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Host Lab: Master in Biomedical Sciences, Université catholique de Louvain, Brussels,
Belgium.

Thanks to the opportunity I has been granted, I was able to accomplish the goals that we set. The aim of the project, which constitutes my master thesis, was to characterize the effects that selective and divided attention have on the processing of somatosensory event related potentials (ERPs). I collected data from 16 healthy participants, exploring how brain responses were modulated when participants attended selectively to either the location of a nociceptive stimulus, or to its intensity or to both at the same time (divided attention).

In line with the aims of the training stay which were i) learn the basics of EEG; ii) learn the event related potentials (ERPs) technique; iii) acquire knowledge about the selective activation of somatosensory pathways (i.e. A δ vs. A β), I have learned the basics of EEG and how to analyse the event related potentials (ERPs) technique; moreover, I acquired knowledge about the selective activation of somatosensory pathways (i.e. A δ vs. A β). More in detail, I have learned all the necessary steps to record EEG data (i.e. from the preparation of the cap, to data acquisition and data analysis). In addition, I have learned how to deliver somatosensory stimuli, to establish their threshold and ensure that the correct fibre population is stimulated. Now, I can distinguish brain responses to different fibre populations depending on their latency and topography. Infrared laser heat stimuli have been used for this project.

Preliminary data analyses seem to confirm the hypothesis that selective and divided attention exert differential responses on the laser ERPs. Should they be confirmed by more in depth analysis, these results will be presented at international conferences and will be the subject of a scientific article, where the support of the NENS will be acknowledged.

The skills and techniques I have learned during this period, which I have formerly mentioned, could be used even at the Department of Psychology in Turin. Indeed, there is the determination to carry on studies concerning ERPs and laser stimulation, also I will teach to my colleagues some techniques which I learned during this experience. Furthermore, I would like to thank all people of the NOCIONs group (<http://www.nocions.org/>). They allowed me to participate in several group activities and work teams. I had the possibility to play an active role on this group and they have been able to kindly provide answer to my questions and curiosity. I found a great place in order to complete the project of my thesis.

Finally, I am grateful to NENS for making this opportunity possible and for allowing me to widen my knowledge in scientific field.