### Processamento cognitivo durante o sono: Psicofisiologia e Neurofisiologia dos Sonhos

### **Results:**

Project results can be summarized as follows:

- 1) The contents of REM and NREM dreams were different. REM reports were longer and more vivid then NREM reports. The visual, emotional and motor components were higher in REM reports, while abstract thoughts were commoner in NREM reports. The reports grammatical composition was also different: REM reports had significantly higher percentages of nouns, verbs and adjectives.
- 2) The dream contents varied across successive sleep cycles: dreams in the beginning of the night had higher diurnal residuals related with daily activities, when compared with those in the end of the sleep episode.
- 3) The contents of dream reports of normal subjects were significantly correlated with spectral contents of the Electroencephalogram (EEG) measured in derivation C4.
- 4) Emotional contents were correlated with a decrease in low EEG frequencies in the theta and delta bands, while abstract thoughts were positively correlated with them.
- 5) Furthermore abstract thoughts were described with less words in contrast with dreams presenting higher emotional contents

#### Project conclusions:

The positive correlations observed between dream contents and EEG frequency components in normal subjects represent an important initial step within the psycho and neurophysiological evaluation of dreams

## **Published Works**:

Master Thesis – "Análise Psiconeurofisiológica dos Sonhos" Dr. Erica Guimarães Master of Science degree in Biophysics

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