## The use of an implicit grammar task and eye measurements to study the somatic marker hypothesis

## **Results:**

A new method has been developed for the assessment of several factors contributing to intuitive decisions. Technically, the method monitors the pupil dilation preceding choices made in an artificial grammar task. The analysis focuses on the acquirement of implicit knowledge related to a somatic marker. Results indicate that with the new method we can unequivocally show that a somatic marker preceding a decision is a driving "force" for the final choice. Thus the basic ingredient of the "somatic marker" model is supported.

## **Published Work:**

Bierman, D.J. (2005). "Non Conscious Processes preceding Intuitive Decisions". In: Behind and Beyond the Brain, Proceedings on the 5th Symposium of the Bial Foundation, Porto, March 31- April 3, 2004. pp. 109-126. ISBN: 972-99286-0-6.

Bierman, D.J., Destrebecqz, A., Cleeremans, A. (2005). "Intuitive Decision Making in Complex Situations: Somatic Markers in an Artificial Grammar Learning Task". Cognitive, Affective, & Behavioral Neuroscience, 5-3, pp. 297-305(9).

## **Researcher's Contacts:**