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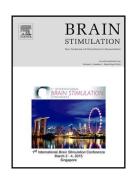
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ACCEPTED MANUSCRIPT

Intracortical Microstimulation Parameters Dictate the Amplitude and Latency of Evoked Responses

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The methods of this research study will be presented at the 37th Annual International Conference of the IEEE Engineering in Medicine and Biology Society in Milan, Italy (25-29 August 2015). Corresponding author Tel.: +1 (438) 993-5765; email address: meghan.watson@polymtl.ca

Highlights

- We examined the influence of stimulation parameters on the responses they evoke.
- Response amplitude and latency were strictly controlled by stimulation parameters.
- Many parameter interactions and functional limits were identified.
- Effective parameter combinations were identified for restrictive paradigms.
- A new approach to stimulation signal design was proposed.

ABSTRACT

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