

# CURRICULUM VITAE ET STUDIORUM



## PERSONAL INFORMATION

**NAME** Luca Battaglini

**E-MAIL** [luca.battaglini@unipd.it](mailto:luca.battaglini@unipd.it)

**NATIONALITY** Italian

**DATE OF BIRTH**



## EDUCATION AND TRAINING

- **DATE** From 2015-2020 Post-doc Research Fellow (University of Padova)
- From 2012 to 2015 Ph.D. in Experimental Psychology (University of Padova)
- From 2010 to 2011 Experimental Psychology and Cognitive Science, Padova, Italy.
- From 2006 to 2009 Cognitive Psychology and Psychobiology, Padova, Italy.

**CURRENT POSITION** Assistant Professor (Ricercatore di tipo A)

**DEPARTMENT** General Psychology

**UNIVERSITY** University of Padova.

## QUALIFICATION

Bachelor Degree in Cognitive Psychology and Psychobiology.

Master Degree in Experimental Psychology and Cognitive Science.  
110/110 Cum Laude.

Ph.D. in Experimental Psychology

Registered Psychologist number 11791

Abilitazione Scientifica Nazionale, Seconda fascia, 11/E1 –  
PSICOLOGIA GENERALE, PSICOBIOLOGIA E PSICOMETRIA.

## WORK EXPERIENCES

**06/01/2011-18/04/2012**

University of Sussex

Visiting Student at the Sussex University

Supervisor: Professor George Mather.

**01/03/2012-29/02/2013**

University of Padova

Internship at the Department of General Psychology.

Supervisor: Professor Gianluca Campana

**01/11/2013-01/06/2014**

University of Plymouth

Visiting Ph.D. Student

Supervisor: Professor Giorgio Ganis

**01/01/2013-01/01/2015**

University of Padova

Department of General Psychology.

Ph.D student in Experimental Psychology

Supervisor: Professor Gianluca Campana.

**01/04/2015-29/03/2017**

University of Padova,

Post-doc Research Fellow at the Department of General Psychology.

Supervisor: Professor Clara Casco.

**01/04/2017-07/09/2020**

University of Padova,

Post-doc Research Fellow at the Department of General Psychology.

**07/09/2020- present**

University of Padova,

Assistant professor (Ricercatore di tipo A) at the Department of General Psychology.

## TECHNICAL SKILLS

Outstanding programming skills with software relevant for research in psychology: Matlab (Psychtoolbox, DAT toolbox, Palamedes toolbox, EEGlab), R, Spss, R, E-prime, Python, Jpsych (Online Experiment).

Expert in brain-interference techniques: Transcranial Magnetic Stimulation (TMS) and transcranial Electrical Stimulation (tDCS, tRNS, tACS).

Expert in EEG recording (Biosemi system and Starstim system) and EEG-ERP analysis.

Expert in Psychophysical Methodology.

## TEACHING EXPERIENCE

### October-November, 2013

*Teaching assistant – course name:* Sensory Processing (Cognitive Neuroscience, 12 hours). Responsible prof. Clara Casco. University of Padova.

### October-November, 2014

*Teaching assistant – course name:* Sensory Processing (Cognitive Neuroscience, 12 hours). Responsible prof. Clara Casco. University of Padova.

### October, 2015

*Teaching assistant – course name:* Sensory Processing (Cognitive Neuroscience, 12 hours). Responsible prof. Clara Casco. University of Padova.

### October, 2015

**Lecturer – course name:** Introduction to Matlab and Psychtoolbox. University of Padova. (20 hours).

**Lecturer – course name:** Vision and Psychophysics. Responsible prof. Gianluca Campana. University of Padova. (12 hours).

### April, 2016

**Lecturer – course name:** Introduction to Matlab and Psychtoolbox. University of Padova. (20 hours).

### October, 2016

*Teaching assistant – course name:* Sensory Processing (Cognitive Neuroscience, 12 hours). Responsible prof. Clara Casco. University of Padova.

### November, 2016

**Lecturer – course name:** Introduction to Matlab and Psychtoolbox for PhD student in Brain, Mind and Computer Science. University of Padova. (10 hours).

