

Carolina Maria Oletto

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🔗 <https://www.researchgate.net/profile/Carolina-Oletto>

Education

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|-----------------------------|---|
| 2017 – 2020
Padua, Italy | I-level Master / Neuroscience and neuropsychological rehabilitation
<i>University of Padua</i>
Dissertation title: 'Perceptual learning improves visual functions in albinistic amblyopia' |
| 2014 – 2017
Pisa, Italy | BA / Sciences and techniques of clinical and health psychology
<i>University of Pisa</i> |

Professional Experience

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| 2024/02 – 2024/03
Liverpool, UK | Visiting Ph.D
<i>University of Liverpool</i>
EEG data collection, preprocessing and analysis.
Tools: <ul style="list-style-type: none">• Biosemi EEG• MatLab |
| 2023/03 – 2023/05
Lausanne, Switzerland | Visiting Ph.D
<i>École polytechnique fédérale de Lausanne (EPFL)</i>
The dissociation between detection and discrimination of peripheral elements in uniform and non-uniform textures. |
| 2021 – present
Padua, Italy | Ph.D candidate in Psychological Sciences
<i>University of Padua</i>
Affiliated with Visual Perception Lab, where I work on visual perception: <ul style="list-style-type: none">• interaction between central and peripheral vision in peripheral discrimination tasks: the effects of stimuli and tasks on the recruitment of retinotopic areas for peripheral discrimination• visual illusions: effects of visual illusions on textures' homogeneity perception |
| 2020 – 2021
Padua, Italy | Research Intern
<i>University of Padua</i>
I was involved in an online experiment on shape discrimination. My activities included: <ul style="list-style-type: none">• participants recruiting• scientific writing |
| 2018 – 2020
Padua, Italy | Undergraduate Intern
<i>NeuroVis.U.S. Lab (University of Padua)</i>
I was involved in: <ul style="list-style-type: none">• administration of a perceptual learning paradigm (NeuroVision Training) in patients with bilateral amblyopia secondary to albinism• administration of pre- and post-training visual tests Tools: <ul style="list-style-type: none">• MatLab (Psychtoolbox)• FrACT• Rarebit |

Publications

Articles

Bertamini, M., **Oletto, C. M.**, & Contemori, G. (2024). The Role of Uniform Textures in Making Texture Elements Visible in the Visual Periphery. *Open Mind*, 8, 462–482. https://doi.org/10.1162/opmi_a_00136

Contemori, G., **Oletto, C. M.***, Battaglini, L., & Bertamini, M. (2024). On the relationship between foveal mask interference and mental imagery in peripheral object recognition. *Proceedings of the Royal Society B: Biological Sciences*, 291(2018), 20232867. <https://doi.org/10.1098/rspb.2023.2867>

*First and second author equally contributed to this manuscript.

Contemori G, **Oletto C. M.**, Battaglini L, Motterle E, Bertamini M (2023) Foveal feedback in perceptual processing: Contamination of neural representations and task difficulty effects. *PLOS ONE* 18(10): e0291275. <https://doi.org/10.1371/journal.pone.0291275>

Oletto, C. M., Contemori, G., Bertamini, M., & Battaglini, L. (2022). The Role of Foveal Cortex in Discriminating Peripheral Stimuli: The Sketchpad Hypothesis. *NeuroSci*, 4(1), 9–17. <https://doi.org/10.3390/neurosci4010002>

Contemori, G., **Oletto, C. M.**, Cessa, R., Marini, E., Ronconi, L., Battaglini, L., & Bertamini, M. (2022). Investigating the role of the foveal cortex in peripheral object discrimination. *Scientific Reports*, 12(1), 19952. <https://doi.org/10.1038/s41598-022-23720-w>

Battaglini, L., **Oletto, C. M.**, Contemori, G., Barollo, M., Ciavarelli, A., & Casco, C. (2021). Perceptual learning improves visual functions in patients with albinistic bilateral amblyopia: A pilot study. *Restorative neurology and neuroscience*, 39(1), 45–59. <https://doi.org/10.3233/RNN-201043>

