



NeuGRID platform under testing

NeuGRID capabilities are continuously tested through demanding data challenges.

ANALYSIS CHALLENGE 1 - COMPLETED

AC1 consisted in the comparison of the performance of algorithms taking advantage of neuGRID services and resources, and, at the same time, of the beta test of the ExpressLane tool architecture. The results of this analysis were presented at the Human Brain Mapping Conference (OHBM2014) in Hamburg, where a great interest was shown by the neuroimaging scientific community. AC1 proved once more that neuGRID environment can offer a functional environment able to process large volumes of data in a very short lapse of time.



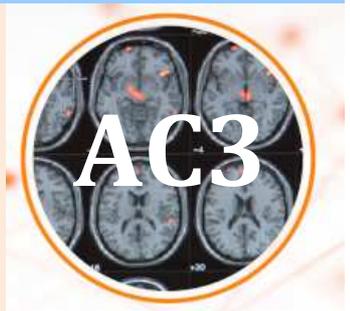
ANALYSIS CHALLENGE 2 - STARTING SOON

The purpose of AC2 is to test new services for automated lesion segmentation that neuGRID plans to offer to the White Matter Disease community. Within the AC2 the accuracy of various segmentation algorithms will be compared to the manual segmentations (gold standard) on a number of outcome measures (e.g. number of lesions, overlap between segmentations and manual outline). This AC shows that neuGRID can become the harmonized environment where new complex, heterogeneous tools can be developed, tested and then distributed to different user communities.



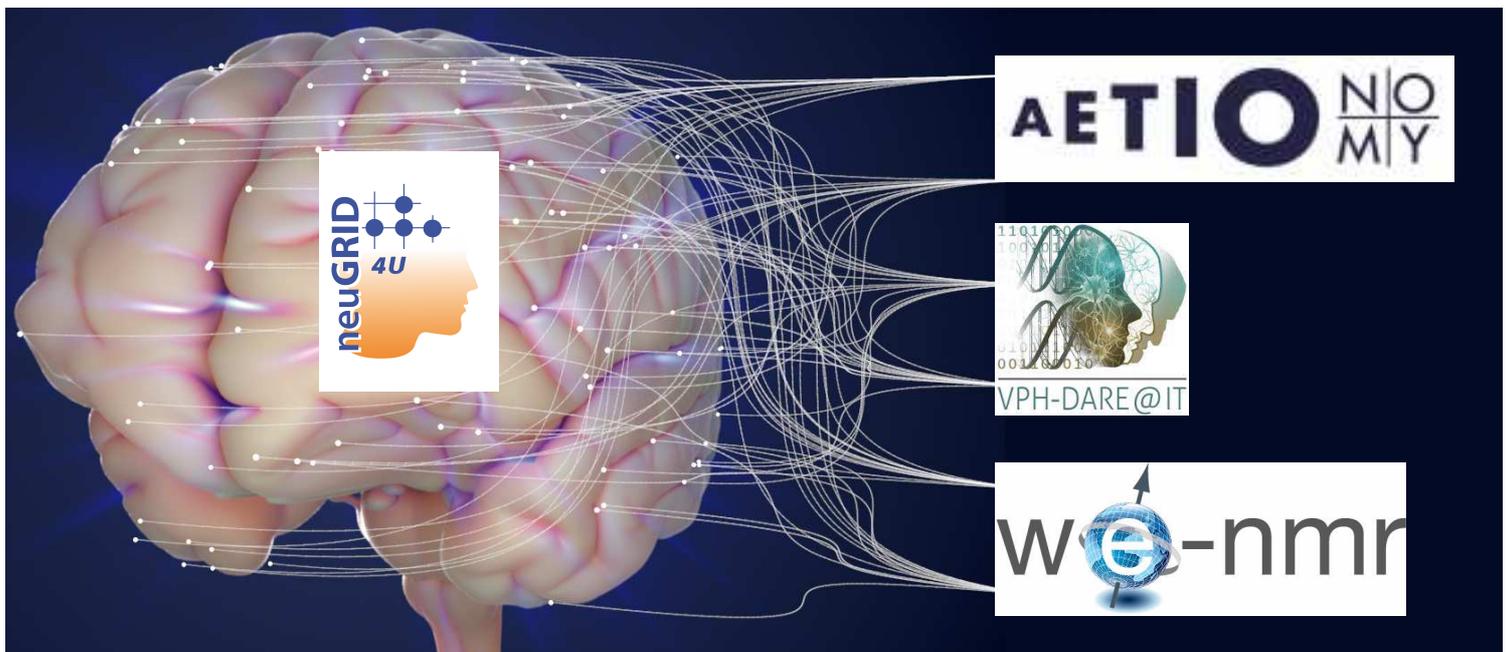
ANALYSIS CHALLENGE 3- STARTING SOON

Aim of the third analysis challenge (AC3) is to compare and characterize the behaviour of different pipelines towards the analysis of the structural and the functional human brain connectomes. Various pipelines will be run for head to head comparison in order to both assess the best acting and the best performing structural and functional tools and define their best combination to classify the different psychiatric disorders.



For further information about neuGRID analysis challenges, go to our website at the following link: <https://neugrid4you.eu/achievements>

NeuGRID4you expands its borders



Thanks to the continuous increasing portfolio of services and resources, neuGRID drew the attention of the major related initiatives at European level, such as: **Aetionomy**, a IMI funded project aiming to develop a “mechanism-based taxonomy” of Alzheimer’s and Parkinson’s Disease; **VPH-Dare**, a FP7 funded initiative that wants to deliver the first patient-specific predictive models for early differential diagnosis of dementias and their evolution; **We-NMR**, another FP7 project which is committed in the development of a worldwide e-Infrastructure for NMR and structural biology. These collaborations show that neuGRID can give a critical contribution towards scientific breakthrough by catalyzing the development of a system where scientific digital data are easily accessible while suitably protected and reliably preserved; and supporting the development of new tools and services for data discovery, integration, visualization and analysis.

NeuGRID at work

User Acceptance Tests

Latest User Acceptance Tests held in Stockholm and Amsterdam provided relevant feedbacks which helped improving the platform and proved that neuGRID can handle complex tasks in real world scenarios.

New Projects

So far, the consortium registered 23 projects benefiting from neuGRID capabilities.

Among them, 2 external projects are currently running on the platform, one of which started on July 1st.

About 6374 scans were processed, and 265.382 jobs were submitted.

