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Open Science for the Neuroinformatics community

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Summary

The Neuroinformatics community in OpenAire-Connect is represented by members of the France Life Imaging (FLI) collaboration. In this context, we aim at leveraging OpenAire-Connect services and give our community members the possibility to easily publish and exchange research artefacts from FLI platforms, such as VIP and Shanoir. This will enable open and reproducible science, since literature, data, and methods can be linked, retrieved, and replayed by all the members of the community.

Content

OpenAIRE-Connect is a European project which aims at providing services enabling uniform exchange of research artefacts (literature, data, and methods), with semantic links between them, across research communities and content providers in scientific communication.

The Neuroinformatics community in OpenAire-Connect is represented by members of the France Life Imaging (FLI) collaboration. Some of the FLI members are also connected to INCF, the International Neuroinformatics Coordinating Facility, to integrate solutions at a global level. In this context, we aim at leveraging OpenAire-Connect services and give our community members the possibility to easily publish and exchange research artefacts from FLI platforms, such as VIP (for processing) and Shanoir (for data management). This will enable open and reproducible science, since literature, data, and methods can be linked, retrieved, and replayed by all the members of the community.

VIP (Virtual Imaging Platform) is a web portal (<https://vip.creatis.insa-lyon.fr>) for the simulation and processing of massive data in medical imaging. By effectively leveraging the computing and storage resources of the EGI e-infrastructure, VIP offers its users high-level services enabling them to easily execute medical imaging applications. VIP has, in June 2018, more than 1000 registered users and about 20 applications open to all its users.

Shanoir is an open source neuroinformatics platform designed to share, archive, search and visualize neuroimaging data. It provides a user-friendly secure web access and offers an intuitive workflow to facilitate the collecting and retrieving of neuroimaging data from multiple sources. Shanoir comes along many features such as anonymization of data, support for multi-center clinical studies on subjects or group of subjects.

By leveraging OpenAire-Connect services and integrating them into VIP and Shanoir, we aim at providing the neuroinformatics community with open Science tools to enhance the impact of science and research.