present:** Associate professor SSD M-PSI/02 Psychobiology and Physiological Psychology. University “G. d’Annunzio” Chieti-Pescara, Italy.
- **2017 – 2018:** Reader at the Department of Psychology, University of Essex, UK
- **2015 – 2017:** Senior Lecturer at the Department of Psychology, University of Essex, UK
- **2008 – 2017:** Assistant professor SSD M-PSI/02 Psychobiology and Physiological Psychology. University “G. d’Annunzio” Chieti-Pescara, Italy.
- **2013 – 2015:** Visiting professor at the Institute of Mental Health Research, University of Ottawa, Ontario, Canada.
- **2006 – 2008:** Post-Doctoral Researcher. University “G. d’Annunzio” Chieti, Italy.
- **2005:** Visiting researcher at ICN, University College of London, University of London, UK.
- **2003 – 2005:** Doctoral student in Biotechnical Technologies and Functional Bioimaging, University “G. d’Annunzio” Chieti-Pescara, Italy.
- **2001 – 2003:** Visiting graduate student at IRCCS Santa Lucia Foundation. Rome, Italy.

Teaching

- **2008 – present:** Graduate students: Methods in cognitive neuroscience (\approx 50 students), University “G. d’Annunzio”, Chieti-Pescara, Italy.
- **2016 – present:** Undergraduate students: Psychobiology (\approx 300 students), University “G. d’Annunzio”, Chieti-Pescara, Italy.
- **2016 – 2018:** Undergraduate students: Beyond Brain and Behaviour (\approx 110 students), Department of Psychology, University of Essex, UK.
- **2015 – 2018:** Undergraduate students: Cognitive Psychology I (\approx 250 students), Department of Psychology, University of Essex, UK
- **2015 – 2018:** Undergraduate students: Brain and Behaviour (\approx 250 students), Department of Psychology, University of Essex, UK
- **2015 – 2018:** Graduate students: Fundamentals of Neuroscience and Neuropsychology (\approx 35 students), Department of Psychology, University of Essex, UK
- **2015 – 2018:** Graduate students: Research management (\approx 35 students), Department of Psychology, University of Essex, UK
- **2015 – 2018:** Graduate students: Special topics in Neuroscience and Neuropsychology (\approx 35 students), Department of Psychology, University of Essex, UK

PhD supervision

- **2018 – 2022** Mario Paci
- **2016 – 2019** Brunella Donno
- **2013 – 2016** Daniele Migliorati
- **2012 – 2015** Gianluca Finotti
- **2010 – 2013** Ettore Ambrosini, Marianna Busiello, Pasquale Cardellicchio

Research Grants

- **2022-2025** European Excellence Initiative (EEI): Strengthening capacity for excellence in higher education institutions and surrounding ecosystems. Boosting INGENIUM For Excellence (Local-PI, 2M€).
- **2022-2025** European Universities (Erasmus-Edu-2022-Eur-Univ): INGENIUM Alliance of European Universities (Local-PI, 14.4M€).
- **2016-2019** Research promotion funds, University G. d'Annunzio, Chieti-Pescara (20K€): Individual differences in perceptual content.
- **2014-2015** University Medical Research Fund, University of Ottawa, Program Grant (54k CAN\$): The multisensory Brain in MDD.
- **2013-2014** BIAL Foundation, Individual Grant (PI, 45k €): “The body beyond the body”
- **2011-2013** Volkswagen Foundation, Network Grant (co-PI, 90k €): “The (Un)bound body project: Exploring the constraints of embodiment & the limits of body representation”

Organization of events

- June 2019: Adriatica2019: Summer school on brain, body and neural oscillations. University “G. d'Annunzio”, Chieti-Pescara, Italy.
- June 2015: Brain oscillations in multisensory integration. 16th International Multisensory Research Forum (IMRF), Pisa, Italy.
- May 2013: Multisensory space workshop. London, UK
- September 2012: Italian Association of Psychology: Section of Experimental Psychology
- September 2009: Italian Association of Psychology: Section of Experimental Psychology

