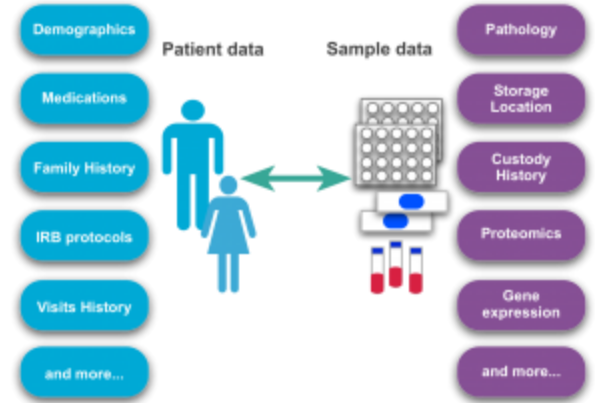


Labmatrix

The Institute for Computational Biology (ICB) has partnered with BioFortis to offer Labmatrix™ to all members of the CWRU and affiliated hospitals research community. Labmatrix is housed inside of the ICB SHED (Securely Held Electronic Data) within the CWRU Secure Research Environment (SRE). Access is tightly controlled via role-based security and 2-factor authentication.

Web based clinical and translational data management

Driven by the vision of personalized medicine and increased externalization by pharmaceutical companies, life science and healthcare data continues to explode in size and complexity. Collection and harmonization of disparate clinical, molecular, patient research and biospecimen data is key to effective research, but presents challenges in terms of access, organization, security and compliance. In addition, creating a holistic view of that data is vital so that multiple stakeholders and domain experts are able to collaboratively explore the data and generate scientific insights.



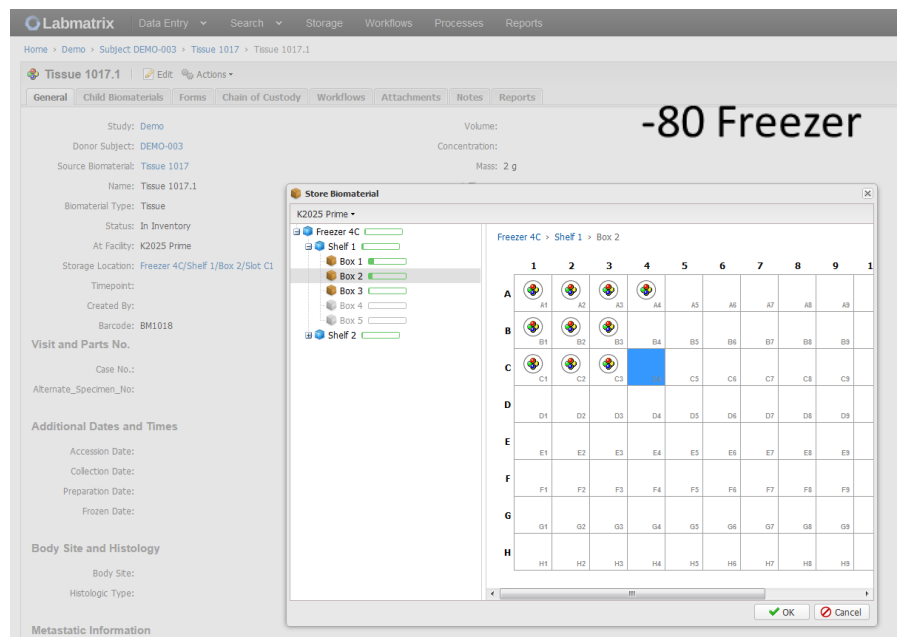
Designed to cope with today's research and healthcare data sets

Developed to address just these challenges, Labmatrix™ is a web-accessible clinical & translational research management software system used for information management and integration of patient, clinical, specimen, genetic and molecular assay data. With the ability to integrate these data sets in a tightly linked, highly annotated manner, Labmatrix has the kind of flexibility, security and data access control today's scientists require for information management of biomarker discovery, next generation bio-banking, pre-clinical and clinical studies and translational research efforts.

Biospecimen management simplified

Sophisticated tracking of all biospecimens stored in researcher freezers, down to the box location, comes standard. Configurations are available for all standard storage systems, but custom configurations can also be developed. ICB translational informatics personnel will go over your existing layouts and facilitate the process of moving data from spreadsheets (or paper) and into the Labmatrix database.

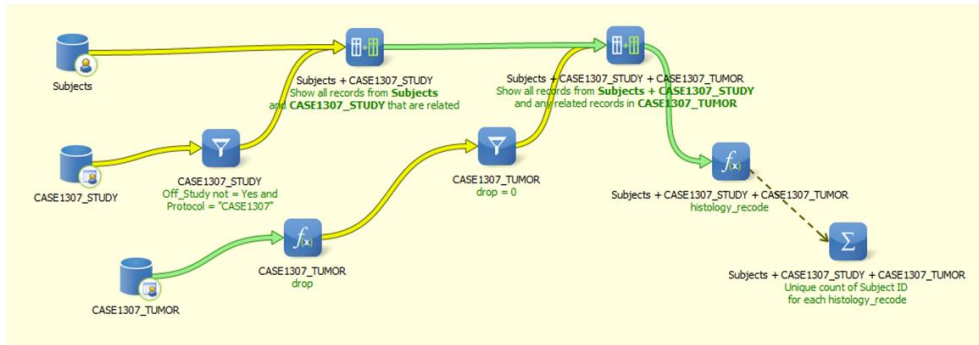
Reports showing all biospecimens in inventory and all shared with other researchers ensure that sample chain-of-custody is preserved.



