

WORK IN PROGRESS



Project: Biomarkers of individual differences in human cortical visual processing (PUPILTRAITS)

Researcher: Paola Binda

Host Institution: Universita Di Pisa, Italy

ERC Funding: € 1.49 million for five years

What do you see when you look at the famous Rubin's vase illusion? The vase or the two faces? New research set out to prove it depends on your physical state and personality. We already know some characteristics of human vision are associated with conditions such as autism. For certain neurodevelopmental disorders, research has also established a link between the digestive system and brain physiology. Paola Binda will now examine human sight to determine the relationship between our bodies' metabolism, how our brains' process information and how we see things.

PUPILTRAITS

Written by PisaVisionLab

Thursday, 21 February 2019 11:42 - Last Updated Friday, 08 March 2019 18:40

Binda's team will measure individual differences in visual function to understand their relationship to autistic personality and to metabolism. The research will use perceptual tests involving pupil-size modulation, combined with metabolic stimulation and ultra-high field magnetic resonance of visual cortical processing. The results could aid diagnosis of autism through evaluation of perceptual styles. They could also help develop innovative therapeutic approaches to change perception and behaviour by influencing general physiology through how we eat and exercise.

[Publications](#)

[Conferences, Seminars and Disseminations](#)

[Seminars Organization](#)

[People](#)

[Institutions](#)