Publications in peer-reviewed journals/books (Papers = 84, h-index=30, Citations=3200; source Scopus, April 2022)

1. Vastano R, **Costantini M**, Widerstrom-Noga E. (2022) Maladaptive reorganization following SCI: The role of body representation and multisensory integration. *Prog Neurobiol.* Jan; 208:102179.
2. Fotia F, Van Dam L, Sykes JJ, Ambrosini E, **Costantini M**, Ferri F. (2022) Body structural representation in schizotypy. *Schizophr Res.* Jan;239:1-10
3. Spadone S, Perrucci MG, Di Cosmo G, **Costantini M**, Della Penna S, Ferri F. (2021) Frontal and parietal background connectivity and their dynamic changes account for individual differences in the multisensory representation of peripersonal space. *Sci Rep.* Oct 15;11(1):20533.
4. Di Cosmo G, **Costantini M**, Ambrosini E, Salone A, Martinotti G, Corbo M, Di Giannantonio M, Ferri F. (2021) Body-environment integration: Temporal processing of tactile and auditory inputs along the schizophrenia continuum. *J Psychiatr Res.* Feb;134:208-214
5. Di Cosmo G, **Costantini M**, Spadone S, Pizzella V, Della Penna S, Marzetti L, Ferri F. (2021) Phase-coupling of neural oscillations contributes to individual differences in peripersonal space. *Neuropsychologia.* Jun 18;156:107823.
6. **Costantini M**, Quarona D, Sinigaglia C. (2021) Colors and Handles: How Action Primes Perception. *Front Hum Neurosci.* 2021 May 11;15:628001.

7. Paci M, Di Cosmo G, Perrucci MG, Ferri F, **Costantini M.** (2021) Cortical silent period reflects individual differences in action stopping performance. *Sci Rep.* 2021 Jul 26;11(1):15158.
8. Venskus A, Ferri F, Migliorati D, Spadone S, **Costantini M***, Hughes G*. (2021) Temporal binding window and sense of agency are related processes modifiable via occipital tACS. *PLoS One.* Sep 10;16(9):e0256987.
9. McDonough KL, **Costantini M.** Hudson M, Ward E, Bach P. (2020) Affordance matching predictively shapes the perceptual representation of others' ongoing actions. *J Exp Psychol Hum Percept Perform.* Aug;46(8):847-859.
10. **Costantini M.** Salone A, Martinotti G, Fiori F, Fotia F, Di Giannantonio M, Ferri F. (2020) Body representations and basic symptoms in schizophrenia. *Schizophr Res.* Aug;222:267-273.
11. Ionta S, **Costantini M.** Ferretti A, Galati G, Romani GL, Aglioti SM. (2020) Visual similarity and psychological closeness are neurally dissociable in the brain response to vicarious pain. *Cortex.* Dec;133:295-308.
12. Donno B, Migliorati D, Zappasodi F, Perrucci MG, **Costantini M.** (2020). The impact of body posture on intrinsic brain activity: The role of beta power at rest. *PLoS One.* 15(1):e0218977.
13. Migliorati D, Zappasodi F, Perrucci MG, Donno B, Northoff G, Romei V, **Costantini M.** (2020). Individual Alpha Frequency Predicts Perceived Visuotactile Simultaneity. *J Cogn Neurosci.* 32(1):1-11.
14. Scarpina F, Marzullo P, Mai S, Mauro A, Scacchi M, **Costantini M.** (2019). Altered temporal sensitivity in obesity is linked to pro-inflammatory state. *Sci Rep.* 29;9(1):15508.
15. Cooke J, Poch C, Gillmeister H, **Costantini M.** Romei V. (2019). Oscillatory Properties of Functional Connections Between Sensory Areas Mediate Cross-Modal Illusory Perception. *J Neurosci.* 39(29):5711-5718.
16. **Costantini M.** Tommasi L, Sinigaglia C. (2019). How action performance affects object perception. *Exp Brain Res.* 237(7):1805-1810
17. Sedda A, Ambrosini E, Dirupo G, Tonin D, Valsecchi L, Redaelli T, Spinelli M, **Costantini M.** Bottini G. (2018), Affordances after spinal cord injury. *J Neuropsychol.* Feb 16.
18. Labrenz F, Ferri F, Wrede K, Forsting M, Schedlowski M, Engler H, Elsenbruch, S, Benson S, **Costantini M.** (2019). Altered temporal variance and functional connectivity of BOLD signal is associated with state anxiety during acute systemic inflammation. *Neuroimage.* Jan 1;184:916-924.
19. Sedda A, Ambrosini E, Dirupo G, Tonin D, Valsecchi L, Redaelli T, Spinelli M, **Costantini M.** Bottini G. (2018), Affordances after spinal cord injury. *J Neuropsychol.* Feb 16.
20. **Costantini M.** Migliorati D, Donno B, Sirota M, Ferri F. (2018). Expected but omitted stimuli affect crossmodal interaction. *Cognition.* 2018 Feb;171:52-64.
21. Finotti G, Migliorati D, **Costantini M.** (2018) .Multisensory integration, body representation and hyperactivity of the immune system. *Conscious Cogn.* Aug;63:61-73.
22. Di Cosmo G, **Costantini M.** Salone A, Martinotti G, Di Iorio G, Di Giannantonio M, Ferri F. (2017) Peripersonal space boundary in schizotypy and schizophrenia. *Schizophr Res.* Dec 18.
23. Ricciardi E, Menicagli D, Leo A, **Costantini M.** Pietrini P, Sinigaglia C. (2017). Peripersonal space representation develops independently from visual experience. *Sci Rep.* Dec 15;7(1):17673
24. **Costantini M.** Migliorati D, Donno B, Sirota M, Ferri F. (2017). Expected but omitted stimuli affect crossmodal interaction. *Cognition.* Nov 3;171:52-64.
25. Weser V, Finotti G, **Costantini M.** Proffitt DR. (2017). Multisensory integration induces body ownership of a handtool, but not any handtool. *Conscious Cogn.* Nov;56:150-164.
26. Ferri F, Ambrosini E, Pinti P, Merla A, **Costantini M.** (2017). The role of expectation in