### June, 2017

**Lecturer – course name:** Introduction to Matlab and Psychtoolbox. University of Padova. (20 hours).

### September-October, 2017

**Lecturer – course name:** Introduction to Matlab and Psychtoolbox. University of Padova. (20 hours).

### November, 2017

**Lecturer** – *course name*: Introduction to Matlab and Psychtoolbox for PhD student in Brain, Mind and Computer Science. University of Padova. (10 hours).

**November-December, 2017**

*Teaching assistant* – *course name*: Sensory Processing (Cognitive Neuroscience, 15 hours). Responsible prof. Clara Casco. University of Padova.

**April, 2018**

**Lecturer** – *course name*: Introduction to Matlab and Psychtoolbox. University of Padova. (20 hours).

**October, 2018**

**Lecturer** – *course name*: Introduction to Matlab and Psychtoolbox for PhD student in Brain, Mind and Computer Science. University of Padova. (10 hours).

**October-December, 2018**

**Lecturer** – *course name*: Vision and Psychophysics. University of Padova. (36 hours, 4 CFU).

**May, 2019**

**Lecturer** – *course name*: Introduction to Matlab and Psychtoolbox. University of Padova. (20 hours).

**October, 2019**

**Lecturer** – *course name*: Transcranial Electrical Stimulation. University of Padova. (20 hours).

**October-December, 2019**

**Lecturer** – *course name*: Vision and Psychophysics. University of Padova. (36 hours, 4 CFU).

**October-December, 2020**

**Lecturer** – *course name*: Vision and Psychophysics. University of Padova. (52 hours, 6 CFU).

**October-December, 2020**

**Lecturer** – *course name*: Cognition and Sensory Perception. University of Padova. (21 hours, 3 CFU).

**TEACHING  
EVALUATION**

**2018-2019**: Vision psychophysics. University of Padova. (36 hours, 4 CFU).

Satisfaction: Mean 8.8/10; Median: 9/10

Organization: Mean 9.08/10; Median: 9/10

Teaching: Mean 8.96/10; Median: 9/10

**2019-2020**: Vision psychophysics. University of Padova. (36 hours, 4 CFU).

Satisfaction: Mean 8.48; Median: 9/10

Organization: Mean 8.75; Median: 9/10

Teaching: Mean 8.26; Median: 9/10

**2020-2021**: Vision psychophysics. University of Padova. (36 hours, 4 CFU).

Satisfaction: Mean 8.25; Median: 9/10

Organization: Mean 8.93; Median: 9/10  
Teaching: Mean 8.6; Median: 9/10

**2020-2021:** Cognition and Sensory Perception. University of Padova. (21 hours, 3 CFU).

Satisfaction: Mean 8.58; Median: 9/10

Organization: Mean 8.83; Median: 9/10

Teaching: Mean 8.38; Median: 9/10

## SCIENTIFIC WORKS (ARTICLES)

- 1) Battaglini, L., Campana, G., & Casco, C. (2013). Illusory speed is retained in memory during invisible motion. *I-Perception*, 4(3), 180-191.
- 2) Battaglini, L., Campana, G., Camilleri, R., & Casco, C., (2014). Probing the involvement of the earliest levels of cortical processing in motion extrapolation with rapid form of visual motion priming and adaptation. *Attention, Perception & Psychophysics*. 77(2), 603-612.
- 3) Camilleri, R., Pavan, A., Ghin, F., Battaglini, L., & Campana, G., (2014). Improvement of uncorrected visual acuity (ucva) and contrast sensitivity (ucsc) with perceptual learning and transcranial random noise stimulation (tRNS) in individuals with mild myopia. *Frontiers in Psychology*. 5.
- 4) Casco, C., Battaglini, L., Bossi, M., Porracin E., & Pavan, A. (2015). Suppressive effects on motion discrimination induced by transient flankers are reduced by perceptual learning. *Journal of Vision*. 15(8), 25-25.
- 5) Casco, C., DeStefani, E., Pinello, L., Sato, G., & Battaglini, L. (2015). Hypervision of mirror symmetry in patients with macular degeneration reflects parafoveal cortical reorganization. *Restorative Neurology and Neuroscience*. 1-11.
- 6) Mather, G., Battaglini, L., & Campana, G. (2016). TMS reveals flexible use of form and motion in biological motion perception. *Neuropsychologia*, 84, 193-197.
- 7) Roncato, S., Guidi, S., Parlangei, O., & Battaglini, L., (2016). Illusory streaks from corner and their perceptual integrations. *Frontiers in Psychology*, 7.
- 8) Battaglini, L., Contemori, G., Maniglia, M., & Casco, C., (2016). Fast moving texture has opposite effects on the perceived speed of visible and occluded object trajectories. *Acta Psychologica*, 170, 206-214.
- 9) Battaglini, L., & Casco, C. (2016). Visuo-spatial contribution to invisible motion. *Frontiers in Psychology*, 7.
- 10) Maniglia, M., Pavan, A., Sato, G., Contemori, G., Montemurro, S., Battaglini, L., & Casco, C. (2016). Perceptual learning leads to long lasting visual improvement in patients with central vision loss. *Restorative Neurology and Neuroscience*, 34(5), 697-720.
- 11) Battaglini, L., Casco, C., Isaacs, B. R., Bridges, D., & Ganis, G. (2017). Electrophysiological correlates of motion extrapolation: An investigation on the CNV. *Neuropsychologia*, 95, 86-93.
- 12) Casco, C., Barollo, M., Contemori, G., & Battaglini, L. (2017). The Effects of Aging on Orientation Discrimination. *Frontiers in aging neuroscience*, 9.

