caTissue Core



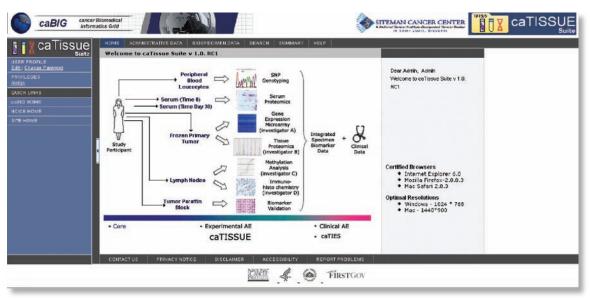
Biobanking management system

caTissue Core is a tissue bank repository tool for biospecimen inventory, tracking, and basic annotation. caTissue permits users to track the collection, storage, quality assurance, and distribution of specimens as well as the derivation and aliquotting of new specimens from existing ones (e.g., DNA analysis).

caTissue Core also allows users to find and request specimens that may then be used in molecular, correlative studies. It provides browser-based and programmatic access to biospecimen data and manages tissue, fluid, cell, and molecular biospecimen information.

Features:

- Web-based application for entering or searching for biospecimens
- Tracking of multiple specimens from the same participant
- Tracking of refined materials (RNA, DNA, Protein) that are used for molecular analysis
- Role-based permission scheme for repository personnel and researchers
- Tracking of quality assurance, distribution, derivation, and aliquotting of biospecimens
- Flexible storage container structure



caTissue Core interface

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Ca	iteg	ories	OŤ	Use:

& Statistical Tools

Biospecimens	☐ Data Sharing	Imaging	Proteomics
Clinical Trials	Genome Annotation	Microarrays	☐ Translational Research
Management Data Analysis	Infrastructure	Pathways	Vocabularies





Architecture Overview

- Application type: Web application—remote application with data uploads/ downloads through Web interface
- **System requirements:** Full installation requires installation of JBoss, version 4.0.4; MySQL 4.1; Oracle version 9i or 10g; ANT (Apache); JDK, version 1.5 or higher; mail server access

Installation and Administration:

- **Skill sets needed:** Linux/Windows server administrator, MySQL/Oracle database administrator, Software engineer with experience in Java desirable
- Infrastructure needed: Windows/RedHat Enterprise Linux-based server (32- or 64-bit)
- Long-term administration needs: Ongoing system and database administration needs such as disk space and database tablespace (if Oracle) management as well as database backup

Resources		
Tool Overview Page	https://cabig.nci.nih.gov/tools/catissuecore	
Primary Workspace	Tissue Banks and Pathology Tools (TBPT)	
TBPT Workspace Lead	Juergen Klenk: <u>klenk_juergen@bah.com</u>	
TBPT LISTSERV	https://list.nih.gov/archives/cabig_tbpt-l.html	
caBIG™ Tool Inventory	https://cabig.nci.nih.gov/inventory	
NCI Center for Bioinformatics Applications Support	ncicb@pop.nci.nih.gov	

Key Contributors:

- Alvin J. Siteman Cancer Center at Washington University School of Medicine in St. Louis
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- Thomas Jefferson University
- University of Pennsylvania
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Other Life Sciences Distribution Components:

- caArray
- Cancer Genome-Wide Association Studies (caGWAS)
- Clinical Trials Object Data System (CTODS)
- geWorkbench
- National Cancer Imaging Archive (NCIA)



