

# caTissue Core 1.2 Demonstration

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Director of Bioinformatics
The Robert H. Lurie Comprehensive Cancer Center
Northwestern University



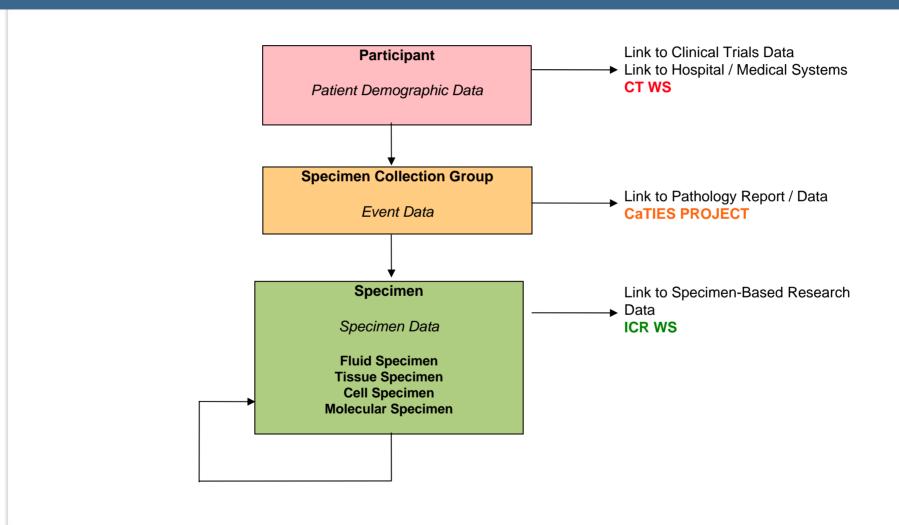
### **Outline**



- "Object Model"
- Login
- User administration
- Biospecimen workflows
  - Add a Participant
  - Add a Collection Protocol
  - Add a Biospecimen
  - Collection Events
  - Searching
  - Reports

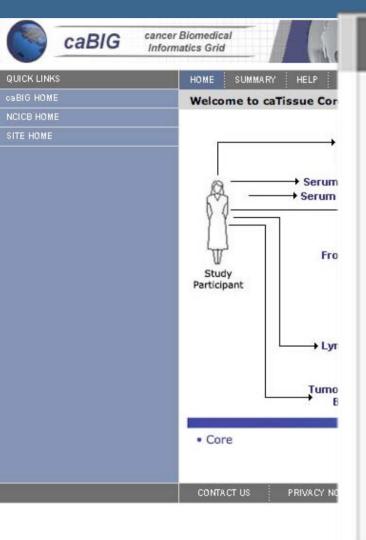












- Email Address is required
- Password is required

Email address wakibbe@northwe

Password \*\*\*\*\*\*\*\*\*

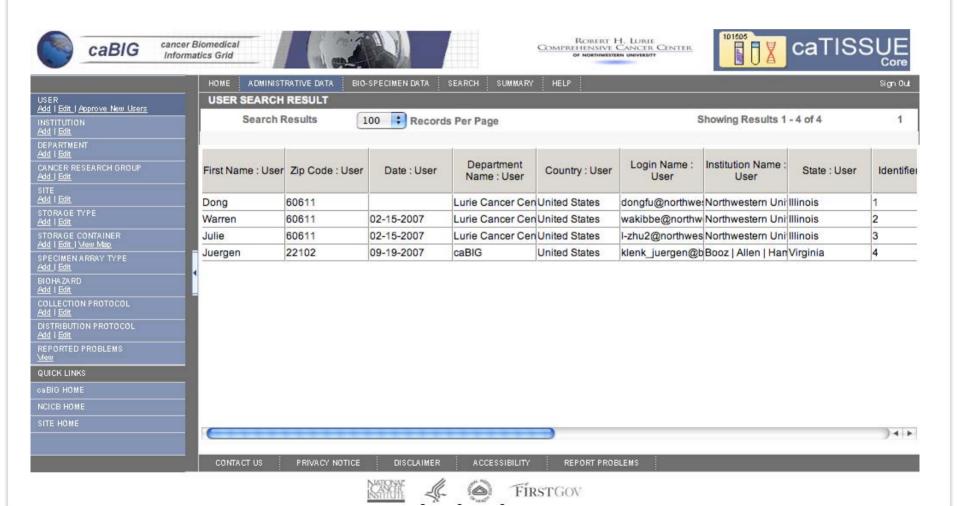
Login

Sign Up

Forgot your password?