- 13) Battaglini, L., Noventa, S., & Casco, C. (2017). Anodal and cathodal electrical stimulation over V5 improves motion perception by signal enhancement and noise reduction. *Brain Stimulation*.
- 14) Altschuler, E.L., Huang, A., Kim, H.J., Battaglini, L., & Roncato, S. (2017). An unexplained three-dimensional percept emerging from a bundle of lines. *Attention, Perception and Psychophysics* 1-9.
- 15) Barollo, M., Contemori, G., Battaglini, L., Pavan, A., & Casco, C. (2017). Perceptual learning improves contrast sensitivity, visual acuity, and foveal crowding in amblyopia. *Restorative Neurology and Neuroscience*, (Preprint), 1-14.
- 16) Konishi, M., Brown, K., Battaglini, L., & Smallwood, J. (2017). When attention wanders: pupillometric signatures of fluctuations in external attention. *Cognition*. 168, 16-26.
- 17) Kanizsár, O., Mongillo, P., Battaglini, L., Campana, G., & Marinelli, L. (2017). Dogs are not better than humans at detecting coherent motion. *Scientific Reports*, 7.
- 18) Casco, C. Barollo, M., Contemori, G., & Battaglini, L. (2018) Neural Restoration Training improves visual functions and expands visual field of patients with homonymous visual field defects. *Restorative Neurology and Neuroscience*. 36(2), 275-291
- 19) Kanizsár, O., Mongillo, P., Battaglini, L., Campana, G., Lööke, M., & Marinelli, L. The effect of experience and of dots' density and lifetime on the detection of coherent motion in dogs. *Animal Cognition*, 21(5), 651-660.
- 20) Battaglini, L., Maniglia, M., Konishi, M., Contemori, G., Coccaro, A., & Casco, C. (2018). Fast random motion biases judgments of visible and occluded motion speed. *Vision research*, 150, 38-43.
- 21) Vicovaro, M., Noventa, S., & Battaglini, L. (2019). Intuitive physics of gravitational motion as shown by perceptual judgment and prediction-motion tasks. *Acta psychologica*, 194, 51-62.
- 22) Contemori, G., Battaglini, L., Barollo, M., Ciavarelli, A., & Casco, C. (2019). Developmental dyslexia: A deficit in magnocellular-parvocellular co-activation, not simply in pure magnocellular activation. *Vision research*, 159, 61-67.
- 23) Contemori, G., Battaglini, L., & Casco, C. (2019). Contextual influences in the peripheral retina of patients with macular degeneration. *Scientific Reports*, 9(1), 9284.
- 24) Eatherington, C. J., Marinelli, L., Lööke, M., Battaglini, L., & Mongillo, P. (2019). Local Dot Motion, Not Global Configuration, Determines Dogs' Preference for Point-Light Displays. *Animals*, 9(9), 661.
- 25) Tachyla, I., Battaglini, L., Barollo, M., Cosentino, S., Contemori, G., Pinello, L., ... & Casco, C. (2019). Testing the visual field of children and adults with Rarebit: The role of task repetition on sensitivity. *PLoS one*, 14(8).
- 26) Battaglini, L., & Mioni, G. (2019) The effect of symbolic meaning of speed on time to contact. *Acta psychologica*, 199, 102921.
- 27) Battaglini, L., Contemori, G., Fertonani, A., Miniussi, C., Coccaro, A., & Casco, C. (2019). Excitatory and inhibitory lateral interactions effects on contrast detection are modulated by tRNS. *Scientific Reports*, 9(1), 1-10.

