

# **Proceedings of the 1st Challenge task on Drug-Drug Interaction Extraction.**

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## Welcome

We are pleased to welcome to the DDIExtraction 2011 workshop (First Challenge Task on Drug-Drug Interaction Extraction) being held in Huelva, Spain on September 7 and co-located with the 27th Conference of the Spanish Society for Natural Language Processing, SEPLN 2011. On behalf of the organizing committee, we would like to thank you for your participation and hope you enjoy the workshop.

The detection of DDI is an important research area in patient safety since these interactions can become very dangerous and increase health care costs. Although there are different databases supporting health care professionals in the detection of DDI, these databases are rarely complete, since their update periods can reach three years. Drug interactions are frequently reported in journals of clinical pharmacology and technical reports, making medical literature the most effective source for the detection of DDI. Thus, the management of DDI is a critical issue due to the overwhelming amount of information available on them.

Information Extraction (IE) can be of great benefit in the pharmaceutical industry allowing identification and extraction of relevant information on DDI and providing an interesting way of reducing the time spent by health care professionals on reviewing the literature. Moreover, the development of tools for automatically extracting DDI is essential for improving and updating the drug knowledge databases. Most investigation has focused on biological relationships (genetic and protein interactions (PPI)) due mainly to the availability of annotated corpora in the biological domain, facilitating the evaluation of approaches. Few approaches have focused on the extraction of DDIs.

The DDIExtraction (Extraction of drug-drug interactions) task focuses on the extraction of drug-drug interactions from biomedical texts and aims to promote the development of text mining and information extraction systems applied to the pharmacological domain in order to reduce time spent by the health care professionals reviewing the literature for potential drug-drug interactions. Our main goal is to have a benchmark for the comparison of advanced techniques, rather than competitive aspects.

We would like to thank all the participating teams for submitting their runs and panelists for presenting their work. We also acknowledge all the members of the program committee for providing their support in reviewing contributions. Finally, we would like to thank to Universidad de Huelva, especially the organizers of the SEPLN 2011 conference and all the people that help us to make this workshop possible.

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**The DDIExtraction 2011 organizing committee**

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