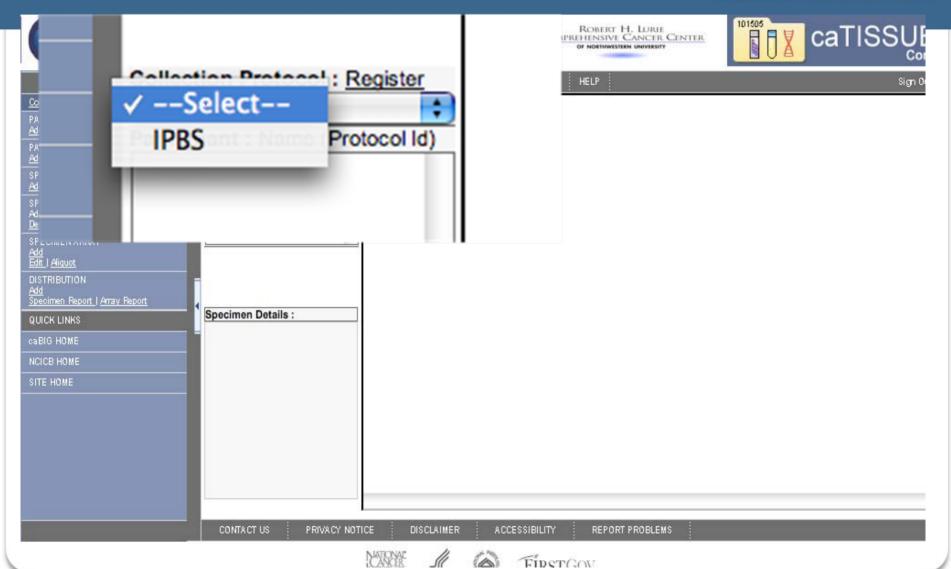
#### Administrative tab - Users

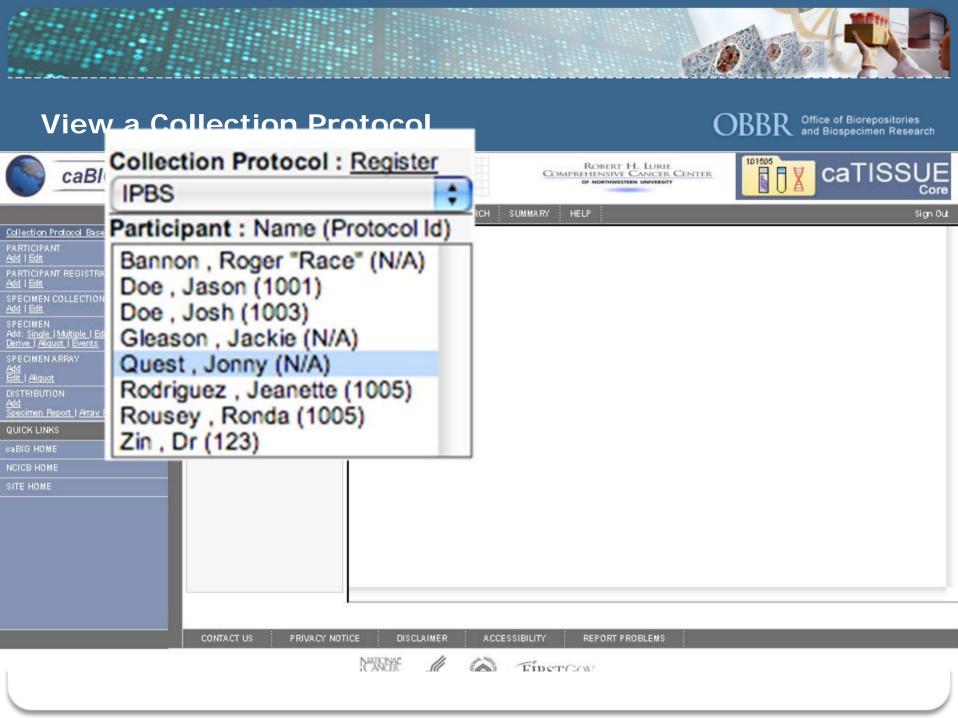




# Biospecimen default view







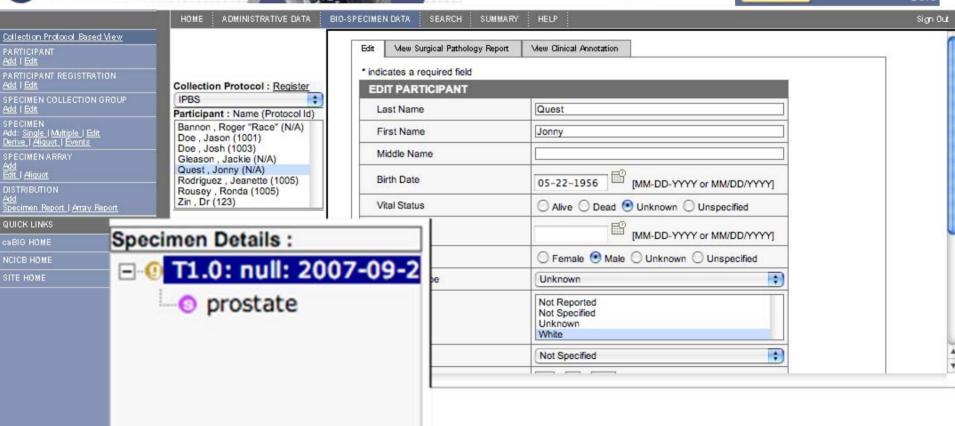


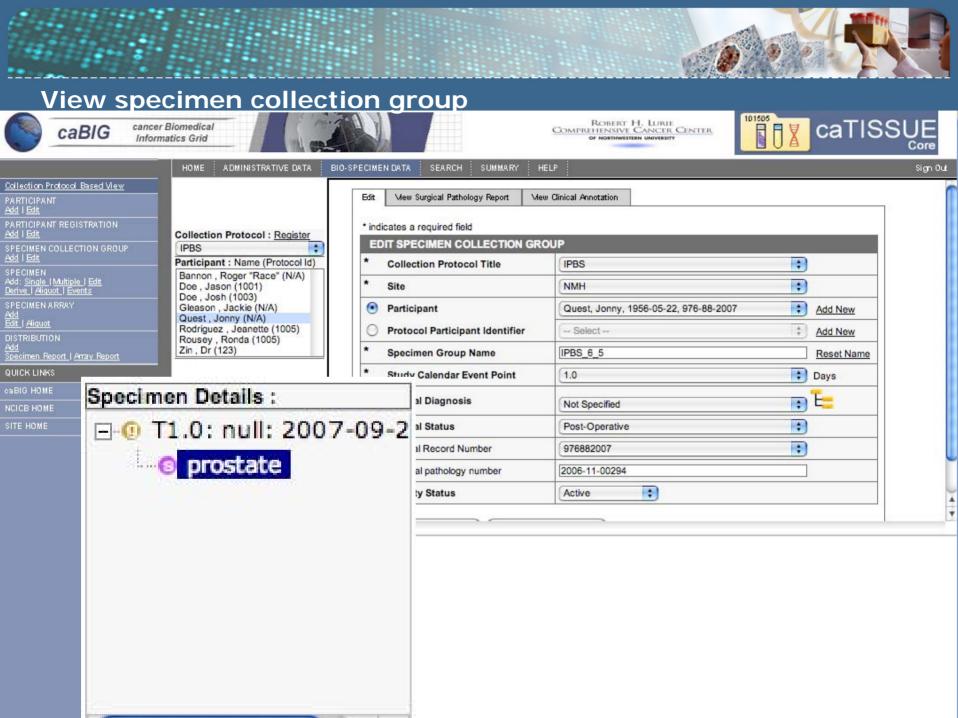


caBIG

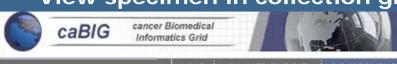
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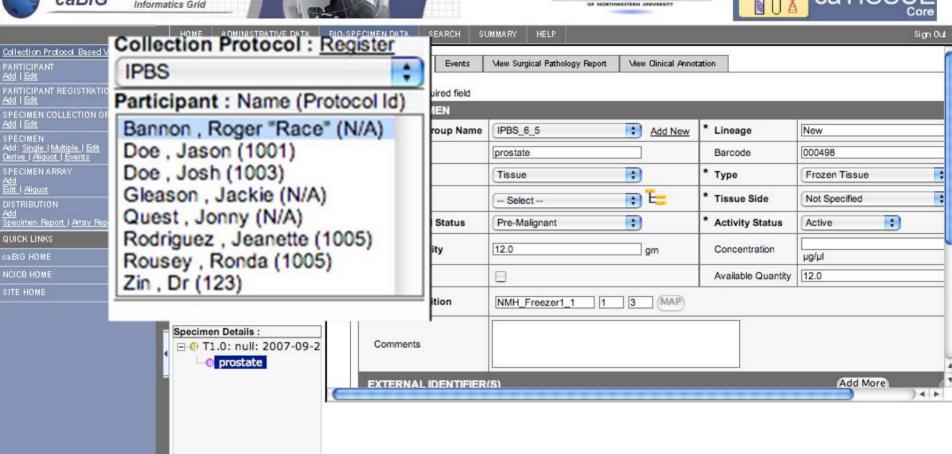