- multisensory body representation - neural evidence. *Eur J Neurosci*. Aug;46(3):1897-1905
27. Donnarumma F, **Costantini M**, Ambrosini E, Friston K, Pezzulo G. (2017). Action perception as hypothesis testing. *Cortex*. Apr;89:45-60.
 28. Ferri F, Nikolova YS, Perrucci MG, **Costantini M**, Ferretti A, Gatta V, Huang Z, Edden RAE, Yue Q, D'Aurora M, Sibille E, Stuppia L, Romani GL, Northoff G. (2017). A Neural "Tuning Curve" for Multisensory Experience and Cognitive-Perceptual Schizotypy. *Schizophr Bull*. Jul 1;43(4):801-813.
 29. Ferri F, Ambrosini E, **Costantini M**. (2016) Spatiotemporal processing of somatosensory stimuli in schizotypy. *Sci Rep*. Dec 9;6:38735.
 30. Ambrosini E, & **Costantini M** (2016). Body posture differentially impacts on visual attention towards tool, graspable, and non-graspable objects. *Journal of Experimental Psychology: Human Perception and Performance*. 2016 Nov 10. [Epub ahead of print]
 31. **Costantini M**, Robinson J, Migliorati D, Donno B, Ferri F, Northoff G. (2016). Temporal limits on rubber hand illusion reflect individuals' temporal resolution in multisensory perception. *Cognition*. 157, 39-48.
 32. Scarpina F, Migliorati D, Marzullo P, Mauro A, Scacchi M & **Costantini M**. (2016). Altered multisensory temporal integration in obesity. *Scientific Reports*, 6, art. no. 28382
 33. Finotti G & **Costantini M** (2016). Multisensory body representation in autoimmune diseases. *Scientific Reports*, 6, art. no. 21074.
 34. Triberti S, Repetto C, **Costantini M**, Riva G, Sinigaglia C (2016). Press to grasp: how action dynamics shape object categorization. *Experimental Brain Research*, 234 (3), pp. 799-806.
 35. Ferri F, **Costantini M**, Huang Z, Perrucci MG, Ferretti A, Romani GL, Northoff G. (2015). Intertrial variability in the premotor cortex accounts for individual differences in peripersonal space. *Journal of Neuroscience*, 35 (50), pp. 16328-16339.
 36. Aquino A, Paolini D, Pagliaro S, Migliorati D, Wolff A, Alparone FR & **Costantini M**. (2015). Group membership and social status modulate joint actions. *Experimental Brain Research*, 233 (8), pp. 2461-2466.
 37. Ambrosini E, Pezzulo G & **Costantini M**. (2015). The eye in hand: Predicting others' behavior by integrating multiple sources of information. *Journal of Neurophysiology*, 113 (7), pp. 2271-2279.
 38. Ferri F, Tajadura-Jiménez A, Väljamäe A, Vastano R & **Costantini M**. (2015). Emotion-inducing approaching sounds shape the boundaries of multisensory peripersonal space *Neuropsychologia*, 70, pp. 468-475.
 39. Committeri G, Cirillo S, **Costantini M**, Galati G, Romani GL, Aureli T (2015). Brain activity modulation during the production of imperative and declarative pointing *NeuroImage*, 109, pp. 449-457.
 40. Fini C, **Costantini M**, Committeri G. (2014). Sharing space: the presence of other bodies extends the space judged as near. *PLoS ONE*. Dec 10;9(12):e114719.
 41. Ferri F, **Costantini M**, Salone A, Ebisch S, De Berardis D, Mazzola V, Arciero G, Ferro FM, Di Giannantonio M, Romani GL, Gallese V. (2014). Binding Action and Emotion in First-Episode Schizophrenia. *Psychopathology*. 47(6):394-407.
 42. Sebastiani V, de Pasquale F, **Costantini M**, Mantini D, Pizzella V, Romani GL, Della Penna S. (2014). Being an agent or an observer: Different spectral dynamics revealed by MEG. *Neuroimage*. 15;102 Pt. 2:717-28
 43. **Costantini M**, Frassinetti F, Maini M, Ambrosini E, Gallese V, Sinigaglia C. (2014). When a laser pen becomes a stick: remapping of space by tool-use observation in hemispatial neglect. *Exp Brain Res*. 2014 Oct;232(10):3233-41
 44. **Costantini M**. (2014). Body perception, awareness, and illusions. *Wiley Interdisciplinary Reviews: Cognitive Science* 5(5), 551-560.