- 28) Battaglini, L., Contemori, G., Penzo, S., & Maniglia, M. (2020). tRNS effects on visual contrast detection. *Neuroscience Letters*, 717, 134696.
- 29) Battaglini, L., Ghiani, A., Casco, C., & Ronconi, L. (2020). Parietal tACS at beta frequency improves vision in a crowding regime. *NeuroImage*, 208, 116451.
- 30) Battaglini, L. Effect of rTMS on a target moving in front of a static or random dynamic visual noise. *Perception*, 19(8), 882-892.
- 31) Vicovaro, M., Battaglini, L., & Parovel, G. (2020). The larger the cause, the larger the effect: evidence of speed judgment biases in causal scenarios. *Visual Cognition*, 1-17.
- 32) Battaglini, L., Mioni, G., Casco, C., Contemori, G. & Konishi, M. (2020). Probing the Effect of the Expected-Speed Violation Illusion. *Psychological Research*, 1-10.
- 33) Battaglini, L., Mena, F. & Casco, C. (2020). Improving motion detection via anodal tDCS. *Restorative, Neurology and Neuroscience (preprint)*, 1-11.
- 34) Battaglini, L., Mena, F., Ghiani, A., Casco, C., Melcher, M. & Ronconi, L. (2020). The effect of alpha tACS on the temporal resolution of visual perception. *Frontiers in Psychology*, 11, 1765.
- 35) Lööke, M., Kanizsar, O., Battaglini, L., Guerineau, C., Mongillo, P., & Marinelli, L. (2020). Are dogs good at spotting movement? Velocity thresholds of motion detection in *Canis familiaris*. *Current Zoology*, 66(6), 699-701.
- 36) Ciavarelli, A., Contemori, G., Battaglini, L., Barollo, M. & Casco, C. (2020). Dyslexia and the magnocellular-parvocellular coactivation hypothesis. *Vision Research*, 179, 64-74.
- 37) Battaglini, L., Oletto, C.M., Contemori, G., Barollo, M., Ciavarelli, C. & Casco, C. Perceptual learning improves visual functions in patients with albinistic bilateral amblyopia. *Restorative Neurology and Neuroscience (Preprint)*, 1-15.
- 38) Ghiani, A., Maniglia, M., Battaglini, L., Melcher, D., & Ronconi, L. (2021). Binding mechanisms in visual perception and their link with neural oscillations: a review of evidence from tACS. *Frontiers in Psychology*, 12, 779.
- 39) Battaglini, L. & Ghiani, A. (2021) Motion behind occluder: Amodal perception and visual motion extrapolation. *Visual Cognition*

## CONFERENCE

Battaglini, L. (2013). The neural bases of time representation of invisible motion. Cognitive Arena Science for Beginners (CSAB), Brixen, Italy.

## TALK

Campana, G., & Battaglini, L. (2015). Rapid priming and Adaptation modulate prediction-of-motion: implication for the involved levels of processing. In *I-Perception* (Vol. 6, No. 6). 1 Olivers yard, 55 City road, London, EC1 Y 1SP, England: Sage Publications LTD.

Contemori, G., Battaglini, L. & Casco, C. (2019). Probing contextual influences in macular degeneration: is the reduced inhibition a sign of cortical reorganization? APCV conference, Osaka, Japan.

Ciavarelli, A., Contemori, G., Battaglini, L., Casco, C., & Barollo., M. (2019). Developmental dyslexia: a deficit in magnocellular-parvocellular co-activation, not simply in pure magnocellular activation APCV conference, Osaka, Japan

Battaglini, L., Casco, C., Ghiani, A., & Ronconi, L. (2019). Parietal tACS at beta frequency improves vision in a crowding regime. APCV conference, Osaka, Japan.