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OF HORTHWESTERN UNIVERSITY





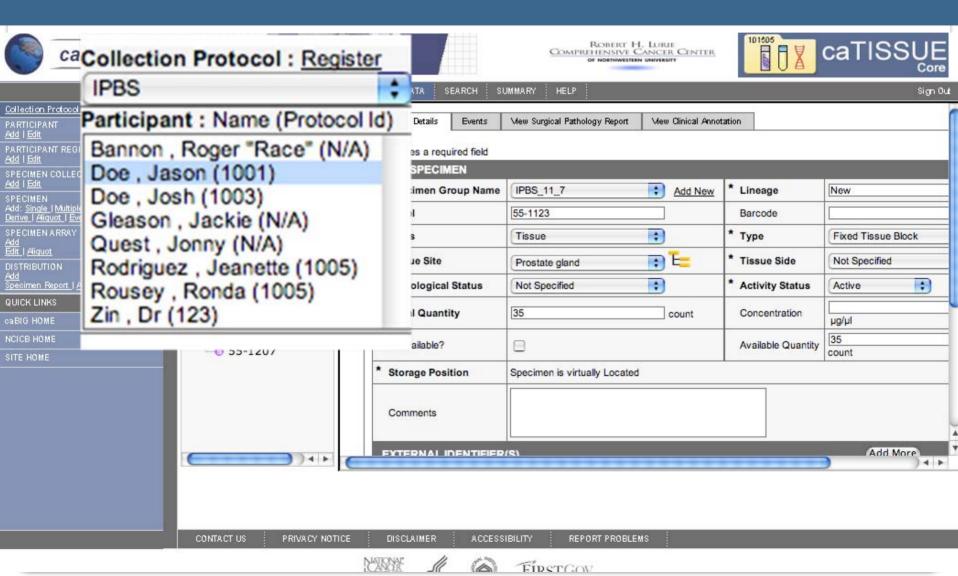
# View another participant



n Protocol Based Viev			
PANT <u>t</u> PANT REGISTRATION.	Participant : Name (Protocol Id)	Mew Surgical Pathology Report	Mew Clinical Annotation
t En collection gro	Specimen Details :	RTICIPANT	
<u>t</u>		me	Bannon
EN gle (Multiple (Edit Aliquot (Events	⊡ 0 T1.0: null: 2007-09-	∠ me	Roger "Race"
EN ARRAY	<b>55-1123</b>	lame	T
quot UTION	55-1207	te	09-20-1935 MM-DD-YYYY or MM/DD/YYYY]
n Report   Array Repor		tus	Alive    Dead    Unknown    Unspecified
INKS		ate	[MM-DD-YYYY or MM/DD/YYYY]
IOME			○ Female ● Male ○ Unknown ○ Unspecified
ME		notype	Unknown
			Black or African American Native Hawaiian or Other Pacific Islander Not Reported Not Specified
		r c	Not Specified •