45. **Costantini M.** (2014) Bodily self and immune self: is there a link? *Frontiers in Human Neuroscience* 2014 Mar 18; 8:138.
46. De Stefani E, Innocenti A, De Marco D, Busiello M, Ferri F, **Costantini M**, Gentilucci M (2014) The spatial alignment effect in near and far space: a kinematic study. *Exp Brain Res.* 232(7):2431-8.
47. Magnani B, Frassinetti F, Ditye T, Oliveri M, **Costantini M**, Walsh V. (2014) Left insular cortex and left SFG underlie prismatic adaptation effects on time perception: evidence from fMRI. *Neuroimage.* 15;92:340-8.
48. **Costantini M**, Ambrosini E, Cardellicchio P & Sinigaglia C (2014). How your hand drives my eyes. *Social Cognitive and Affective Neuroscience.* May;9(5):705-11
49. Ferri F, Busiello M, Campione GC, De Stefani E, Innocenti A, Romani GL, **Costantini M**, Gentilucci M. (2013). The eye contact effect in request and emblematic hand gestures. *Eur J Neurosci.* Dec 2 [Epub ahead of print]
50. Serino A, Alsmith A, **Costantini M**, Mandrigin A, Tajadura-Jimenez A, Lopez C. (2013). Bodily ownership and self-location: components of bodily self-consciousness. *Conscious Cogn.* 2013 Dec;22(4):1239-52
51. Cardellicchio P, Sinigaglia C & **Costantini M** (2013). Grasping affordances with the other's hand: A TMS study. *Social Cognitive and Affective Neuroscience,* Apr;8(4):455-9.
52. Ferri F, **Costantini M**, Salone A, Di Iorio G, Martinotti G, Chiarelli A, Merla A, Di Giannantonio M, Gallese V. (2013). Upcoming tactile events and body ownership in schizophrenia. *Schizophr Res.* Jul 5 [Epub ahead of print].
53. Ferri F, Chiarelli AM, Merla A, Gallese V & **Costantini M** (2013). The body beyond the body: expectation of a sensory event is enough to induce ownership over a fake hand. *Proc Biol Sci.* Jun 26;280(1765).
54. Ambrosini E, Reddy V, de Looper A, **Costantini M**, Lopez B, Sinigaglia C (2013). Looking ahead: anticipatory gaze and motor ability in infancy. *PLoS One.* Jul 4;8(7):e67916
55. **Costantini M** & Ferri F (2013). Action co-representation and social exclusion. *Exp Brain Res.* 229(2):197-202
56. **Costantini M**, Di Vacri A, Chiarelli A, Ferri F, Romani GL, Merla A (2013). Studying social cognition using Near Infrared Spectroscopy: the case of Social Simon Effect. *Journal of Biomedical Optics.*18(2):25005.
57. Ambrosini E, Blomberg O, Mandrigin A & **Costantini M** (2013). Social exclusion modulates pre-reflective interpersonal body representation. *Psychol Res.* Jan 10. [Epub ahead of print]
58. Ferri F, Ebisch SJ, **Costantini M**, Salone A, Arciero G, Mazzola V, Ferro FM, Romani GL, Gallese V. (2013). Binding action and emotion in social understanding. *PLoS One.* 8(1):e54091
59. **Costantini M**, Ambrosini E & Sinigaglia C (2012). Does how I look at what you're doing depend on what I'm doing? *Acta Psychologica* 141(2):199-204
60. **Costantini M**, Ambrosini E & Sinigaglia C. (2012). Out of your hand's reach, out of my eyes' reach. *The Quarterly Journal of Experimental Psychology,* 65(5), 848-855.
61. Ambrosini E, Scorolli C, Borghi AM & **Costantini M**. (2012). Which Body for Embodied cognition. Affordance and language within actual and perceived reaching space. *Conscious Cogn.* 21(3):1551-7
62. Ambrosini E, Sinigaglia C & **Costantini M** (2012). Tie my hands, tie my eyes. *Journal of Experimental Psychology: Human Perception and Performance,* 38(2), 263-266.
63. Ferri F, Frassinetti F, Ardizzi M, **Costantini M** & Gallese V (2012). A Sensorimotor Network for the Bodily Self. *Journal of Cognitive Neuroscience,* 24(7), 1584-1595.
64. **Costantini M**, Ambrosini E, Scorolli C & Borghi AM (2011). When objects are close to me: affordances in the peripersonal space. *Psychon Bull Rev,* 18, 302-308.

