

Research Portal for Secure Data Discovery, Access and Collaboration

CANARIE RDM Workshop

January 23, 2019

Moyez Dharsee
Indoc Research

Brendan Behan, PhD
Ontario Brain Institute

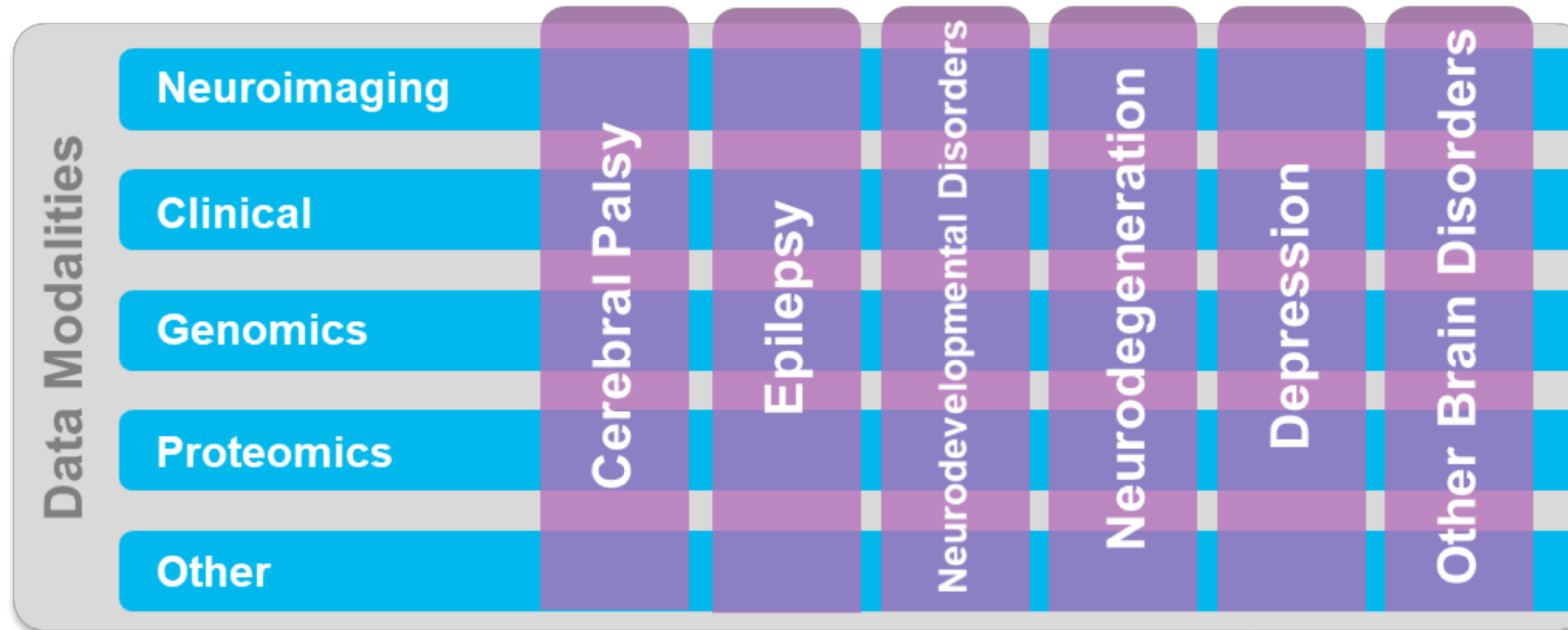
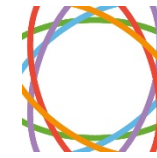


