



# Andrea Orlandi

Male | 21/10/1986 | Italian

## RESEARCH INTERESTS

Body perception, action representation, visuomotor (dance, music) expertise, neural plasticity, motor imagery, mental rotation, neuroaesthetics of movement, social cognition  
electroencephalography (EEG/ERP), functional neuroimaging (fMRI), kinematic analysis

## JOB-RELATED SKILLS

Good knowledge of theoretical models related to neuropsychology and cognitive neuroscience  
Good knowledge of the EEG/ERP (evoked-related potential) technique: both biological-theoretical and practical (recording and analysis) assumptions  
Good knowledge of specific software:

- EEG recording and stimuli presentation: Eevoke, Eeprobe, ASA (ANT Neuro software)
- Experiment creation: OpenSesame/E-Prime, PsychoPy
- Statistical analysis: Statistica (StatSoft), SPSS, R
- Photo, video, audio editing, and 3D graphic: Photoshop/Gimp, Adobe Premiere, Audacity, Blender

Basic knowledge of Matlab, SPM, and Tracker (Offline Motion Tracking)

## FUNDING GRANTED

December 2020

### Grants for Scientific Research – BIAL Foundation (Portugal)

*Title:* Beyond your own body: extending the bodily self to the neuroaesthetics of interactions.

*Team:* Andrea Orlandi (PI), Martina Fanghella, Quentin Moreau, Matteo Candidi (co-PI)

*Amount:* 49,500 €

February 2021

### MSCA-IF-2020 – Marie Curie Global Fellowship

*Title:* InteroceptionAction - Unraveling the role of interoceptive abilities in aesthetic appreciation of movement.

*Supervisors:* Prof. Matteo Candidi - Sapienza University of Rome (Italy)

Prof. Emily S. Cross - Macquarie University, Sydney (Australia)

*Amount:* 257,210 €

## WORK EXPERIENCE

September 2019 – Current Position

### Postdoctoral research fellowship

Fellowship at Sapienza University of Rome, Dept. of Psychology, Italy

SCNL - Social and Cognitive Neurosciences Laboratory | AgliotiLAB

*Supervisor:* Prof. Matteo Candidi

January 2015 – October 2015

### Fellowship at CNR (National Research Council)

Fellowship IBFM-CNR, Institute of Bioimaging and Molecular Physiology, CNR, Milan-Segrate, Italy

BANDO IBFM/B.S.005/2014/Z.A. - PROTOCOLLO N. 0003050 DEL 14/11/2014

*Supervisor:* Prof. Alberto Zani

March 2013 – December 2014

### Post-graduate trainee

University of Milano-Bicocca, Dept. of Psychology, Italy

Cognitive Electrophysiology Laboratory

*Supervisor:* Prof. Alice Mado Proverbio

## EDITORIAL EXPERIENCE

- Topic editor for Brain Sciences

- Editor Reviewer for Frontiers in Psychology

- Translator of the book Cognitive Neuroscience (third Italian edition) by Gazzaniga, Ivry, & Magnun (edited by Zanichelli)

## TEACHING EXPERIENCE

March 2017

### Non-academic lecture

“Neuroscience meets dance” at Artichoke formazione danza ricerca (dance academy), Milan, Italy

January 2015 – November 2018

#### Teaching assistant (Prof. Alice Mado Proverbio)

- Physiological Psychology (2015-2018), Behavioral Disorders Psychobiology (2016-2018) and Social Cognitive and Affective Neuroscience (2016-2018)
- Experimental Research Methods in Cognitive Neuroscience (2015-2016) and Lifespan Psychobiology (2015-2017)
- Lecturer for the laboratory of 'EEG/ERP and neuroscience of dance' (April 2016)

### EDUCATION

November 2015 – November 2018

#### Ph.D. student

Psychology, Linguistics and Cognitive Neuroscience (Cum Laude), University of Milano-Bicocca, Dept. of Psychology, Italy

*Supervisor:* Prof. Alice Mado Proverbio, Lab of Cognitive Electrophysiology

*Thesis:* "Action representation in the human brain: electrophysiological markers and neurofunctional correlates"

Date of thesis defence: 8.02.2019

October 2017 – July 2018

#### Visiting Ph.D. student

University of Glasgow, Scotland (UK)

Bangor University, Wales (UK)

