

# SEA-XNAT Boarding Document – answer key

1. Anticipated data collection start and end dates. **Start August 2012, 5 year grant**

2. How many subjects will participate in the study? **Around 200**

3. Is this a multi-site study?  Yes  No

If so, please list the sites that will be collecting data.

Site Name	PI
University at Large	Gordon Investigator
<b>Oceanic University at Atlantis (OUA)</b>	<b>Lucille Ostero</b>
<b>University College Valhalla (UCV)</b>	<b>Robert Loblaw</b>
<b>Gotham State University (GSU)</b>	<b>Barry Zuckerkorn</b>

4. Please list XNAT project information. (If more lines needed, please continue on back.)

Project ID (<=14 chars)	Running title (<=24 chars)/ Title	Description	Alias	Keywords	Archive setting (circle one)
TEST_UL	UL TEST Study / This is a study of TEST here at the University at Large.	A longitudinal study of TEST here at University at Large to test things.	NP101	TEST longitudinal Large	<input checked="" type="radio"/> prearchive archive no overwrite archive overwrite
BOGUS_OUA	OUA BOGUS Study/BOGUS Study at Oceanic University, Atlantis	The Oceanic University, Atlantis site data for the Big Open Group Unified Study.	7048	SUPEREGO psychoneurobabble Oceanic Atlantis	prearchive archive no overwrite <input checked="" type="radio"/> archive overwrite
BOGUS_UCV	UCV Bogus Study/BOGUS Study at University College Valhalla	The University College Valhalla site data for the Big Open Group Unified Study.	7055	SUPEREGO psychoneurobabble Valhalla	<input checked="" type="radio"/> prearchive archive no overwrite archive overwrite
BOGUS_GSU	GSU BOGUS Study/BOGUS Study at Gotham State University	The Gotham State University site data for the Big Open Group Unified Study.	6318	SUPEREGO psychoneurobabble Gotham	<input checked="" type="radio"/> prearchive archive no overwrite archive overwrite

5. User access plan

a. Can the study provide a list of people on your study for initial boarding?  Yes  No

Advise to please specify: user\_id/name and role (Collaborator:view-only Member:view, create, edit, execute pipelines Owner: view, create, edit, delete, execute pipelines, add pipelines to project, grant user access, configure project)

**In our scenario, the coordinators have not been granted access to the data by the other institutions' IRBs. This implies that we're probably going to want one project per institution in XNAT to control access to each institution's data individually.**

b. Is there anyone outside the study who will be given access to the data? **Yes, outside researchers will be given access to all sites' data.**

c. How will user access be enabled/disabled throughout the life of the study?

i. Study will designate its own project owners who will enable/disable users directly. (preferred)

**Note: As the support team, we would encourage them to self-administer their own project to reduce our helpdesk load.**

ii. Users contact SEA-XNAT help desk directly -> study must contact to validate new user requests.

iii. Other, please describe:

6. What modalities of imaging data will you be collecting (1.5T MR, PET-AV45, CT, EEG, etc)?

**3T MR and PET-FDG**

7. Would you like to set up a pipeline to verify the acquisition protocol (i.e. count and correctness) of received images (image validation)?  Yes  No

If yes, which modalities require validation? (If all, just write "all"). **Just MR**

Note: A team member will be assigned to follow up with PI and flesh out a validation schematron.

8. Does the study perform QC on imaging?  Yes  No

Will the study store QC results in the SEA-XNAT?  Yes  No

**Note: There already exists a qcmanualassessor data type in XNAT. We would encourage the group to record their results using this data type.**

Will the study store or discard sessions which fail QC.  Store  Discard

9. What kind of subject demographic data will be collected? Please check all that apply. Add items not listed in spaces provided.

<b>Subject data</b>	
Gender	<b>x</b>
Handedness	<b>x</b>
Education	<b>x</b>
Height (inches)	
Weight (lbs)	
Race	<b>x</b>
Ethnicity	<b>x</b>
Circle one: Date of birth <u>Year of birth</u> Age	<b>x</b>
<b>Blood type</b>	<b>x</b>

10. Please list all other data types to be collected. (Note: Request sample data from PI. Developer will follow up with the study PI for planning. XNAT Marketplace is an online repository where common data types could be available for download.)

