

## MARTINA FUSARO

### PROFESSIONAL EXPERIENCE

From April 2019	<b>Post-doctoral fellow</b> Department of Psychology, Sapienza University of Rome, Rome (Italy)
May 2018 – January 2019	<b>Post-doctoral fellow</b> Unitelma Sapienza University of Rome, Rome (Italy)
November 2014-February 2018	<b>PhD student</b> Department of Psychology, Sapienza University of Rome, Rome (Italy); Social and Cognitive Neuroscience Laboratory, IRCCS Santa Lucia Foundation, Rome (Italy)

### EDUCATION

February 2018	<b>Ph.D in Psychology and Social Neuroscience</b> , research curriculum in “Cognitive, Social and Affective Neuroscience” (CoSAN) (coordinator: Prof. Salvatore Maria Aglioti), Department of Psychology, Faculty of Medicine and Psychology, Sapienza University of Rome and Santa Lucia Foundation. <i>Thesis: “The perception of pain and pleasure in immersive virtual reality: behavioral, physiological and neurophysiological evidences”, Supervisor: Dott. G.Tieri</i>
February 2013	<b>MSc with specialization in “Clinical Psychology and Neuropsychology</b> , Faculty of Psychology, University of Milan-Bicocca (IT), 110/110 cum laude <i>Thesis: “Cross-modal interaction in the visual cortex: a study of an audio-visual illusion induced by phosphenes” Supervisor: Dott.ssa N. Bolognini.</i>
October 2010	<b>Bsc, Faculty of Psychology, Course of “Counselling and mental health”,</b> Faculty of Psychology, University of Milan-Bicocca (IT)

### TRAINING

September 2013-March 2014	Training post-lauream (500 hours) in experimental psychology, Faculty of Psychology, University of Milan-Bicocca (IT). Supervisor: Nadia Bolognini; Skills: Brain stimulation (tDCS, TMS) and neuro-navigation
March 2013 - September 2013	Training post-lauream (500 hours) in clinical and experimental neuropsychology, Laboratory of Neuropsychology, Italian Institute for Auxology, Milan (IT). Supervisor: Elisabetta Banco; Skills: evaluation and rehabilitation of patients suffering from neurological disease
March 2012-June 2012	Training pre-lauream (200 hours) in experimental psychology, Faculty of Psychology, University of Milan-Bicocca (IT). Supervisor: Nadia Bolognini; Skills: Brain stimulation (tDCS, TMS), Skin conductance response (SCR)

March 2010- June 2010	Training (200 hours) in clinical Psychology, “Stella Polare Cooperativa Onlus”, Milan (IT) Supervisor: Elena Pila; Skills: establish relationships with patients suffering from psychiatric disorders
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## CONFERENCES

11-13 September 2019	International Association for the Study of Affective Touch, Linköping. Oral presentation: <b>Fusaro M.</b> , “Feeling touch in absence of tactile stimulation: subjective and bodily reactivity to observation of virtual touches on taboo body zones”.
15 February 2019	Neuroscience Goes Social II, Department of Psychology Sapienza University of Rome. Oral presentation: <b>Fusaro M.</b> , “Vicarious experience of (intimate) touch in Immersive Virtual Reality”
17-19 October 2018	DISSELF 2018 (DIS)Embodied Perception of the Self and Other, Porto (Portugal). Poster presentation: <b>Fusaro M.</b> , Lisi M., Tieri G “Vicarious touch in Immersive Virtual Reality”
19-31 August 2018	SPSAN São Paulo School of Advanced Science on Social and Affective Neuroscience (SPSAN). Poster presentation: <b>Fusaro M.</b> , Lisi M., Tieri G., “Vicarious pain, pleasant and intimate touch in Immersive Virtual Reality”.
6-7 July 2017	3 <sup>RD</sup> workshop on Virtual Social Interaction (Bielefeld, Germany). Oral presentation. <b>Fusaro M.</b> , Tieri G., Aglioti S.M., “Cognitive and Visual Perspective-Taking in immersive virtual reality modulate implicit and explicit reactions to observed pain and pleasure”
29 October 2016	XXIV Congresso SIPF. Poster Presentation. <b>Fusaro M.</b> , Tieri G., “Visual perspective changes subjective and psychophysiological reactivity to the virtual pain and pleasure on self and others”.
7-15 July 2016	Bossey, Switzerland: International Summer School in Affective Sciences (ISSAS) of the National Center of Competence in Research in Affective Sciences.

