

# A gut feeling

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# A GUT FEELING

## NONINVASIVE BRAIN STIMULATION, GUT MICROBIOTA AND DECISION-MAKING UNDER RISK

BY ALINE M. **DANTAS**

1. Risk-taking behavior involves a complex interplay between responses to potential reward and the inhibition of such responses via the activation of frontal brain areas (This thesis).
2. Frontal theta-band activity is a fundamental part of the electrophysiological mechanism that modulates risk-taking behavior. (This thesis)
3. The activity of frontal brain areas involved in risk-taking behavior and value choices indicate a strong functional interplay which could not be disentangled with our experimental design. (This thesis)
4. The gut-brain axis is a player in human decision-making. (This thesis)
5. The integration of multiple neuroscientific techniques allows important and unique insights into complex cognitive processes such as human decision-making. (The discipline)
6. Interdisciplinary research is a risk-taking exercise and yet a fundamental step for the advance of consumer and human decision research. (The discipline)
7. Economic decision making is a complex process of which we now only have a fleeting grasp. (The discipline)
8. Factors such as different levels of frontal theta-band activity and the influence of the gut microbiota should be taken into account to properly comprehend and estimate individual risk-taking behavior. (Impact)
9. A big part of doing research is persevering fuelled by pure and simple optimism.
10. Anecdotal evidence indicates that a gut regularly irrigated with caipirinhas leads to successful academic endeavours.
11. “And in the end, the love you take, is equal to the love you make”. (J. Lennon & P. McCartney, 1969)