<b>Name</b>	<b>Description</b>	<b>Likely code source (circle one)</b>	<b>Upload method</b>
Pittsburgh Side Effects Scale	Commonly used test to assess side effects in drug treatment.	<u>Core XNAT</u> XNAT Marketplace To be created	<u>HTML form</u> CSV uploader Script
<b>NIH (National Institute of Health) Stroke Scale</b>	<b>Systematic assessment tool that provides a quantitative measure of stroke-related neurologic deficit. Very often used tool. Coordinators will enter this data.</b>	Core XNAT <u>XNAT Marketplace</u> To be created	<u>HTML form</u> CSV uploader Script
<b>EgoMaster</b>	<b>Tests for the presence and significance of ego indicators in subjects. Only used by the BOGUS study. Online test, so results output into a spreadsheet</b>	Core XNAT XNAT Marketplace <u>To be created</u>	HTML form <u>CSV uploader</u> Script

11. Is this a longitudinal study (i.e. will the participant be assessed multiple times)? **Yes** No

If yes, then if possible, please list “visit” or “encounter” types as well as data required at each.

Visit type	Frequency	Trigger?	Data types collected at visit
Example: On site visit	Once every 6 months	Age > 80	Subject demographics, MR Session, CT Session
<b>Baseline visit</b>	<b>once</b>	<b>none</b>	<b>Subject demographics, MR Session, PET Session, NIH Stroke Scale, Egomaster</b>
<b>One year follow-up</b>	<b>once</b>	<b>One year anniversary of baseline visit</b>	<b>MR Session, NIH Stroke Scale, Egomaster</b>

Also, if yes, Please describe unique visit ID pattern: **v00, v01**

Example ID patterns:

Numbered: 001, 002, 003, 004

Descriptive: PRE, POST

Numbered+Descriptive: onsite\_001, remote\_001, onsite\_002, etc.

12. Please list planned subject and data labels for every data type listed above (including imaging and non-imaging data).

Data type	Label pattern	Example label	How will this label pattern be enforced?
Example: Subject	<project_id>001	UL001	Process: coordinator will enter labels
Example: MR Session	<subject_label>_<visit_id>_mr	UL001_PRE_mr	Project anonymization script
<b>Subject</b>	<b>&lt;site&gt;nnn</b>	<b>OUA001</b>	<b>Process: coordinator will enter labels</b>
<b>MR</b>	<b>&lt;subject_label&gt;_&lt;visit_id&gt;_mr</b>	<b>OUA001_v00_mr</b>	<b>Project anonymization script</b>
<b>PET</b>	<b>&lt;subject_label&gt;_&lt;visit_id&gt;_pet</b>	<b>OUA001_v00_pet</b>	<b>Project anonymization script</b>
<b>NIH Stroke Scale</b>	<b>&lt;subject_label&gt;_&lt;visit_id&gt;_nihss</b>	<b>OUA001_v00_nihss</b>	<b>Process: coordinator will enter labels</b>
<b>EgoMaster</b>	<b>&lt;subject_label&gt;_&lt;visit_id&gt;_ego</b>	<b>OUA001_v00_ego</b>	<b>Process, labels will be entered into spreadsheet for upload</b>

13. Please list processing pipelines needed.

Name	Description	Input file or data type?	Available in SEA-XNAT?	If not already available, then what is the plan?
Example: FreeSurfer	<b>FreeSurfer</b> tool for reconstruction of the brain's cortical surface from structural MR data, and overlay of functional MRI data onto reconstructed surface.	MR Session DICOM	Yes <input checked="" type="radio"/> No	Will download FreeSurfer version 5.1 (free from Harvard). SEA-XNAT will make pipeline for FreeSurfer. SEA-XNAT will create new imageAssessor to hold FreeSurfer data results. Pipeline developer will follow up with project for details.
<b>DICOM to NIFTI</b>	<b>Pipeline to create nifti files from dicom files. Files will be stored on file system under same directory as dicom and will be available for download through REST or GUI. Other processing tools take only nifti files as input.</b>	MR Session DICOM	Yes <input checked="" type="radio"/> No	<b>SEA-XNAT will download a copy of the dcm2nii tool and create pipeline from it.</b>
<b>DICOM dump pipeline</b>	<b>For a DICOM imaging session, dump contents of one file to text. Store this file in the session directory to be available for download through REST or GUI. Looking for PHI.</b>	MR Session DICOM	Yes <input checked="" type="radio"/> No	<b>SEA-XNAT will create this pipeline using available DICOM or Linux utilities.</b>