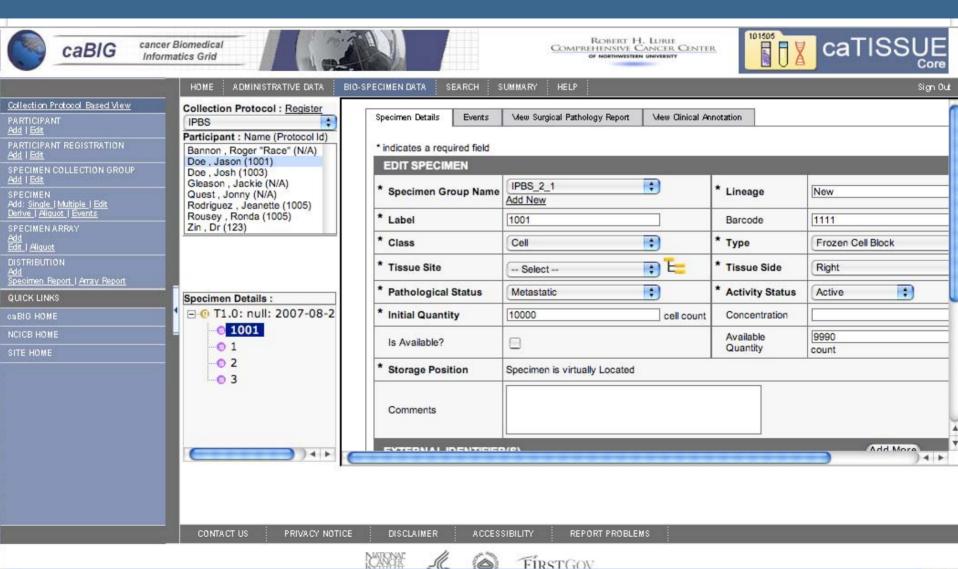


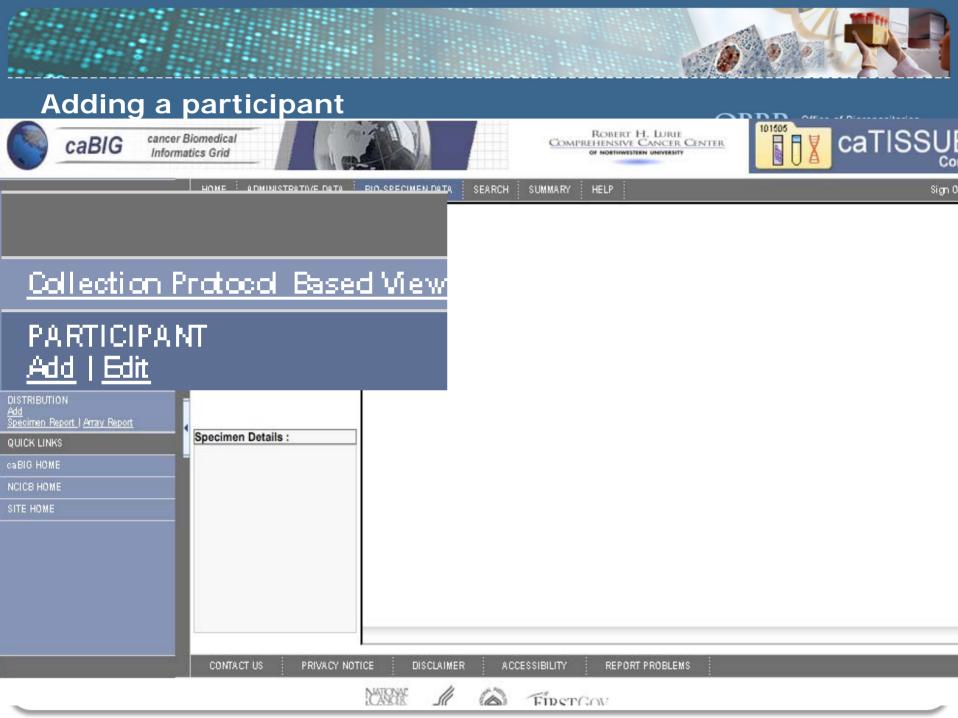




### **Another participant**







# Add a Participant





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BIO-SPECIMEN DATA SEARCH





Sign Out

Callection Protocol Based View	* indicates a required field			
PARTICIPANT <u>Add</u> I <u>Edit</u>	ADD PARTICIPANT			
PARTICIPANT REGISTRATION Add   Edit	Last Name			
SPECIMEN COLLECTION GROUP Add   Edit	First Name			
SPECIMEN Add: Single   Multiple   Edit	Middle Name			
Derive   Aliquot   Events SPECIMEN ARRAY	Birth Date	[MM-DD-YYYY or MM/DD/YYYY]		
Add Edit   Aliquot	Vital Status	O Alive O Dead  O Unknown O Unspecified		
DISTRIBUTION <u>Add</u> <u>Specimen Report   Array Report</u>	Death Date	[MM-DD-YYYY or MM/DD/YYY		
QUICK LINKS	Gender	○ Female ○ Male ○ Unknown ● Unspecified		
caBIG HOME	Sex Genotype	Unknown ‡		
NCICE HOME	Race	Native Hawaiian or Other Pacific Islander Not Reported Not Specified Unknown		
	Ethnicity	Unknown :		
	Social Security Number (SSN)			
	MEDICAL IDENTIFIER(S)	Add More		
	# Source	Medical Record Number Delete?		

ADMINISTRATIVE DATA

CONTACT US

-- Select --

PRIVACY NOTICE

\*

Submit

DISCLAIMER

Register to Protocol

annessiell r

REPORT PROBLEMS







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BIO-SPECIMEN DATA

SEARCH

SUMMARY

ADMINISTRATIVE DATA





Sign Out

Collection Protocol Based View	
PARTICIPANT <u>Add</u> I <u>Edit</u>	
PARTICIPANT REGISTRATION Add   Edit	
SPECIMEN COLLECTION GROUP Add   Edit	
SPECIMEN Add: <u>Single   Multiple   Edit</u> <u>Derive   Aliquot   Events</u>	
SPECIMEN ARRAY <u>Add</u> <u>Edit   Aliquot</u>	
DISTRIBUTION <u>Add</u> Specimen Report   <u>Array Report</u>	
QUICK LINKS	1
caBIG HOME	
NCICB HOME	
SITE HOME	

DD PARTICIPANT					
Last Name	Zin				
First Name	Dr				
Middle Name					
Birth Date	05/05/15 [MM-DD-YYY	Y or MM/DD/YYYY]			
Vital Status	○ Alive ○ Dead ● Unknown ○	Unspecified			
Death Date	[MM-DD-YYY	Y or MM/DD/YYYY]			
Gender	○ Female				
Sex Genotype	Unknown				
Race	American Indian or Alaska Native Asian Black or African American Native Hawaiian or Other Pacific Isla	ander			
Ethnicity	Not Reported				
Social Security Number (SSN)					
MEDICAL IDENTIFIER(S)	Add	More			
Source	Medical Record Number	Delete?			

Submit

Register to Protocol

# **Adding MRN to participant**





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Sign Out

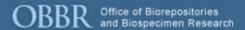
PARTICIPANT <u>Add I Edit</u>	ADD PARTICIPANT  Last Name					
	Last Name					
PARTICIPANT REGISTRATION <u>Add</u>   <u>Edit</u>	Lastivanio	Zin				
SPECIMEN COLLECTION GROUP Add   Edit	First Name	Dr				
SPECIMEN Add: Single   Multiple   Edit	Middle Name					
Derive   Aliquot   Events SPECIMEN ARRAY	Birth Date	05/05/15 [MM-DD-YYYY or MM/DD/YYY	7]			
Add Edit   Aiquot	Vital Status	○ Alive ○ Dead ● Unknown ○ Unspecified				
DISTRIBUTION Add Specimen Report   Array Report	Death Date	[MM-DD-YYYY or MM/DD/YY				
QUICK LINKS	Gender	○ Female ● Male ○ Unknown ○ Unspecified				
caBIG HOME	Sex Genotype	Unknown	-			
SITE HOME	Race American Indian or Alaska Native Asian Black or African American Native Hawaiian or Other Pacific Islando					
	Ethnicity	Not Reported				
#	Select Children's Memorial Ho ENH NMFF V NMH	spital Add More Record Number Delete?				

Register to Protocol

Submit

Rehab Institute

# Submit and register





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	HOME ADMINISTRATIVE DATA BIO	D-SPECIMEN DATA SEARCH SUMMARY	HELP	
ection Protocol Based View	* indicates a required field		2.0	
TICIPANT I <u>Edit</u>	ADD PARTICIPANT			
RTICIPANT REGISTRATION	Last Name	Zin		
CIMEN COLLECTION GROUP	First Name	Dr		
OMEN Single   Multiple   Edit e   Aliquot   Events	Middle Name			
CIMEN ARRAY	Birth Date	05/05/1915 EMM-DD-YYYY	or MM/DD/YYYY]	
<u>Aliquot</u>	Vital Status	○ Alive ○ Dead ● Unknown ○	Unspecified	
TRIBUTION cimen Report   Array Report	Death Date	[MM-DD-YYYY	or MM/DD/YYYY]	
CK LINKS	Gender	○ Female	Unspecified	
IG HOME	Sex Genotype	Unknown	•	
E HOME	Race	American Indian or Alaska Native Asian Black or African American Native Hawaiian or Other Pacific Isla	nder	
	Ethnicity	Not Reported	•	
	Social Security Number (SSN)			
	MEDICAL IDENTIFIER(S)	Add N	More Called	
	# Source	Medical Record Number	Delete?	
	1. NMH	0128-5551212		
	Sub	mit Register to Protocol  Submit and Regi	ster to protocol	





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Sign Out









SITE HOME

BIO-SPECIMEN DATA

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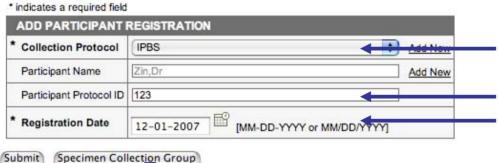
HELP



Sign Out

Participant successfully created for Zin,Dr.

