



UNIVERSITÀ  
di **VERONA**

Dipartimento  
di **NEUROSCIENZE,  
BIOMEDICINA E MOVIMENTO**

## *ANNUNCIO DI SEMINARIO*

# How big is that box? Differences in size constancy for perception and action

**03 maggio 2017**

**ore 15.00**

**Istituti Biologici / Strada Le Grazie 8 / Verona / Aula F**

Mel Goodale, PhD, FRSC, FRS  
The Brain and Mind Institute  
The University of Western Ontario  
London ON CANADA N6A 5B7  
<http://www.uwo.ca/bmi/goodalelab/>

Size constancy in perception refers to the fact that people report an object to be the same size regardless of viewing distance. Size constancy is also evident in grasping: people scale their grip aperture to the real size of a goal object regardless of viewing distance. In both cases, size constancy is achieved by calibrating retinal image size of an object by its viewing distance. In near space, both visual and proprioceptive cues can provide information about the distance of an object. What is not known is whether or not the same cues are used to calibrate size constancy for perceptual judgements and grasping. To address this question, we asked participants either to grasp or to manually estimate the size of spheres presented at different distances when different visual and proprioceptive cues were available. Our results suggest that proprioception can support size constancy for grasping when visual distance cues are severely limited, but cannot support size constancy for perceptual judgements. These results also converge on neuropsychological evidence suggesting that the neural substrates for size constancy in perception and action are quite different.

Per informazioni: [carloalberto.marzi@univr.it](mailto:carloalberto.marzi@univr.it)

Lecture sponsored by ERC grant 339939 (C.A. Marzi)