*Supervisor:* Prof. Emily S. Cross, Social Brain in Action Laboratory | SoBA Lab

#### Advanced courses

- 5.07.2021 – 9.07.2021 - Causal Discovery for Psychology, Neuroscience, and Psychiatry (University of Minnesota, USA - *online*)
- 13.08.2017 – 19.08.2017 - Radboud Summer School, Math and Matlab for Neuroscientists (Nijmegen, The Netherlands)
- 12.07.2017 – 14.07.2017 - 7th IMPRS NeuroCom Summer School. Max Plank Institute - UCL, London (UK)  
Poster presentation. *Award:* Experimental Design Prize winner
- 19.06.2017 – 22.06.2017 - Cutting EEG, 3rd Symposium on cutting-edge methods for EEG research. University of Glasgow, Scotland (UK)  
Poster presentation
- 04.09.2016 – 10.09.2016 - The Visceral Ming VII Summer School. Bangor University, Wales (UK)

September 2011 – March 2014

#### Master's Degree

Clinical and Developmental Psychology and Neuropsychology. University of Milano-Bicocca, Italy.

*Thesis:* "Neuroscienze della danza: il ruolo dell'expertise nella percezione del movimento"

(Neuroscience of dance: the role of expertise in the perception of biological motion)

*Supervisor:* Prof. Alice Mado Proverbio. *Final mark:* 110/110 Cum Laude

September 2007 – March 2011

#### Bachelor's Degree

Psychological Science and Techniques. University of Milano-Bicocca, Italy

#### Artistic Degree

Accademia Pier Lombardo | Dance Department. Milan, Italy

#### High School Diploma (scientific studies)

Liceo Scientifico Salesiani Don Bosco, Treviglio (MI), Italy

### MEMBERSHIPS

- *Partnership Studies Group* based at the University of Udine (from 2021)
- *Marie Curie Alumni Association – MCAA* (from 2021)
- *AIP - Associazione Italiana Psicologia (Italian Psychology Association)*; from 2016)

### PUBLICATIONS

Peer-reviewed journal articles

1. Orlandi A, Cross ES, Orgs G (2020). Timing is everything: Dance aesthetics depend on the complexity of movement kinematics. *Cognition*, 205, 104446.
2. Orlandi A, Proverbio AM (2020). ERP indices of an orientation-dependent recognition of the human body schema. *Neuropsychologia*, 107535.
3. Orlandi A, Arno E, Proverbio AM (2020). The effect of expertise on kinesthetic motor imagery of complex actions. *Brain Topography*, 33(2), 238-354.
4. Orlandi A, D'Inca S, Proverbio AM (2020). Muscular effort coding in action representation in ballet dancers and controls: electrophysiological evidence. *Brain Research*, 146712.
5. Orlandi A, Proverbio AM (2019). Left-hemispheric asymmetry for object-based attention: an ERP study. *Brain Sciences*, 9(11), 315.
6. Orlandi A, Proverbio AM (2019). Bilateral engagement of the occipito-temporal cortex in response to dance kinematics in experts. *Scientific Reports*, 9(1), 1000.
7. Orlandi A, Zani A, Proverbio AM (2017). Dance expertise modulates visual sensitivity to complex biological