ADMINISTRATIVE DATA



SEARCH

SUMMARY



# **Add Specimen Collection Group**

ADMINISTRATIVE DATA

\* indicates a required field



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HOME



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HELP



Sign Out

Collection Protocol Based View

PARTICIPANT
Add | Edit

PARTICIPANT REGISTRATION
Add | Edit

SPECIMEN COLLECTION GROUP
Add | Edit

SPECIMEN | Add: Single | Multiple | Edit
Derive | Aliquot | Events

SPECIMEN ARRAY
Add
Edit | Aliquot

DISTRIBUTION
Add
Specimen Report | Array Report

QUICK LINKS

CaBIG HOME

NCICB HOME

· Collection Protocol Registration successfully created for IPBS Zin, Dr.

SEARCH

SUMMARY

*	Collection Protocol Title	IPBS	Add New
*	Site	Select	Add New
•	Participant	Zin, Dr, 1915-05-05	Add New
0	Protocol Participant Identifier	Select	‡ Add New
*	Specimen Group Name	IPBS_12_9 Reset Name	
*	Study Calendar Event Point	Select	Days
*	Clinical Diagnosis	Not Specified	<b>₽ E</b>
*	Clinical Status	Not Specified	•
	Medical Record Number	Select	•
	Surgical pathology number		

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Submit

PRIVACY NOTICE

Add Specimen

DISCLAIMER

Add Multiple Specimens

ACCESSIBILIT

REPORT PROBLEMS



ADMINISTRATIVE DATA





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HELP

SUMMARY



Sign Out

Collection Protocol Based View

PARTICIPANT
Add | Edit

PARTICIPANT REGISTRATION
Add | Edit

SPECIMEN COLLECTION GROUP
Add | Edit

SPECIMEN
Add: Single | Multiple | Edit
Derive | Aliquot | Events

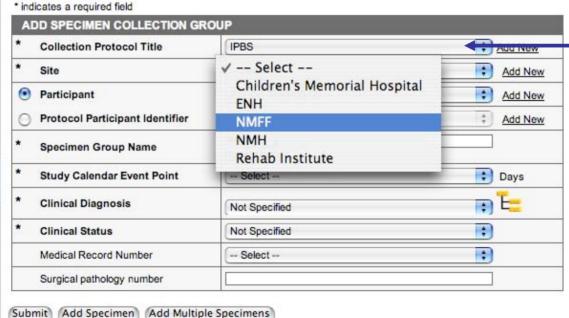
SPECIMEN ARRAY
Add
Edit | Aliquot
DISTRIBUTION
Add
Specimen Report | Array Report

QUICK LINKS

CaBIG HOME

· Collection Protocol Registration successfully created for IPBS Zin, Dr.

BIO-SPECIMEN DATA



# Collection Site







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Sign Out

ollection Protocol Based View	1000000 10 W 100000		
ARTICIPANT dd I Edit	indicates a required field		
ARTICIPANT REGISTRATION	ADD SPECIMEN COLLECTION GR	OUP	
ld   Edit	* Collection Protocol Title	IPBS	Add New
ECIMEN COLLECTION GROUP	* Site	NMH	Add New
ECIMEN d: <u>Single   Multiple   Edit</u> rive   Aliquot   Events	Participant	Zin, Dr, 1915-05-05	Add New
PECIMEN ARRAY	Protocol Participant Identifier	Select	‡ Add New
Id It   <u>Aliquot</u> STRIBUTION	* Specimen Group Name	IPRS 12 9 Select	
id ecimen Report   Array Report	* Study Calendar Event Point	✓ 1.0	Days
JICK LINKS	* Clinical Diagnosis		_ T_
BIG HOME	* Clinical Diagnosis	Not Specified	• =
ICB HOME	* Clinical Status	Post-Operative	•
те номе	Medical Record Number	- Select	•
	Surgical pathology number		į.







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BIO-SPECIMEN DATA

Add Multiple Specimens

ADMINISTRATIVE DATA

Add Specimen

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Sign Out

Collection Protocol Based View
PARTICIPANT
Add | Edit
PARTICIPANT REGISTRATION
Add | Edit
SPECIMEN COLLECTION GROUP
Add | Edit
SPECIMEN | Add | Edit
SPECIMEN | Add | Edit
SPECIMEN | Add | Edit
SPECIMEN Add | Edit
Derive | Aliquot | Events
SPECIMEN ARRAY
Add | Edit | Aliquot
DISTRIBUTION
Add | Specimen Report | Array Report
QUICK LINKS
CABIG HOME
NCICB HOME

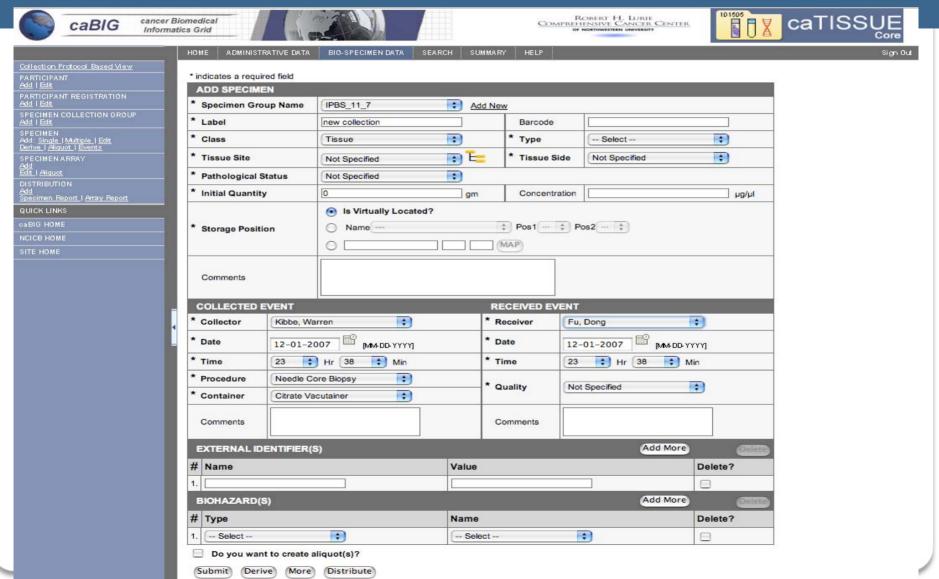
A	DD SPECIMEN COLLECTION GR	OUR	
and the same	DD SPECIMEN COLLECTION GR	OUF	
*	Collection Protocol Title	IPBS	Add New
*	Site	NMH	Add New
•	Participant	Zin, Dr, 1915-05-05	Add New
0	Protocol Participant Identifier	- Select	\$ Add New
*	Specimen Group Name	IPBS_12_9 Reset Name	
*	Study Calendar Event Point	1.0	Days
*	Clinical Diagnosis	Serous cystadenocarcinoma, NOS	• =
*	Clinical Status	Post-Operative	•
	Medical Record Number	0128-5551212	•
	Surgical pathology number	this is a test	