## TEACHING ACTIVITIES

2016, 2017, 2018, 2019	Lecture on “Social touch”, duration 2h, Class: Social Neuroscience (prof. Salvatore Maria Aglioti). Department of Psychology, Sapienza University of Rome.
2017	Research tutor of a master’s degree student at the department of psychology, “Sapienza” University of Rome.
2017	Tutor for high-school students for the national program “Alternanza Scuola/Lavoro”, project “Brain and Virtual reality: new technologies in neuroscience”.

## GRANTS AND AWARDS

October 2019	Principal investigator of a starting Research grant awarded by Sapienza University of Rome for the project "The analgesic power of a caress: the role of the virtual touch in the modulation of chronic and acute pain".
October 2017- January 2018	Grant for research activity abroad (University of Reading), funded by "Sapienza" University of Rome
26/7/2016	Principal investigator of a starting Research grant awarded by Sapienza University of Rome for the project "Observing pain and pleasure on self and others: behavioral, physiological and motor evoked potentials in immersive virtual reality".
(2016-2017)	BIAL Foundation Research Grant (2016-2017) "Virtual bodies, real empathy: behavioural, bodily, and neural reactivity to the observation of Pain and Pleasure on self and others in immersive virtual reality" (PI: TIERI Gaetano, Co-PI: FUSARO Martina).
11/2014-11/2017	3 years PhD Scholarship "Sapienza" University of Rome

## EDITORIAL ACTIVITY

I served as ad-hoc reviewer for the following journals: PLoS ONE, Scientific Report, Frontiers Neuroscience, Social Cognitive and Affective Neuroscience, Vision Research, Cortex.

## RESEARCH INTERESTS

Perception of vicarious sensations of pain and pleasure in virtual reality

Social modulation of touch

Empathy

Pain modulation using virtual touch (experimentally induced pain in healthy subjects and chronic pain in patients)

Autism research

## RESEARCH TECHNIQUES

The above-mentioned topics are investigated by means of:

- Immersive Virtual Reality
- Non-invasive brain stimulation. tDCS and tACS protocols; TMS stimulation: single pulse (along with motor evoked potentials recording), paired pulse, cortico-cortical paired associative stimulation, theta burst.
- Psychophysiology measures (electrodermal activity, heart rate, heart rate variability)
- sEMG (surface electromyography)
- Behavioral, personality and reaction time measures
- Online surveys

## FOREIGN LANGUAGES

Proficient English and Italian (native language) and basic knowledge of Portuguese.

## PUBLICATIONS

Fusco G., **Fusaro M.**, Aglioti S.M. (in preparation) Using transcranial alternating current stimulation (tACS) to modulate conflict and error monitoring in a hand Flanker task.

Lisi, M., **Fusaro M.**, Tieri, G., Aglioti S.M. (in preparation) Sexual orientation and implicit attitudes toward sexuality modulate interpersonal space: an immersive virtual reality study

**Fusaro, M.**, Lisi, M., Tieri, G., Aglioti S.M. (submitted) Touched by vision: heterosexual, gay and lesbian people's explicit and implicit reactivity to observation of their embodied avatar caressed on taboo body parts.

**Fusaro, M.**, Tieri, G., Aglioti S.M. (2019) Influence of cognitive stance and physical perspective on subjective and autonomic reactivity to observed pain and pleasure: An immersive virtual reality study. *Consciousness and cognition*, 67, 86-97.

Era, V. **Fusaro, M.** Gallo, S., (2017) Commentary: "Decoding the Charitable Brain: Empathy, Perspective Taking, and Attention Shifts Differentially Predict Altruistic Giving". *Frontiers in Behavioral Neuroscience*.doi: 10.3389/fnbeh.2017.00110

**Fusaro, M.**, Tieri, G., & Aglioti, S. M. (2016). Seeing pain and pleasure on self and others: behavioral and psychophysiological reactivity in immersive virtual reality. *Journal of Neurophysiology*, 116(6), 2656-2662.

Convento S., Bolognini N., **Fusaro M.**, Lollo F., Vallar G., (2014). Neuromodulation of parietal and motor activity affects motor planning and execution. *Cortex*, DOI:10.1016/j.cortex.2014.03.006

Bolognini N., Rossetti A., **Fusaro M.**, Vallar G., Miniussi C., (2014). Sharing social touch in the primary somatosensory cortex. *Current Biology*, DOI: 10.1016/j.cub.2014.05.025

Bolognini, N., Convento, S., **Fusaro, M.**, Vallar, G., (2013). The Sound-induced Phosphene Illusion. *Experimental Brain Research*, 2013. DOI: 10.1007/s00221-013-3711-1.

