

Associate Professor  
University of Trento  
Corso Bettini 31, Rovereto Italy

email: david.melcher@unitn.it  
Phone: +39 0464 808665

Melcher Active Perception Group: <http://r.unitn.it/en/cimec/map>

---

- 2001 PhD in Psychology, Rutgers University (New Jersey, USA)  
1998 MSc in Psychology, Rutgers University  
1994 BA (Magna Cum Laude), Transylvania University (Kentucky, USA)
- 12/2006-present Associate Professor, Faculty of Cognitive Sciences,  
University of Trento  
-Head of the *Doctoral School in Cognitive and Brain Sciences*  
(2010 – 2013)  
-Coordinator, *Masters in Cognitive Science* (2009 - 2014)
- 08/2016-05/2017 Visiting researcher, University of South Florida and UMass-Boston
- 06/2015-09/2015 Visiting researcher, Harvard and NYU Medical Schools
- 07/2013-07/2014 Visiting professor, Harvard Summer School  
-Course on “Art, Mind and Brain” (Summer 2013 and 2014)
- 2011-2012 Visiting professor, Bocconi University (Milan, Italy)  
-Course on “Neuroscience of everyday life”
- 2010-2012 Visiting professor, San Raffaele University (Milan, Italy)  
-Courses on “Cognition” and “Neuroscience of vision”
- 09/2003-12/2006 Principal Lecturer, Oxford Brookes University  
-Leader of the Masters in Cognitive Neuropsychology (2004-2006)  
-Quality Assessment Officer (2003-2006)
- 03/2006-07/2006 Visiting Fellow, College de France
- 02/2005-09/2006 Research Fellow, Oxford University

06/2001- Research Fellow, San Raffaele University (Milan, Italy)  
08/2003

Title: Neural mechanisms of temporal integration of sensory information  
- Project leader



Co-organizer of the *Rovereto Attention Workshops*, October 2009, 2011, 2013, 2015.

Co-

International peer-reviewed journal articles

Wutz A, Muschter E, van Koningsbruggen MG, Weisz N & (2016) Temporal integration windows in neural processing and perception aligned to saccadic eye movements. *Current Biology*, in press.

Buonocore A, McIntosh RD & (2015) Beyond the point of no return: effects of visual distractors on saccade amplitude and velocity. *Journal of Neurophysiology* Dec 2:jn.00939.2015. doi: 10.1152/jn.00939.2015.

Buonocore A & (2015) Interference during eye movement preparation shifts the timing of peri-saccadic compression. *Journal of Vision*, 15(15):3.

Buonocore A & (2015). Disrupting saccadic updating: visual interference prior to the first saccade elicits spatial errors in the secondary saccade in a double-step task. *Experimental Brain Research*, 233(6):1893-1905.

Drewes J, Zhu W, Wutz A & (2015). Dense sampling reveals behavioral oscillations in rapid visual categorization. *Scientific Reports*, 5:16290.

Fracasso A, Kaunitz L & (2015). Saccade kinematics modulate perisaccadic perception. *Journal of Vision*, 15(3). pii: 4.

Hartzell JF, Davis B, et al. (2015). Brains of verbal memory specialists show anatomical differences in language, memory and visual systems. *Neuroimage*, Jul 15. pii: S1053-8119(15)00638-2 [Epub ahead of print]

& Morrone MC (2015). Non-retinotopic visual processing in the brain. *Visual Neuroscience*, 32, E017.

Wutz A, Shukla A, Bapi RS & (2015) Expansion and Compression of Time Correlate with Information Processing in an Enumeration Task. *PLoS One*, 10(8):e0135794.

Van Paaschen J, Bacci F & (2015). The Influence of Art Expertise and Training on Emotion and Preference Ratings for Representational and Abstract Artworks. *PLoS One*, 10(8): e0134241.

Cavicchio F, & Poesio M (2014). The effect of linguistic and visual salience in visual world studies. *Frontiers in Psychology*, 5:176.

Corbett, JE &

Corbett, JE & (2014). Characterizing ensemble statistics: Mean size is represented across multiple frames of reference. *Attention, Perception, & Psychophysics*, 76(3), 746-58.

Drewes J, Zhu W (2014) Dissociation Between Spatial and Temporal Integration Mechanisms in Vernier Fusion. *Vision Research*, 105, 21-28.

**Melcher, D.** & Bacci F. (2013) Perception of emotion in abstract artworks: a multidisciplinary approach. *Perception*, 42(2):191-216.