Battaglini L., Ghiani, A., Casco, C. & Ronconi, L. (2019). Parietal tACS at beta frequency improves visual crowding. ESCOP conference, Tenerife, Spain.

## POSTER

Mather, G., & Battaglini, L., (2011). A simple model of position effects in apparent motion perception. ECVF conference, Toulouse, France.

Battaglini, L., Campana, G., & Casco C. (2012). Motion processing behind occluders. ECVF conference, Alghero, Italy.

Battaglini, L., Campana, G., & Casco C. (2013). The effect of dynamic dots texture on motion extrapolation. ECVF conference, Bremen, Germany.

Battaglini, L., Bethany R. I., & Ganis, G. (2014). Adaptation to implied motion affects random dot stimuli but motion extrapolation. ECVF conference, Beograd, Serbia.

Battaglini, L., & Ganis, G. (2015). Electrophysiological correlates of motion extrapolation. ECVF conference, Liverpool, United Kingdom.

Battaglini, L., & Casco, C. (2016). Anodal and Cathodal electrical stimulation over V5 improves motion perception by signal enhancement and noise reduction. ECVF conference, Barcelona, Spain.

Orsolya, K., Mongillo, P., Campana, G., Battaglini, L., Scandurra A., Marinelli L., (2016). Global motion detection in dogs (*canis familiaris*) APCV, Frematle, Australia.

Kanizsar O., Mongillo P., Campana G., Battaglini L., Scandurra A., Marinelli L. Motion Detection in Dogs and Humans. Oral presentation at the 14th International Conference on Psychology and Behavioural Sciences (ICPBS), 15-16 July, 2017, Singapore, Singapore.

Mioni G., & Battaglini, L., (2017). The effect of the symbolic meaning of speed on time to contact. ECVF conference, Berlin, Germany.

Battaglini, L., & Casco, C., (2017). Fast random motion biases judgments of visible and occluded motion speed. ECVF conference, Berlin, Germany.

Vicovaro, M., Battaglini. L., & Noventa, S. (2017). Explicit and implicit perceptual knowledge of free fall. ECVF conference, Berlin, Germany.

Battaglini, L., & Mioni G., (2018). The Effect of semantic meaning on speed. ECVF conference Trieste, Italy.

## INVITED SPEAKER

Battaglini, L. (2015). Motion perception. Aimo, 2015. Rome, Italy.

Battaglini, L. (2016). Attentive and Perceptual contribution to visual training. Associazione italiana medici oculisti, 2016. Rome, Italy.

Battaglini, L., (2020). Improving vision with transcranial electrical stimulation. Brain Awareness Week 2020. Padova, online conference.



Battaglini, L. (2020). Non poter vedere i 20/20. VII Congresso Nazionale ALOeO (Associazione Laureati Ottica e Optometrica) “Visione oltre i 20/20”. Milano, online conference.

**AWARD**

Best Presentation Award.

Casco, C., Battaglini, L., Barollo, M., & Contemori, G. (2017). Neural Restoration Training Improves Visual Functions and Expands Visual Field of Patients with Homonymous Visual Field Defects. ICNBR 2017, Barcelona, Spain.

**REVIEWER EDITOR**

Review Editor for Perception Science (Frontiers in Psychology; Frontiers in Neuroscience. Review Editor for Cognitive Science (Frontiers in Psychology).

**REVIEWER ACTIVITY**

Ad hoc Reviewer: Scientific Reports, Animal Cognition, Biological Psychology, Journal of Vision, Restorative Neurology and Neuroscience, Frontiers in Human Neuroscience, Vision, Frontiers in Psychology, Experimental Brain Research, Perception, PLOSE ONE.

**GUEST ASSOCIATE EDITOR**

Frontiers in Psychology, Frontiers in Neuroscience  
Topic: Neural Modulation of Conscious Perception: Emerging Approaches from Basic Research to Clinical Translation

**ASSOCIATE EDITOR**

Restorative Neurology and Neuroscience

**ORGANIZATION OF SCIENTIFIC MEETINGS**

2021: Symposium on Perception and Cognition  
2021: Kanizsa lecture

**DATE** \_\_\_\_\_ 25/08/2021 \_\_\_\_\_

**SIGNATURE** \_\_\_\_\_ LUCA BATTAGLINI \_\_\_\_\_