canarie



ONTARIO
BRAIN
INSTITUTE

INSTITUT
ONTARIEN
DU CERVEAU



Integrated Discovery Programs



Researcher

Portal

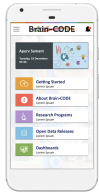
Clinical

Imaging

Molecular

Patient Information

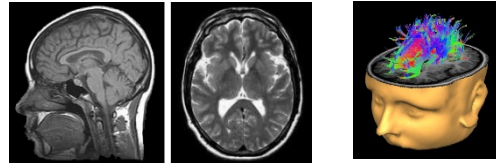
REDCap
Research Electronic Data Capture



medidata
Rave

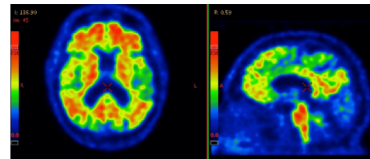
OpenClinica

COGNICITY



MRI

DTI



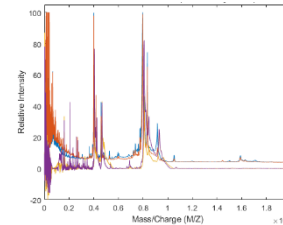
PET



illumina
ThermoFisher
SCIENTIFIC

Next Generation Sequencing

Quantitative
mass spectrometry



Multiplexed Immunoassays



Health Card Number



Hospital ID Number

Brain-CODE



Portal

Data Capture Resources



External
Data
Sources



Program
Specific EDC
Databases



XNAT



REDCap



LabKey



OpenClinica



Subject
Registry



Brain-CODE

 Researcher

Portal

Data Capture Resources



External
Data
Sources

Program
Specific EDC
Databases



XNAT

MySQL

REDCap

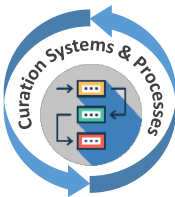
LabKey



PostgreSQL

OpenClinica

Subject
Registry



Federated Data Warehouse

Airflow



Spark SQL



Apache Thrift™



Brain-CODE

 Researcher

Portal

Data Capture Resources



External
Data
Sources

Program
Specific EDC
Databases



MySQL



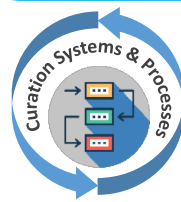
PostgreSQL



OpenClinica



Subject
Registry



Federated Data Warehouse

Airflow

redis

KEYCLOAK

kafka

Platform Services

-  Security and Privacy
-  ID, Permissions & Ethics Management
-  Data Marshalling and Linkage
-  Provenance



