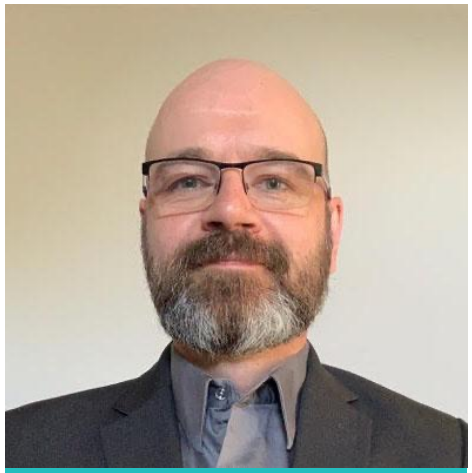
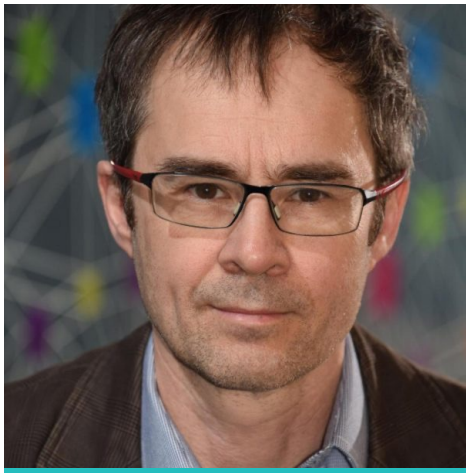
NeuroHub
neurohub.ca
Seamless neuroscience data management, analysis and collaboration

Introduction



Bryan Caron

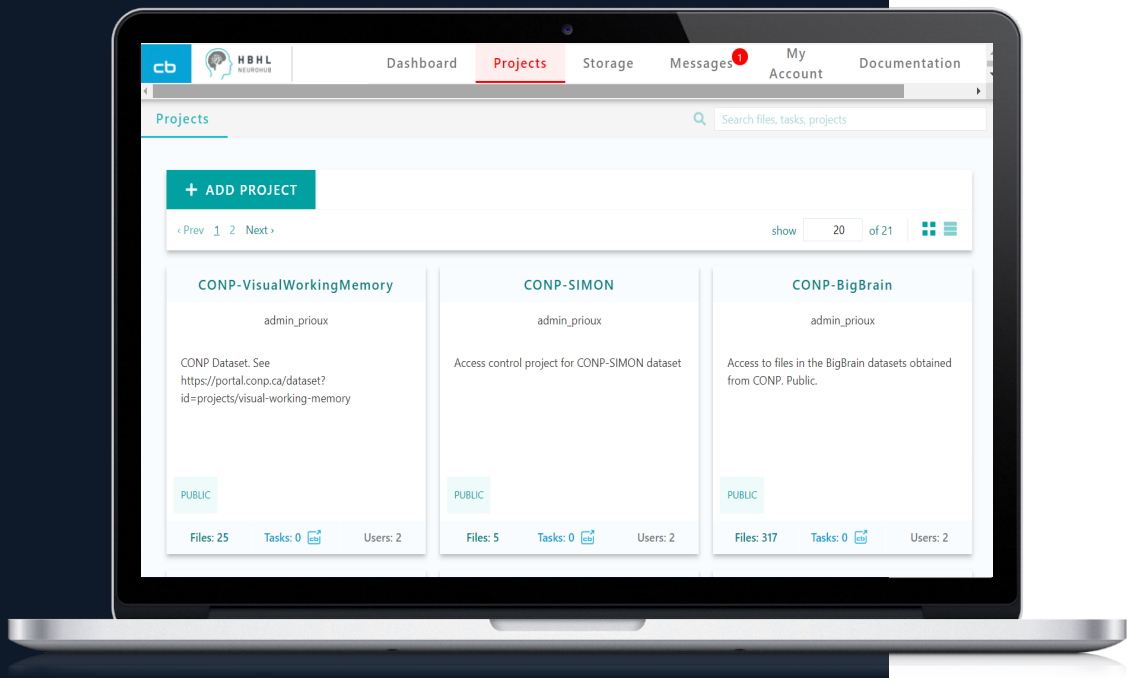
Co-PI, NeuroHub
Director, Operations and Development



Jean-Baptiste Poline

co-PI, NeuroHub,
Associate Professor

What is NeuroHub?