65. **Costantini M**, Ambrosini E, Sinigaglia, C & Gallese V (2011). Tool-use observation makes far objects ready-to-hand. *Neuropsychologia*, 49, 2658-2663.
66. **Costantini M**, Committeri G & Sinigaglia C (2011). Ready both to your and to my hands: mapping the action space of others. *PLoS One*, 6, e17923.
67. **Costantini M**, Urgesi C, Galati G, Romani GL & Aglioti SM (2011). Haptic perception and body representation in lateral and medial occipito-temporal cortices. *Neuropsychologia*, 49, 821-829.
68. Ferri F, Riggio L, Gallese V & **Costantini M** (2011). Objects and their nouns in peripersonal space. *Neuropsychologia*, 49(13), 3519-3524.
69. Cardellicchio P, Sinigaglia C & **Costantini M** (2011). The space of affordances: a TMS study. *Neuropsychologia*, 49, 1369-1372.
70. Tsakiris M, Tajadura-Jimenez A & **Costantini M** (2011). Just a heartbeat away from one's body: interoceptive sensitivity predicts malleability of body-representations. *Proc Biol Sci*, 278, 2470-2476.
71. Ferri F, Frassinetti F, **Costantini M** & Gallese V (2011). Motor simulation and the bodily self. *PLoS One*, 6, e17927.
72. Ambrosini E, **Costantini M** & Sinigaglia C (2011). Grasping with the eyes. *J Neurophysiol*, 106, 1437-1442.
73. Busiello M, **Costantini M**, Galati G & Committeri G (2011). Sensory-motor interference abolishes repetition priming for observed actions, but not for action-related verbs. *Neurosci Lett*, 492, 89-93.
74. **Costantini M**, Ambrosini E, Tieri G, Sinigaglia C & Committeri G (2010). Where does an object trigger an action? An investigation about affordances in space. *Exp Brain Res*, 207, 95-103.
75. Cardini F, **Costantini M**, Galati G, Romani G L, Ladavas E & Serino A (2010). Viewing one's own face being touched modulates tactile perception: an fMRI study. *J Cogn Neurosci*, 23, 503-513.
76. Tsakiris M, **Costantini M** & Haggard P (2008). The role of the right temporo-parietal junction in maintaining a coherent sense of one's body. *Neuropsychologia*, 46, 3014-3018.
77. **Costantini M**, Galati G, Romani GL & Aglioti SM (2008). Empathic neural reactivity to noxious stimuli delivered to body parts and non-corporeal objects. *Eur J Neurosci*, 28, 1222-1230.
78. **Costantini M**, Committeri G & Galati G (2008). Effector- and target-independent representation of observed actions: evidence from incidental repetition priming. *Exp Brain Res*, 188, 341-351.
79. **Costantini M** & Haggard P (2007). The rubber hand illusion: sensitivity and reference frame for body ownership. *Conscious Cogn*, 16(2), 229-240.
80. **Costantini M**, Buetti D, Pazzaglia M & Aglioti SM (2007). Temporal dynamics of visuo-tactile extinction within and between hemispaces. *Neuropsychology*, 21(2), 242-250.
81. **Costantini M**, Galati G, Ferretti A, Caulo M, Tartaro A, Romani GL & Aglioti SM (2005). Neural systems underlying observation of humanly impossible movements: an FMRI study. *Cereb Cortex*, 15(11), 1761-1767.
82. Buetti D, **Costantini M**, Forster B & Aglioti SM (2004). Uni- and cross-modal temporal modulation of tactile extinction in right brain damaged patients. *Neuropsychologia*, 42(12), 1689-1696.