SEARCH

SUMMARY







# Specimen added



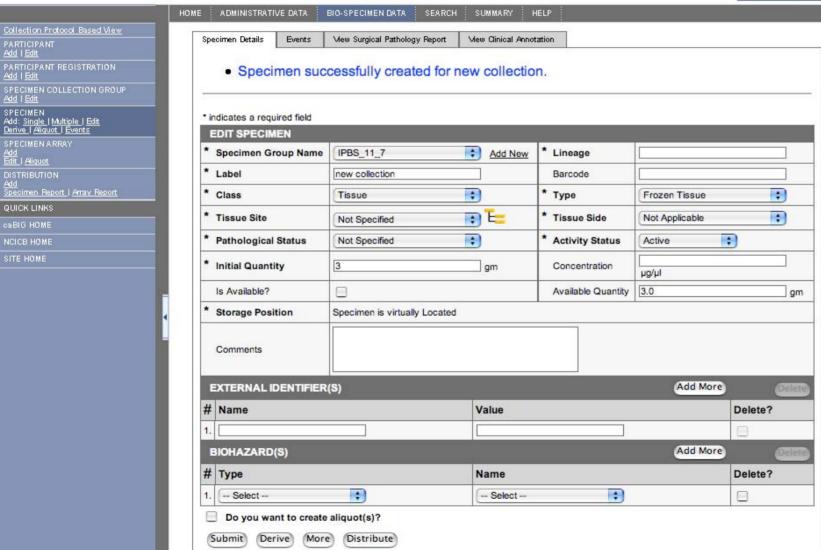
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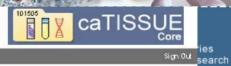
Sign Out



# Add a specimen to an existing collection event



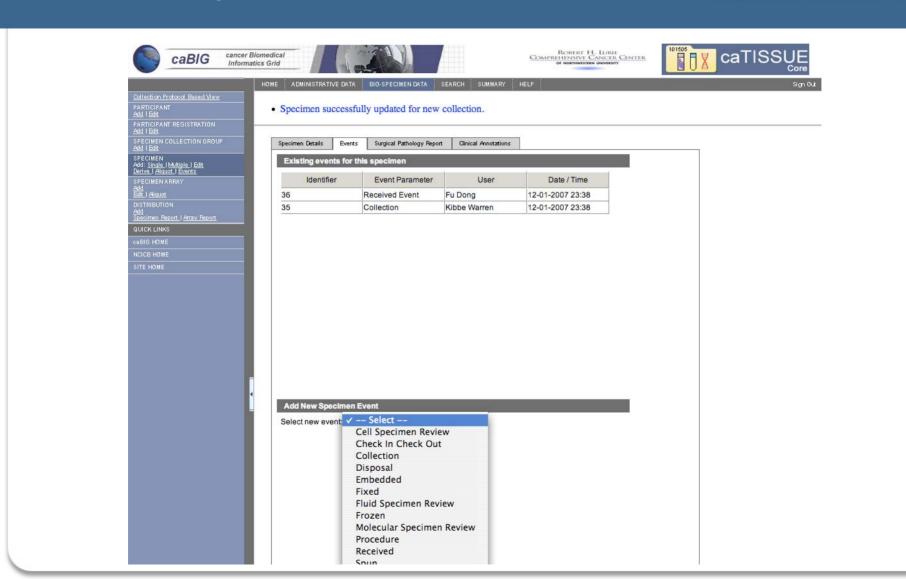
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	HOME ADMINISTR	WIIVE DATA	BIO-SPECIMEN DATA	SEARCH SL	JMMARY HELP		
Collection Protocol Based View		72.77					
PARTICIPANT Add   Edit	<ul> <li>indicates a requir</li> <li>ADD SPECIME</li> </ul>						
PARTICIPANT REGISTRATION Add   Edit	* Specimen Gro	1000	[IPBS_11_7	÷ A	dd New		
SPECIMEN COLLECTION GROUP <u>Add   Edit</u>	* Label		new collection		Barcode		
SPECIMEN Add: <u>Single   Multiple   Edit</u> <u>Derive   Aliquot   Events</u>	* Class		Tissue	+)	* Type	Frozen Tissue	• •
	* Tissue Site		Not Specified	₽ E	* Tissue S	Not Applicable	:
SPECIMEN ARRAY Add Edit I Alquot	* Pathological S	tatus	Not Specified	*)			
DISTRIBUTION  Add Specimen Report   Array Report	* Initial Quantity	200000	3	gm	Concent	ration	рд/рі
QUICK LINKS 03BIG HOME NCICB HOME SITE HOME	* Storage Position	on	Is Virtually Loca     Name	ted?	* Pos1	† Pos2 †	
	Comments						
	COLLECTED E	VENT			RECEIVED E	VENT	
4	* Collector	Kibbe, Wa	rren 🛟		* Receiver	Fu, Dong	*
L.	* Date	12-01-20	007 E MM-DD-YYYY		* Date	12-01-2007	[MM+DD-YYYY]
	* Time	23 🛊	Hr 38 📫 Min		* Time	23 🛟 Hr 38	Min
	* Procedure	Needle Co	ore Biopsy		* Quality	Acceptable	•
	* Container	Citrate Va	cutainer			Cassina	
	Comments				Comments		
	EXTERNAL ID	ENTIFIER(S	5)	-511		A	dd More Dalate
	# Name			Value	2		Delete?
	1.						8
	BIOHAZARD(S	3)				A	dd More
	# Type			Name			Delete?
	1 Select		•	Sel	ect	•	
	Do you wan						







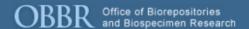


# **Entering the event information**



Add New Spe	ecimen Event	
Select new ev	ent: Frozen 💠	
* indicates a re	equired field	
NEW FROZ	EN EVENT PARAMETERS	
* User	Fu, Dong	
* Date	12-01-2007 [MM-DD-YYYY or MM/DD/YYYY]	
* Time	23	
* Method	Not Specified ▼	
Comments		
	Submit	

# Viewing specimen events





Add | Edit

SPECIMEN

SITE HOME

SPECIMEN ARRAY Add Edit | Aliquot

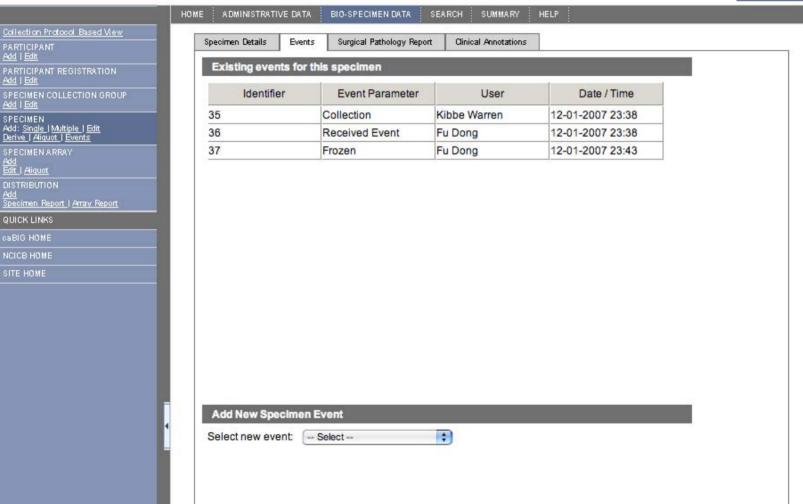
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### View the collection groups for a protocol