14. Please list any notifications required.

Notification description	Frequency	Notification recipients
Example: Our team should receive a list of all CT sessions uploaded in the last 24 hours.	Nightly	someone@gmail.com
<b>Alert MR or PET QC team that new imaging sessions have been uploaded</b>	Nightly	<a href="mailto:qcpeople@xnat.org">qcpeople@xnat.org</a> (vm use only)
<b>Report to PIs of any new clinical assessments (NIH Stroke Scale, EgoMaster)</b>	Every Sunday night	<a href="mailto:pipeople@xnat.org">pipeople@xnat.org</a> (vm use only)

15. Please list any reports required. (Example report for each report type should be supplied by study).

Report description	Frequency	Available to
Example: Quarterly report for our sponsor	Quarterly	xnat_user_id
<b>Work list for QC people to allow them to see which MR sessions have not been QC'ed yet.</b>	<b>Always available</b>	<b>All QC users</b>
<b>"Data freeze report" (will provide sample)</b>	<b>Quarterly</b>	<b>All PIs</b>
<b>Visualization of NIH Stroke Scale data versus EgoMaster data (graphs, charts, scatter plot) - not sure which data points yet</b>	<b>Always Available</b>	<b>All PIs</b>

16. If sample imaging data provided, please complete a row below for every scanner involved in your study.

#	Site	Station name (0008,1010)	Modality (please circle one) (0008,0060)	Scanner manufacturer (circle one) (0008,0070)	Image file type (circle one)	Upload method (circle one) – *DICOM send for OUA scanners only	Approx session size	DICOM headers found with PHI
1	OUA	MMIR-3T	<del>1.5T-MR</del> 3T-MR PET-FDG PET-PIB PET-AV45 CT	<del>Siemens</del> Philips GE	<del>DICOM</del> ECAT Siemens IMA	Upload Applet Zip Uploader <del>DICOM send*</del>	80 MB	(0010, 0010)
2	OUA	OUASCAN-3T	1.5T MR <del>3T MR</del> PET-FDG PET-PIB PET-AV45 CT	<del>Siemens</del> Philips GE	<del>DICOM</del> ECAT Siemens IMA	Upload Applet Zip Uploader <del>DICOM send*</del>	Check vm after	None found
3	OUA	n/a not DICOM	1.5T MR 3T MR <del>PET-FDG</del> PET-PIB PET-AV45 CT	<del>Siemens</del> Philips GE	<del>DICOM</del> <del>ECAT</del> Siemens IMA	<del>Upload Applet</del> Zip Uploader DICOM send*	Check vm after	n/a
4	UCV	MRSCAN1-UCV	1.5T MR <del>3T MR</del> PET-FDG PET-PIB PET-AV45 CT	Siemens <del>Philips</del> GE	<del>DICOM</del> ECAT Siemens IMA	<del>Upload Applet</del> Zip Uploader DICOM send*	Check vm after	None found
5	UCV	VPI-PETCT1	1.5T MR 3T MR <del>PET-FDG</del> PET-PIB PET-AV45 CT	Siemens <del>Philips</del> GE	DICOM ECAT Siemens IMA	<del>Upload Applet</del> Zip Uploader DICOM send*	Check vm after	None found
6	GSU	SCS-3TMR	1.5T MR <del>3T MR</del> PET-FDG PET-PIB PET-AV45 CT	Siemens Philips <del>GE</del>	<del>DICOM</del> ECAT Siemens IMA	<del>Upload Applet</del> Zip Uploader DICOM send*	Check vm after	None found

**Notes:**

1. OUA collects PET in ECAT format, so no DICOM header samples supplied.
2. No PET scanner listed for GSU. GSU's PET scanner failed certification, so they are sending their participants to UCV for scanning. (Means that any anonymization or validation will be the same for these sites' PETs.)