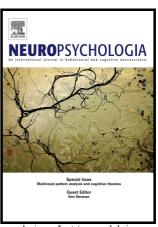
## Author's Accepted Manuscript

SMILE AND LAUGHTER ELICITED BY**ELECTRICAL STIMULATION OF** THE FRONTAL OPERCULUM

F. Caruana, F. Gozzo, V. Pelliccia, M. Cossu, P. Avanzini



www.elsevier.com/locate/neuropsvchologia

PII: S0028-3932(16)30239-1

http://dx.doi.org/10.1016/j.neuropsychologia.2016.07.001 DOI:

Reference: NSY6054

To appear in: Neuropsychologia

Received date: 4 February 2016 Revised date: 8 June 2016 Accepted date: 2 July 2016

Cite this article as: F. Caruana, F. Gozzo, V. Pelliccia, M. Cossu and P. SMILE AND LAUGHTER ELICITED BY ELECTRICAL STIMULATION OF THE FRONTAL OPERCULUM, Neuropsychologic http://dx.doi.org/10.1016/j.neuropsychologia.2016.07.001

This is a PDF file of an unedited manuscript that has been accepted fo publication. As a service to our customers we are providing this early version o the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting galley proof before it is published in its final citable form Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain

### **ACCEPTED MANUSCRIPT**

#### SMILE AND LAUGHTER ELICITED BY

#### ELECTRICAL STIMULATION OF THE FRONTAL OPERCULUM

Caruana F.<sup>1,2</sup>\*, Gozzo F.<sup>3</sup>, Pelliccia V.<sup>3</sup>, Cossu M.<sup>3</sup>, Avanzini P.<sup>1</sup>

- <sup>1</sup> Department of Neuroscience, University of Parma, Parma, Italy
- <sup>2</sup> CNR Institute of Neuroscience, Parma, Italy.
- <sup>3</sup> Claudio Munari Center for Epilepsy Surgery, ASST Grande Ospedale Metropolitano Niguarda, Milan, Italy
- \* Correspondence should be addressed to:

Fausto Caruana, Department of Neuroscience, University of Parma, Via Volturno 39, 43125 Parma, Italy. Tel. +39 0521 903894; E-mail: fausto.caruana@unipr.it.

#### Abstract

Laughter and smile are typical expressions of mirth and fundamental means of social communication. Despite their general interest, the current knowledge about the brain regions involved in the production of these expressions is still very limited, and the principal insights come from electrical stimulation (ES) studies in patients, in which, nevertheless, laughter or smile have been elicited very rarely. Previous studies showed that laughter is evoked by the stimulation

#### Download English Version:

# https://daneshyari.com/en/article/7318852

Download Persian Version:

https://daneshyari.com/article/7318852

Daneshyari.com