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	HOME ADMINIST	TRATIVE DATA BIO-	-SPECIMEN DATA : S	SEARCH SUMMARY	HELP				Sign Out	
Callection Protocol Based View		SPECIMEN COLLECTION GROUP SEARCH RESULT								
PARTICIPANT Add   Edit	- Property of the Party of the							- 8 of 8	1	
PARTICIPANT REGISTRATION Add   Edit										
SPECIMEN COLLECTION GROUP <u>Add   Edit</u> SPECIMEN Add: <u>Single   Multiple   Edit</u> <u>Derive   Aliquot   Events</u>	Name : Specimen Collection Group	Participant Last Name : Specimen Collection Group	Study Calendar Event Point : Specimen Collection Group	Medical Record Number : Specimen Collection Group	Clinical Status : Specimen Collection Group		Clinical Diagnosis: Specimen Collection Group	Protocol Participant Identifier: Specimen	Identi Speci Collection	
SPECIMEN ARRAY Add	IPBS_2_1	Doe	1.0	2	Post-Operative	Collection Group S09-21-2006	Mixed tumor malig	Collection Group	4	
Add Edit   Aliquot				2					0	
DISTRIBUTION <u>Add</u>	IPBS_3_2	Doe	1.0	3	Post-Operative	S06-07-2006	Malignant tumor s		2	
Specimen Report   Array Report	IPBS_3_3	Doe	1.0	3	Post-Operative	S06-07-2006	Malignant tumor s	1003	3	
QUICK LINKS	1PBS_4_4	Gleason	1.0	4	Post-Operative	2005-07-24335	Not Specified		4	
caBIG HOME	IPBS_6_5	Quest	1.0	6	Post-Operative	2006-11-00294	Not Specified		5	
NCICB HOME	IPBS_5_6	Rodriguez	1.0		Post-Operative		Melanotic neurofi	1005	6	
SITE HOME	IPBS_11_7	Bannon	1.0	11	Post-Operative	2006-0500123	Not Specified		7	
	IPBS_9_8	Rousey	1.0		New Diagnosis		Olfactory neuroge	1005	8	

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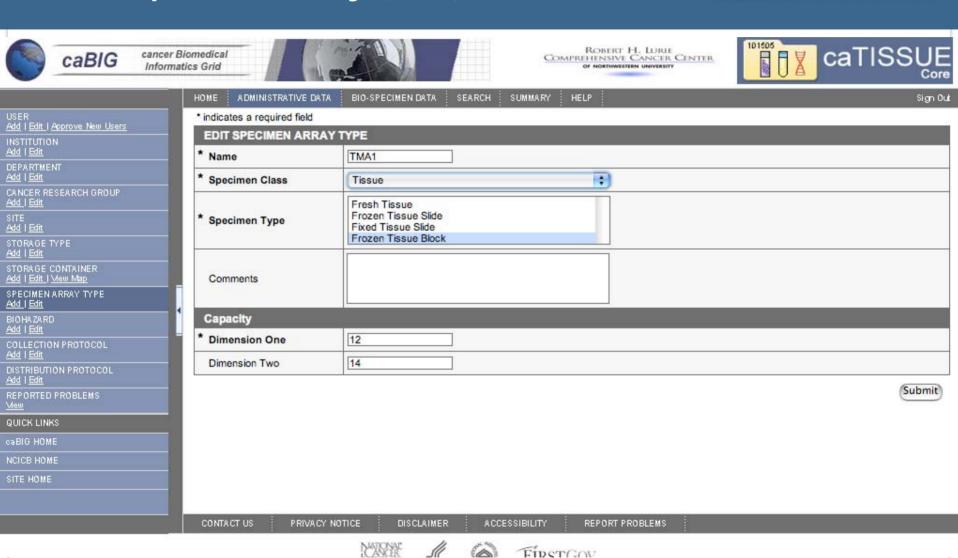






### Add a specimen array (TMA)





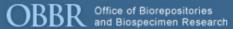


### Conclusion



- caTissue can support many typical workflows 'out of the box'
- caTissue supports good security practices, including CFR Title 21
   Part 11 compliance
- Barcode-based tracking is available, but still a second class citizen
- All data elements are mapped to CDEs
- Interoperability is a huge plus

### Add a Specimen Collection Group





PARTICIPANT Add | Edit

Add | Edit

caBIG

Collection Protocol Based View

SPECIMEN COLLECTION GROUP Add | Edit

SPECIMEN Add: <u>Single | Multiple | Edit</u> <u>Derive | Aliquot | Events</u>

DISTRIBUTION <u>Add</u> <u>Specimen Report</u> J <u>Array Report</u>

SPECIMEN ARRAY Add Edit | Aliquot

SITE HOME

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Sign Out

ADD SPECIMEN COLLECTION GR	OUP	
* Collection Protocol Title	Select	Add New
* Site	Select	Add New
Participant	Select	Add New
Protocol Participant Identifier	Select	Add New
* Specimen Group Name	Reset Name	
* Study Calendar Event Point	Select	† Days
* Clinical Diagnosis	Not Specified	<b>₽ E</b>
* Clinical Status	Not Specified	•
Medical Record Number	Select	÷
Surgical pathology number		