Brain-CODE



Researcher

Portal

Data Capture Resources



External Data Sources

Program Specific EDC Databases



MySQL

REDCap



PostgreSQL

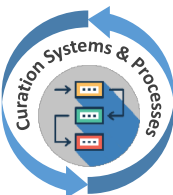
OpenClinica



Subject Registry



Canvas



Federated Data Warehouse

Airflow

redis

KEYCLOAK

APACHE kafka

Platform Services



Security and Privacy



ID, Permissions & Ethics Management



Data Marshalling and Linkage



Provenance

IBM DB2

PostgreSQL

elastic

Spark SQL

Apache Thrift™

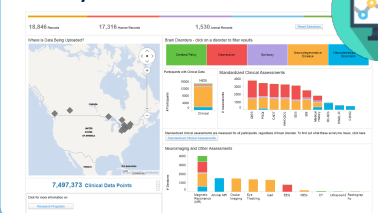
Admin Dashboards and Quality Control



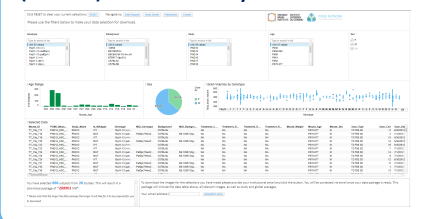
Analytics Workspace



Study Dashboards



(meta)Data Query and Release



Brain-CODE



Researcher

External Restricted Data



Portal

Data Capture Resources



External Data Sources

Program Specific EDC Databases

XNAT

REDCap

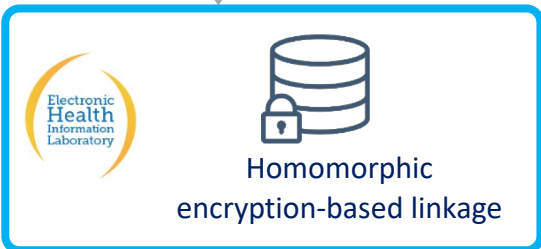
LabKey

OpenClinica

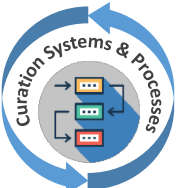
Subject Registry



External Linkage



Canvas



Federated Data Warehouse

Airflow

redis

KEYCLOAK

kafka

Platform Services

- Security and Privacy
- ID, Permissions & Ethics Management
- Data Marshalling and Linkage
- Provenance

IBM DB2

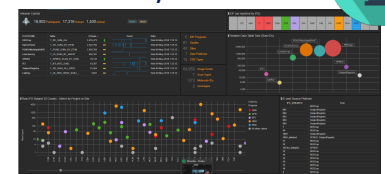
PostgreSQL

Spark SQL

elastic

Apache Thrift™

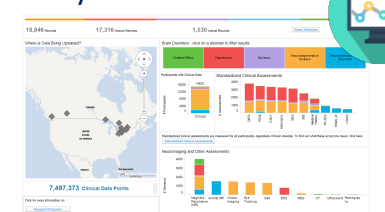
Admin Dashboards and Quality Control



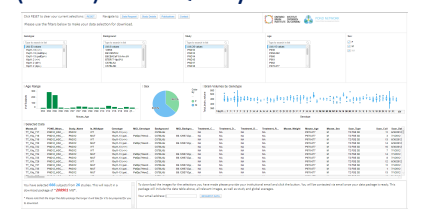
Analytics Workspace

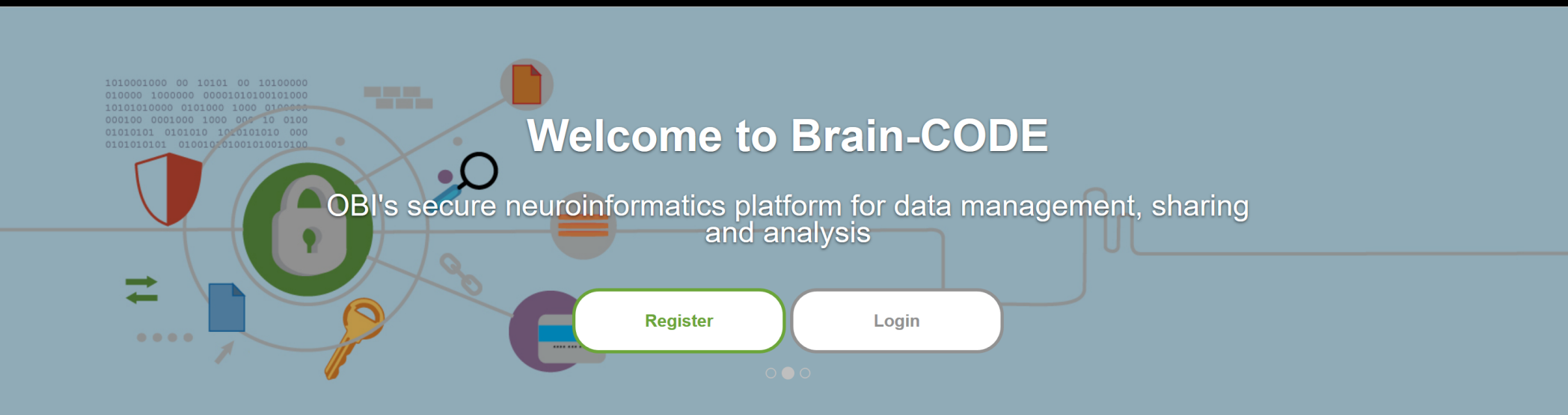


Study Dashboards



(meta)Data Query and Release






Welcome to Brain-CODE

OBI's secure neuroinformatics platform for data management, sharing and analysis

[Register](#) [Login](#)

New Open Data Releases



Neurodevelopmental Disorders Priority Setting Partnership

POND Network, James Lind Alliance, Ontario Brain Institute

View and download original and overarching research questions brought forward by the neurodevelopmental disorders community.