Wutz, A. & **Melcher, D.** (2013) Temporal buffering and visual capacity: the time course of object formation underlies capacity limits in visual cognition. *Perception*, 42(5): 921-933.

Dempere-Marco, L., & Deco, G. (2012) Effective visual working memory capacity : an emergent effect from the neural dynamics in an attractor network. *PLoS One*, 7(8) :e42719

& Fracasso, A. (2012) Remapping of the line motion illusion across eye movements. *Experimental Brain Research*, 218(4) : 503-14.

Wutz, A., Caramazza, A. & (2012) Rapid enumeration within a fraction of a single glance : the role of visible persistence in object individuation capacity. *Visual Cognition*, 20(6) : 717-32.

Kaunitz, L.N., Fracasso, A. & (2011) Unseen complex motion is modulated by attention and generates a visual aftereffect. *Journal of Vision*, 11(13), 10.

Kaunitz LN, Kamienkowski JE, Olivetti E, Murphy B, Avesani P &

(2010) The missing link for attentional pointers: comment on Cavanagh et al. *Trends in Cognitive Sciences*, 14(11), 473.

(2009) Selective attention and the active remapping of object features in trans-saccadic perception. *Vision Research*, 49, 1249-55.

& Colby, C.L. (2008) Trans-saccadic perception. *Trends in Cognitive Sciences*, 12, 466-73.

(2008) Dynamic object-based remapping of visual features in trans-saccadic perception. *Journal of Vision* (special issue on Visual Stability), 8, 1-17.

& Bacci, F. (2008) The visual system as a constraint on the survival and success of specific artworks. *Spatial Vision*, 21, 347-62.

Alais, D. & (2007) Strength and coherence of binocular rivalry depends on shared stimulus complexity. *Vision Research*, 47, 269-79.

Tatler, B. & (2007) Pictures in mind: Initial encoding of object properties varies with the realism of the scene stimulus. *Perception*, 36, 1715-29.

(2007) Predictive re-mapping of visual features precedes saccadic eye movements. *Nature Neuroscience*, 10, 903-7.

(2006) Accumulation and persistence of memory for natural scenes, *Journal of Vision*, 6, 8-17.

& Vidnyanszky, Z. (2006) Subthreshold features of visual objects: Unseen but not unbound, *Vision Research*, 46, 1863-1867.

& Wade, N. (2006) Cave art interpretation II. *Perception*, 35, 719-22.

Wade, N. & (2006) Cave art interpretation I. *Perception*, 35, 577-80.

\_\_\_\_\_ (2005) Spatiotopic transfer of visual form adaptation across saccadic eye movements. *Current Biology*, 15, 1745-



& Bacci, F. (2003) A moment's monument: The central vision of Italian sculptor Medardo Rosso (1858-1928). *Perception*, 32, 1051-8.

& Morrone, M.C. (2003) Spatiotopic temporal integration of visual motion across saccadic eye movements. *Nature Neuroscience*, 6, 877-881.

(2001) Persistence of visual memory for scenes. *Nature*, 412, 401.

& Kowler, E. (2001) Visual scene memory and the guidance of saccadic eye movements. *Vision Research*, 41, 3597-3611.

& Kowler, E. (1999) Shape, surfaces and saccades. *Vision Research*, 39, 2929-46.

### Book

Bacci, F. and ., Editors (2011) *Art and the Senses*, Oxford University Press. ISBN13: 9780199230600; ISBN10: 0199230609 (now in its second printing in a paperback edition)

### Book chapters

& Cavanagh, P. (2011) Pictorial cues in art and in visual perception. In F. Bacci & D. Melcher (Eds.) *Art and the Senses*, Oxford University Press.

& Zampini, M. (2011) Audio-visual integration in science and the arts. In F. Bacci & D. Melcher (Eds.) *Art and the Senses*, Oxford University Press.

Muniz, V. & (2011) The mystery of representation: A conversation with Vik Muniz. In F. Bacci & D. Melcher (Eds.) *Art and the Senses*, Oxford University Press.

& Morrone, M.C. (2007) Trans-saccadic memory: building a stable world from glance to glance. In R. Van Gompel et al., *Eye movement research: A window on mind and brain* (Amsterdam: Elsevier).

Cognition and Behaviour//Radboud University (Netherlands), Umea University (Sweden), Bristol, Dundee, Kingston University London, Oxford, Royal Holloway and University College London (United Kingdom), Harvard, Rutgers, University of South F.2 (R) -0.26 -0.2 ( )S4T Q q 0.20.5 (a) -0.2 ( ) 0.5 (a) -0.2(n) -0 Q q 0.20.2 ( ) ] TJ ET Q q