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DISCLAIMER

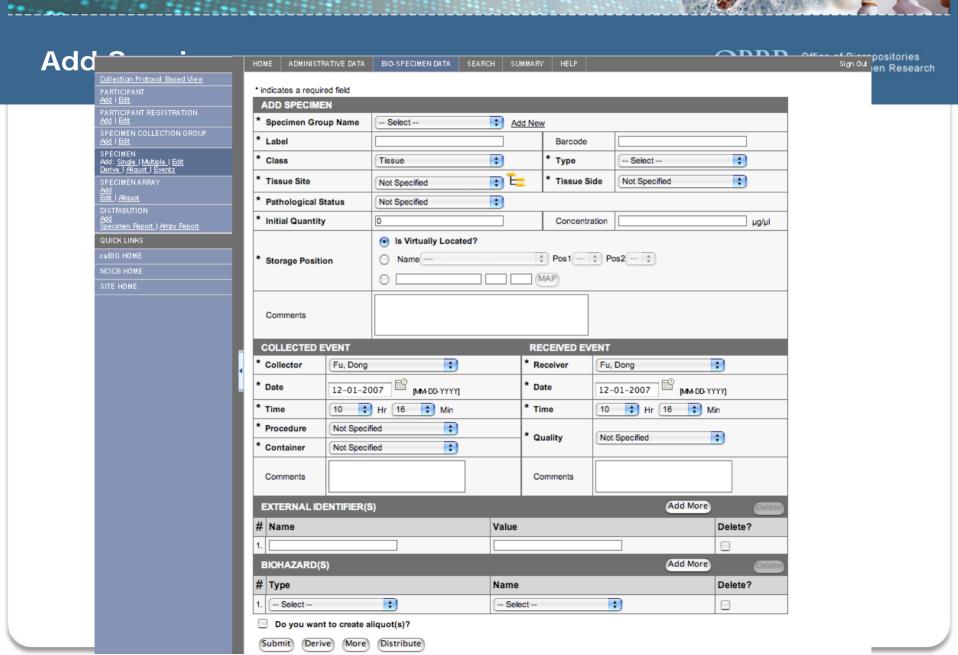
ACCESSIBILITY

REPORT PROBLEMS



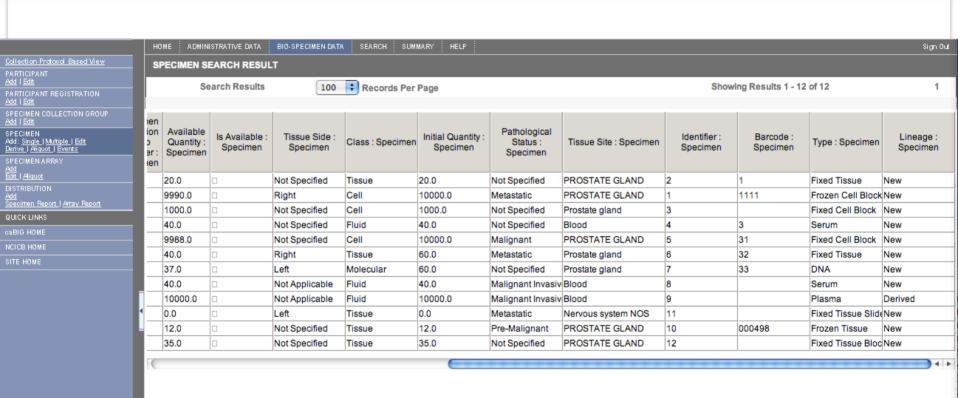








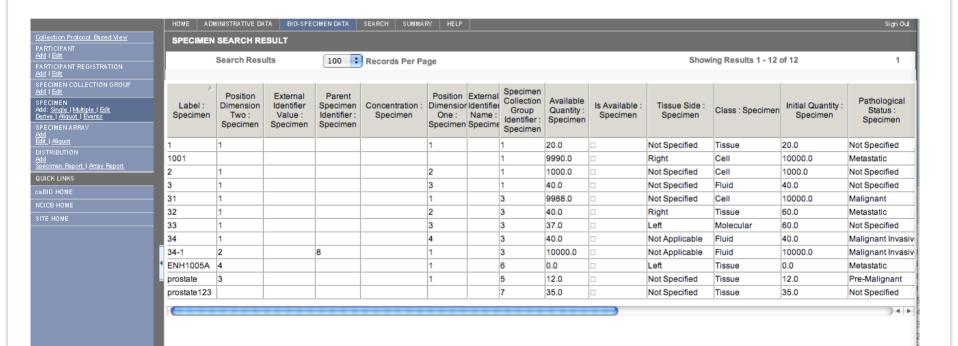






### **Specimen Search Result**

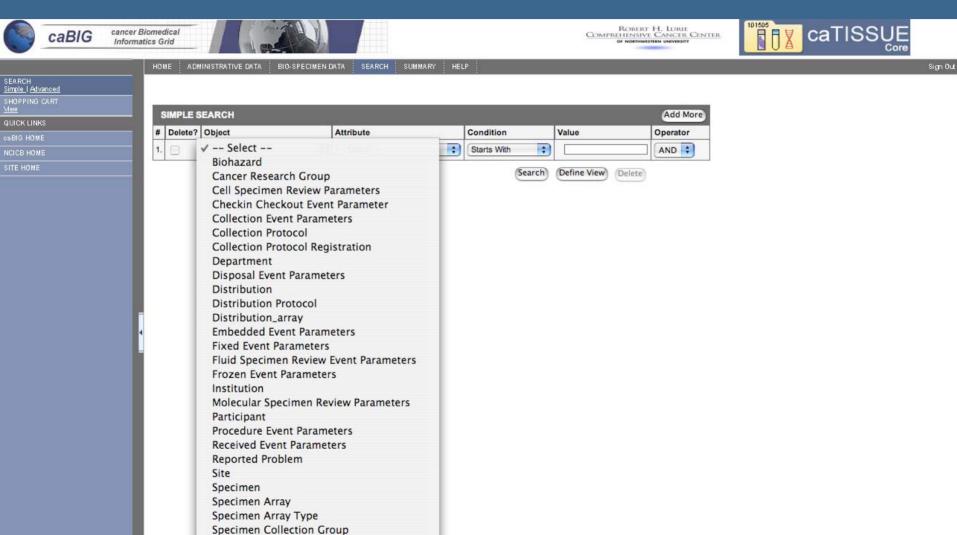






Spun Event Parameters Storage Container Storage Type







# **Advanced Search options**



HOME ADMINISTRATIVE DATA BIO-SPECIMEN DATA SEARCH SUMMARY HELP			
SEARCH <u>Simple   Advanced</u>	ADVANCE SEARCH		
SHOPPING CART Mew QUICK LINKS caBIG HOME NCICB HOME	Select Node To Start	Participant     Collection Protocol     Specimen Collection Group     Specimen	
SITE HOME		Submit	

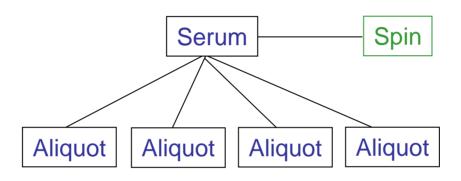


# Instance diagram - Serum aliquots



Specimen

**Event** 



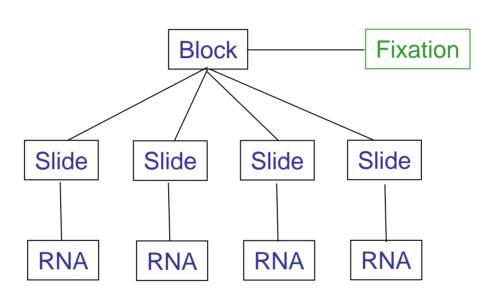


# Instance diagram - Laser capture microdissection



Specimen

**Event** 





# Instance diagram - events

OBBR Office of Biorepositories and Biospecimen Research



**Event** 