Book Chapters

83. **Costantini M**, Stapleton M. (2015). How the body narrows the interaction with the environment. *Perceptual and Emotional Embodiment: Foundations of Embodied Cognition*, 1, pp. 181-197.

84. **Costantini M.** & Sinigaglia C (2012). Grasping Affordance. A window onto social Cognition. In A. Seeman (ed.) *Joint Attention: New Developments*. MIT Press, Cambridge Mass.: 431-470.

Editorial activities

Ad hoc referee for: *Cognition*, *Journal of Experimental Psychology: Human Perception and Performance*; *Brain and Cognition*, *Cerebral Cortex*, *Experimental Brain Research*, *Journal of Neuroscience*, *Neuroimage*, *Neuropsychologia*, *PLoS ONE*, *PNAS*, *The Quarterly Journal of Experimental Psychology*.

Academic Editor: *PLoS ONE*

Administration

- **2021 – Present:** Responsible for INGENIUM European Campus. University “G d’Annunzio”, Chieti-Pescara, Italy (<https://ingenium-eu.education>)
- **2018 – Present:** Erasmus departmental coordinator. University “G d’Annunzio”, Chieti-Pescara, Italy.
- **2016-2018:** PGT director of Education. Department of Psychology, University of Essex, UK
- **2015-2018:** Member of the ethics committee. Department of Psychology, University of Essex, UK

Chieti, August 29, 2022

Signed

