Contribution ID: **50**   Type: **Hands-on session**

BigBrain data processing with CBRAIN and DataLad

Wednesday 4 October 2023 14:45 (1h 30m)

This tutorial will provide an introduction to two tools that can be used to process and manage BigBrain-related data: CBRAIN and DataLad.
CBRAIN is a web portal that provides seamless access to high-performance computing clusters, and is a component of the NeuroHub ecosystem of neuroinformatics tools. DataLad is a data integration tool to keep track of distributed datasets. The tutorial will cover the main functionalities of CBRAIN and DataLad, illustrate them on BigBrain data, and demonstrate their interaction.

Expected learning outcomes:
In this tutorial participants will learn to use the following infrastructure tools and services for analyzing data in HIBALL:

 Part 1: CBRAIN to process BigBrain data on HPC clusters through a web portal, including: Finding BigBrain datasets in CBRAIN Processing BigBrain datasets in CBRAIN Exploring and working with the processing results Downloading and sharing the results   Part 2: DataLad and Boutiques, to access and process BigBrain data through uniform command-line interfaces, including: Finding BigBrain datasets in DataLad Installing and downloading BigBrain datasets Processing BigBrain datasets with Boutiques Uploading derived data to DataLad

Preparations & Equipment:

 Laptop (Windows, Mac or Linux) NeuroHub or CBRAIN account
 Participants who do not already have a NeuroHub or CBRAIN account can obtain one in advance of the training session by registering at https://portal.neurohub.ca and selecting 'Request Account'.

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Session Classification: Hands-on session 3B