Qigram Query Tool – The power of the platform

Labmatrix provides a powerful drag-and-drop query interface allowing complex analyses to be performed on data within studies and across related studies (e.g. registries and ancillary). ICB personnel will work with your lab teams to provide initial Qigram training and follow-up training as needed. One trained, lab personnel will be able to apply these skills to future studies. The examples below are taken from an actual research study in Labmatrix.

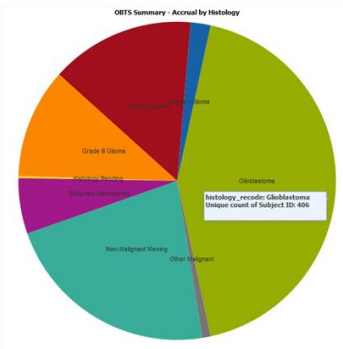
Accrual Subject # by Histology Type



Output as Text

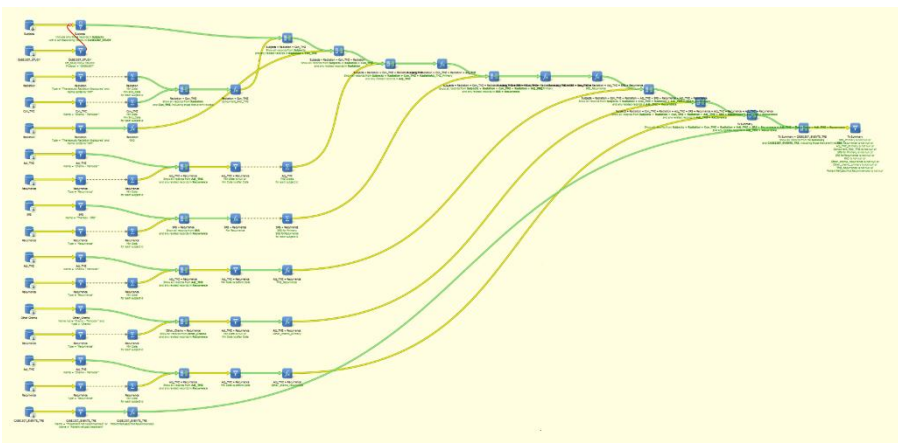
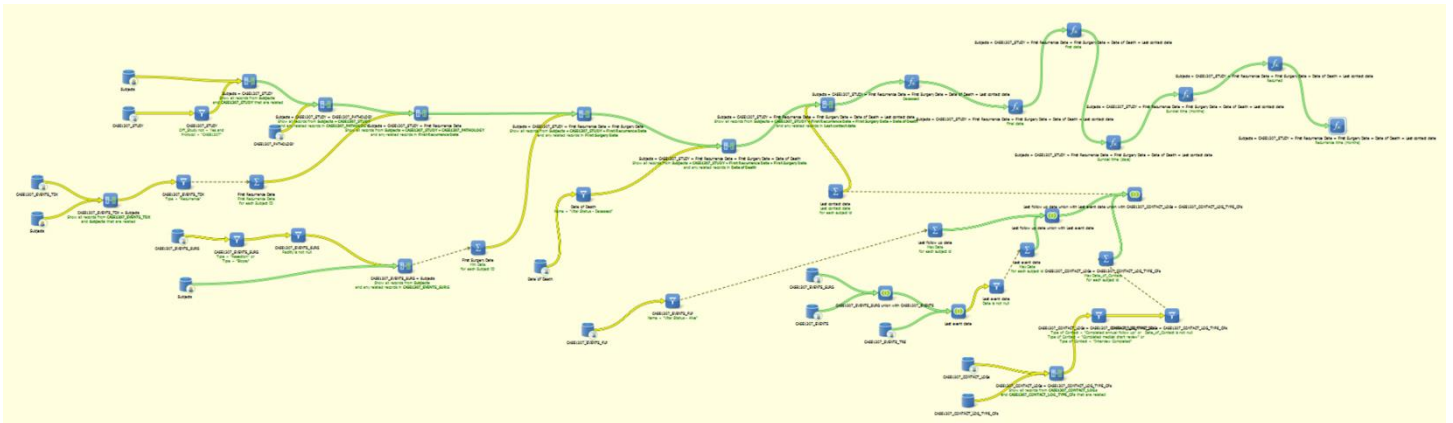
histology_recode	Unique count of Subject ID
Glioblastoma	406
Grade I Glioma	19
Grade II Glioma	138
Grade III Glioma	105
Histology Pending	2
Malignant Meningioma	53
Non-Malignant Meningioma	208
Other Malignant	8
Other Non-Malignant	28
Plutary Adenoma	89
Vestibular Schwannoma	60

Output Graphically



Subject's Survival Time and Recurrence Time Calculations

Combining multiple dates, assigning a priority based on data availability/completeness, and calculating survival/follow-up times



Tissue Inventory Treatment

Combining data on multiple treatment modalities which are further combined to generate an overall summary of treatments received

To learn more about Labmatrix and how the ICB can assist with your research studies, please contact: icb_info@case.edu

Services offered: Evaluation of existing data, consultation on technology platforms, solution development, end-user training.