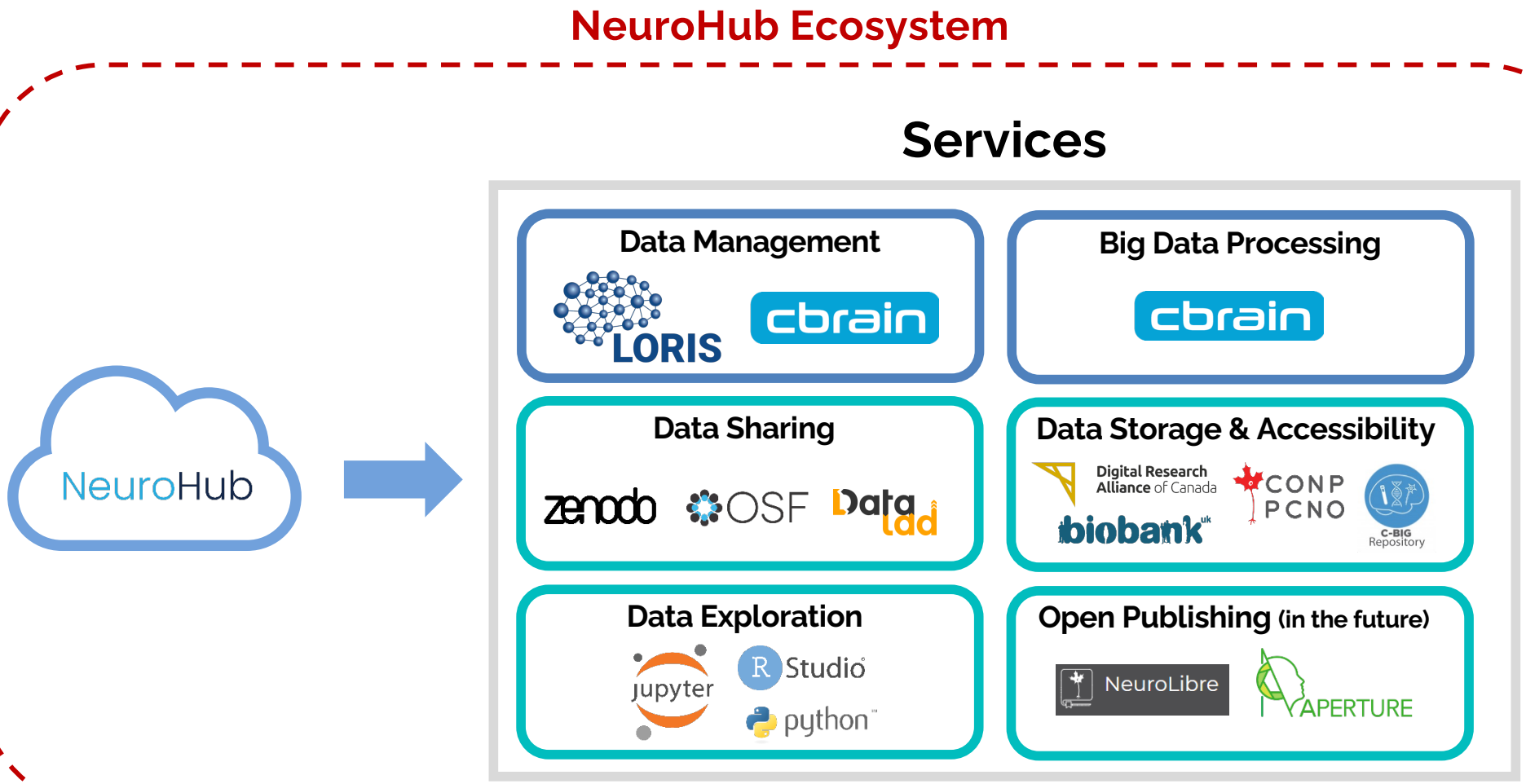
Multi-modal data management

Data Storage & secure sharing with collaborators

Dataset Access via a simple web UI

Analyze data more efficiently and reproducibly

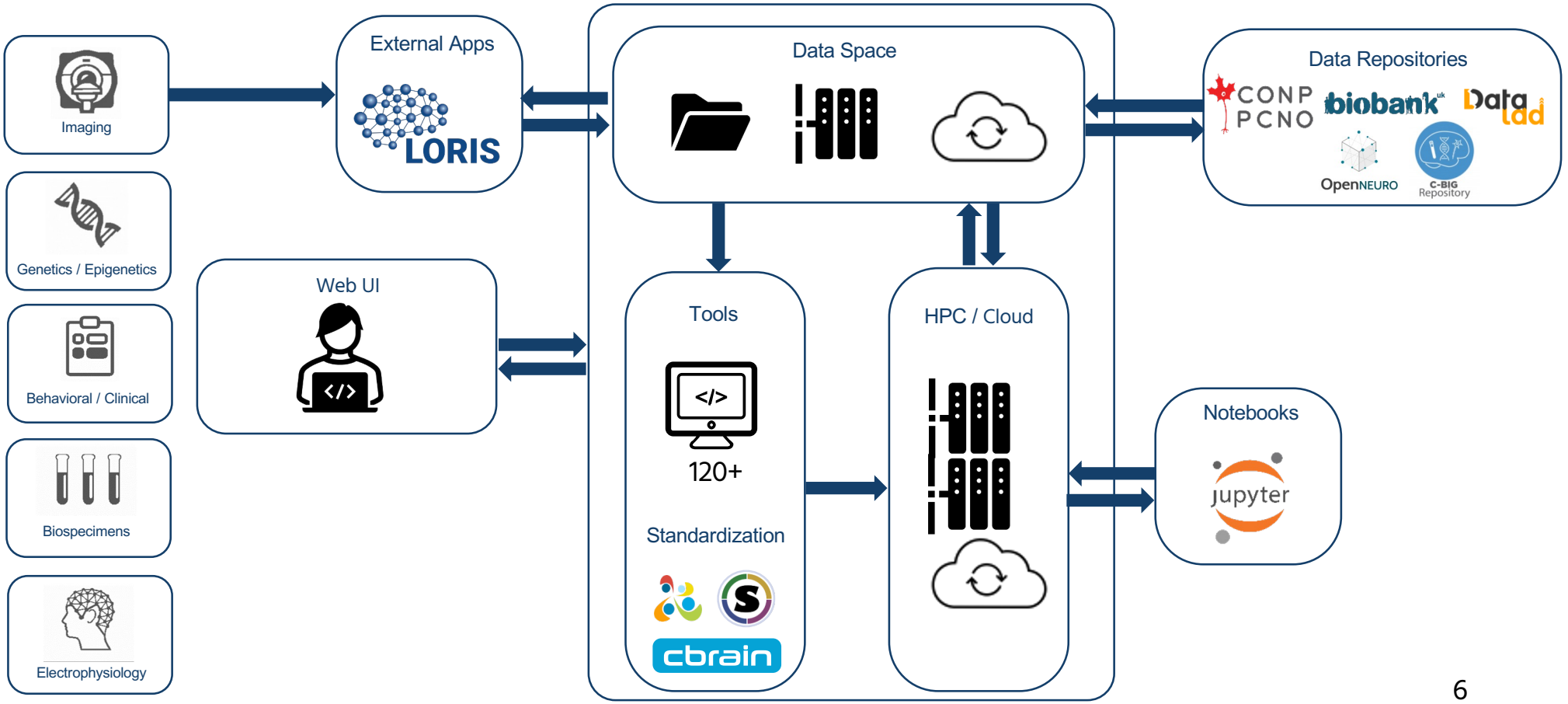
NeuroHub Ecosystem



NeuroHub Ecosystem Features

- Easy-to-use interface and rich API
- Securely store and share data
- Access to high performance computing
- Access large international datasets
- Capture and curate multi-modal data
- Sample level data with NeuroBagel

Big Data Processing



Range of Service Models

NeuroHub Portal

Simple data sharing, analysis & collaboration

Storage & sharing of data (limited)

Access international datasets

120+ computational pipelines

Publish open data

NeuroHub cbrain

Small-scale data management & analysis

NeuroHub Portal

Data management for multiple clinical projects

Custom tools and pipelines

Enhanced storage and compute

Data standardization expertise

NeuroHub LORIS

Large-scale data management & analysis

NeuroHub cbrain

Multi-site, multi-modal data management software

Access to a large library of modules and instruments

Customization services

Dedicated project management and support

Sample Level data with NeuroBagel

How can we **find cohorts** across sensitive data and have **sharing constraints locally controlled**

Conclusion

Big Data

Big Computation

International Collaboration

Interdisciplinary Health Research

Infrastructure and services for accomplishing science

NeuroHub provides key services for reproducibility and interoperability

- Components, such as CBRAIN, are completely general and can be used beyond brain science
- Since launching in 2020:
  - 300+ NeuroHub Portal users
  - 400+ attendees at NeuroHub training events
  - 100+ published research outcomes using the platform

neurohub.ca

info@neurohub.ca