[Learn More](#) [Get Access](#)



LOGIN

branded public facing site

contextual and role-based access

Research Platforms

Research Consortia Platforms

Restricted Data Platforms

Internal Research Programs

...

Data Capture Systems



Participant Information



Clinical Assessments

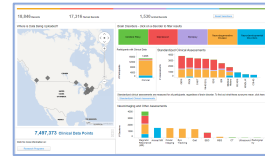


Genomics



Imaging

Program Dashboards



Study Dashboards



Admin Dashboards and Quality Control

Data Access Systems



Query and Data Request Systems

Data Access Approval Systems

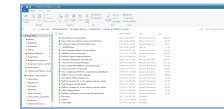
Analytics Workspaces

Data Sharing, Access and Analytics Environments



Restricted Data Environment (remote access)

Collaboration Systems



File Sharing

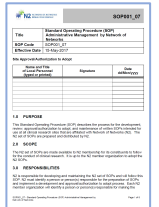


Networking



Collaborative Editing

Governance and Support

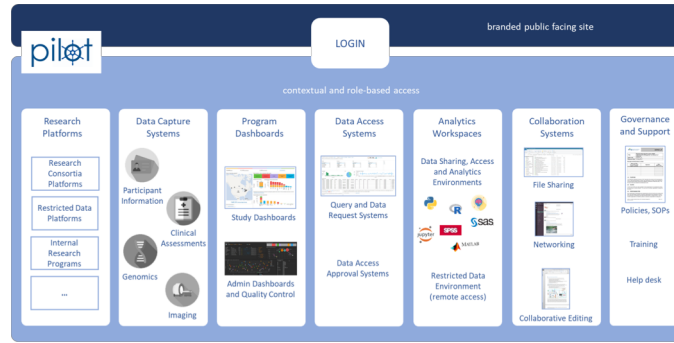


Policies, SOPs

Training

Help desk

Modules



customizability, multi-tenancy



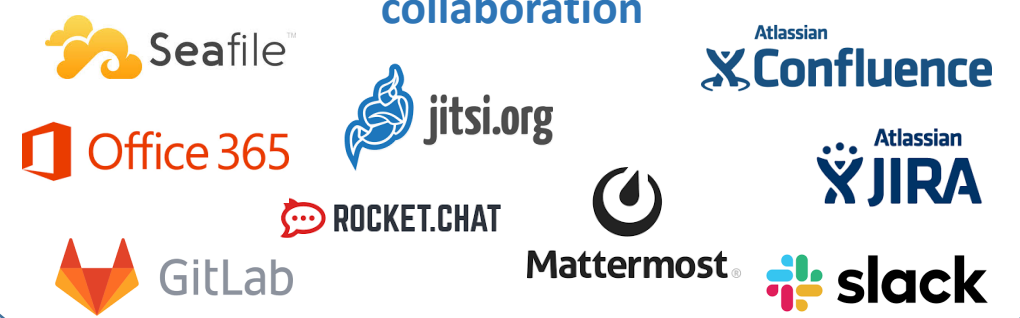
identity, authentication, authorization



data access



collaboration



Team & Acknowledgements



Apurv Samant
Frontend Developer



Salim Haniff
DevOps Lead



Fan Dong
Director, Systems Dev



Brendan Behan
Program Lead
Informatics & Analytics



Abraham Prince
Web Developer



Sara Latour
Data Mgmt Specialist



Moyez Dharsee
CTO



Elizabeth Theriault
Director
Informatics & Analytics



Mojib Javadi
Director, Program Dev



Ken Evans
President & CEO



Tom Gee
VP, Engineering



Shannon Lefaire
Program Lead
Informatics Governance



David Rotenberg
Sean Hill



Florence Dzierszinski
Zul Merali



Flavio Kapczynski