Posters

Oletto, C.M., Contemori, G., Battaglini, L., Bertamini, M. (2023). Is peripheral object discrimination relying on visual imagery? *ECVP conference Paphos (Cyprus)* 27/08/2023 - 31/08/2023

Contemori, G., **Oletto, C.M.**, Di Dona, G., Ronconi, L., Battaglini, L., Bertamini, M. (2023). Entrainment of perceptually relevant brain oscillations in visual contour integration: Evidence from tACS and Audio-Visual Entrainment. *ECVP conference Paphos (Cyprus)* 27/08/2023 - 31/08/2023

Zulianello, M., Contemori, G., **Oletto, C.M.**, Bertamini, M. (2023). The honeycomb illusion: Peripheral vision of contours, unlike that of objects, is refractory to predictions, extrapolation and memory effects. *The System Vision Symposium Tuebingen (Germany)* 22/08/2023 - 24/08/2023

Oletto, C.M., Contemori, G., Battaglini, L., Cessa, R., Bertamini, M. (2022). Foveal Feedback in the parvocellular and magnocellular systems: comparing a shape and a non-shape task. *ECVP conference Nijmegen* 27/08/2022 - 01/09/2022. <http://hdl.handle.net/11577/3458956>

Talks

Oletto, C.M., Contemori, G., Battaglini, L., Bertamini, M. (2024). The centre shapes the periphery: The importance of elements in the centre in uniformity perception. *Cognitive Science Arena Brixien (Italy)* 08/02/2024 - 10/02/2024

Bertamini, M., Contemori, G., Battaglini, L., **Oletto, C.M.** (2023). The honeycomb illusion: Peripheral vision of contours, unlike that of objects, is refractory to predictions, extrapolation and memory effects. *ECVP conference Paphos (Cyprus)* 27/08/2023 - 31/08/2023

Oletto, C.M., Contemori, G., Battaglini, L., Bertamini, M. (2023). The Honeycomb Illusion is not an illusion. *Science of Consciousness (TSC) Taormina (Italy)* 21/05/2023 - 27/05/2023

Oletto, C.M., Contemori, G., Battaglini, L., Bertamini, M. (2023). The Honeycomb Illusion is not an illusion. *Cognitive Science Arena Brixien (Italy)* 09/02/2023 - 12/02/2023

Oletto, C.M., Cessa, R., Battaglini, L., Bertamini, M. (2022). Foveal retinotopic cortex in peripheral non-shape discrimination tasks: comparing magno and parvocellular system. *AIP conference Padova (Italy)* 26/09/2022 - 30/09/2022

Contemori, G., **Oletto, C.M.**, Cessa, R., Battaglini, L., Bertamini, M. (2022). Foveal feedback and the discrimination of peripheral objects: timing and role. *ECVP conference Nijmegen (Netherlands)* 27/08/2022 - 01/09/2022. <http://hdl.handle.net/11577/3458971>

Teaching Activities

2024/05 – 2024/05	Transcranial electrical stimulation (tES) (20 hours)
2024/02	Amblyopia rehabilitation using perceptual learning (1 hour)
2023/10 – 2023/11	Basic Concepts of Psychology (10 hours)
2022/10 – 2022/11	Basic Concepts of Psychology (10 hours)

Languages

Italian	● ● ● ● ●	English	● ● ● ● ●
Japanese	● ● ● ● ●	Cambridge English Level 2 Certificate in ESOL International (Advanced) - C1	

Skills

Python	● ● ● ● ●	R	● ● ● ● ●
Psychopy (experiment setting)		Data analysis	
Eye tracker	● ● ● ● ●	MatLab	● ● ● ● ●
EEG	● ● ● ● ●	Psychtoolbox, EEG Lab	
Biosemi, Starstim			

Affiliations

Visual Perception Lab

University of Padua

Associazione Italiana di Psicologia (AIP)

PercUP

University of Padua

Research in perception and its neural correlations.

NeuroVis.U.S. Lab

Experimental rehabilitation paradigms in vision loss and visual impairments.