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|                      | movements. <i>Neuropsychologia</i> , 104: 168-181  |
|                      | 8. Proverbio AM, Orlandi A, Bianchi E (2017). Electrophysiological markers of prejudice related to sexual gender. <i>Neuroscience</i> , 358: 1-12  |
|                      | 9. Proverbio AM, Cozzi M, Orlandi A, Carminati M (2017). Error related negativity in the skilled brain of pianists reveals motor simulation. <i>Neuroscience</i> , 346: 309-319  |
|                      | 10. Proverbio AM, Orlandi A, Pisanu F (2016). Brain processing of consonance/dissonance in musicians and controls: a hemispheric asymmetry revisited. <i>European Journal of Neuroscience</i> , 44(6): 2340-2356   |
|                      | 11. Proverbio AM, Orlandi A (2015). Instrument-Specific Effects of Musical Expertise on Audiovisual Processing (Clarinet versus Violin). <i>Music Perception</i> , 33(4): 446-456  |
|                      | 12. Proverbio AM, Gabaro V, Orlandi A, Zani A (2015). Semantic brain areas are involved in gesture comprehension: An electrical neuroimaging study. <i>Brain and language</i> , 147, 30-40   |
|                      | 13. Zani A, Marsili G, Senerchia A, Orlandi A, Citron FM, Rizzi E, Proverbio AM (2015). ERP signs of categorical and supra-categorical processing of visual information. <i>Biological psychology</i> , 104, 90-107  |
| Book chapters        | 14. Cross ES, Orlandi A (2020). The Aesthetics of Action and Movement. In <i>The Oxford Handbook of Empirical Aesthetics</i>   |
| Published abstracts  | 15. Orlandi A, Zani A, Proverbio AM (2015). Dance expertise modulates the visuomotor perception of body motion. <i>Perception</i> , 44, 233  |
|                      | 16. Orlandi A, Proverbio AM (2014). Dance expertise modulates the visuomotor processing of complex body movements. <i>Neuropsychological Trends</i> , 16, 109-110  |
| <b>PRESENTATIONS</b> |  |
| Invited speaker      | 1. Orlandi A (2021). "Rappresentazioni multisensoriali del corpo: mvedere, toccare, sentire la danza". Cinematica Festival, Corporeità e Nuovi Media, Ancona, Italy.   |
| Oral presentations   | 1. Orlandi A, Cross ES, Orgs G (2021). "Timing is everything: Dance aesthetics depend on the complexity of movement kinematics". XXVI Conference of the International Association of Empirical Aesthetics, London, UK.   |
|                      | 2. Orlandi A, Era V, Moreau Q, Di Pace E, Martelli M, Candidi M (2021). "Dispositional traits and contextual information modulate the recognition of interacting bodies". XXVII Congresso Nazionale AIP (Sezione Sperimentale), Lecce, Italy.  |
|                      | 3. Orlandi A (2019). "Action representation in the human brain: electrophysiological markers and neurofunctional correlates". XXV Congresso Nazionale AIP (Sezione Sperimentale), Milan-San Raffaele, Italy. <i>Candidate for doctoral thesis prize</i> .  |
|                      | 4. Orlandi A, D'Incà S, Arno E, Proverbio AM (2018). "Kinesthetic imagery and action representation: an insight from dance expertise". The 16th European Workshop on Imagery and Cognition (EWIC), Padova, Italy.  |
|                      | 5. Orlandi A, D'Incà S, Arno E, Proverbio AM (2017). "Expertise-induced neural plasticity: Muscular effort coding in action representation in ballet dancers and naïve". International Symposium on Neurobiology, NeuroMI, Milan, Italy  |
|                      | 6. Orlandi A, D'Incà S, Arno E, Proverbio AM (2016). "Codifica neuroelettrica dello sforzo muscolare nella rappresentazione dell'azione". XXII Congresso Nazionale AIP, Rome, Italy  |
|                      | 7. Orlandi A, Calbi M, Proverbio AM (2014). "The neuroscience of dance: Role of expertise in the perception of biological motion". Summer school Università di Milano-Bicocca (Ph.D. program in Experimental psychology, linguistics and cognitive neuroscience), Villa Forno (Cinisello Balsamo), Italy |
| Posters              | 1. Orlandi A, Orgs G, Cross ES (2018). "Aesthetic perception of tempo and time dynamics in dance movements". Visual Neuroaesthetics Symposium (VisNA), Max Planck Institute for Empirical Aesthetics, Frankfurt, Germany   |
|                      | 2. Orlandi A, Arno E, D'Incà S, Proverbio AM (2017). "Perceiving the exertion: the role of visuomotor expertise". 7th IMPRS NeuroCom Summer School, Max Plank Institute – UCL (University College London), London, England   |
|                      | 3. Orlandi A, Zani A, Proverbio AM (2016). "Using Repetition Suppression to investigate the visual sensitivity to actions in experts and non-experts". CAOs (Concepts, Actions and Objects) Workshop in Rovereto (TN), Italy   |
|                      | 4. Orlandi A, Zani A, Proverbio AM (2015). "Dance expertise modulates the visuomotor perception of body motion". European Conference on Visual Perception (ECVP), Liverpool, UK  |
|                      | 5. Orlandi A, Proverbio AM (2014). "Dance expertise modulates the visuomotor processing of complex body movements". XXII Congresso Nazionale della Società Italiana di Psicofisiologia (SIPF), dalle Neuroscienze di base alla Neuroriabilitazione, Firenze, Italy                                       |