# HID Walkthroughs and Use Case Training Manual

October 12, 2007

Function Biomedical Informatics Research Network

www.nbirn.net

HID WALKTHROUGHS	1
LIST OF WALKTHROUGHS	1
Walkthrough 1: Complete Data Entry from Paper Assessment Forms	
Walkthrough 2: Complete Data Entry using Existing Online Assessments	
Walkthrough 3: Enter or Alter Data for an Existing Subject	
Walkthrough 4: Migrate Data to the HID	
Walkthrough 5: Design a new Assessment Protocol that is Compatible with the HID	
Walkthrough 6: Find Shared HID Data that is Relevant to Your Work Walkthrough 7: Download Data from the HID	
WALKTHROUGH 1: COMPLETE DATA ENTRY FROM PAPER ASSESSMENT FORMS	
STEP 1: SEE IF AN EXISTING ONLINE ASSESSMENT FORM SUITS YOUR NEEDS STEP 2: CREATE A NEW ONLINE ASSESSMENT FORM	
WALKTHROUGH 2: COMPLETE DATA ENTRY USING EXISTING ONLINE ASSESSMEN	NTS 2
STEP 1: CREATE AN EXPERIMENT	3
STEP 2: CREATE A STUDY GROUP	3
STEP 3: CREATE A NEW SUBJECT	
STEP 4: ENROLL THE SUBJECT IN THE EXPERIMENT AND STUDY GROUP	
STEP 5: BEGIN ENTERING SUBJECT DATA	
STEP 6: ADD CLINICAL ASSESSMENT DATA	
WALKTHROUGH 3: ENTER OR ALTER DATA FOR AN EXISTING SUBJECT	5
STEP 1: LOCATE THE SUBJECT	5
STEP 2: SELECT THE EXPERIMENT, VISIT, AND SEGMENT	
STEP 3: ADD NEW DATA OR EDIT EXISTING DATA	6
WALKTHROUGH 4: MIGRATE DATA TO THE HID	7
WALKTHROUGH 5: DESIGN A NEW ASSESSMENT PROTOCOL THAT IS COMPATIBL	
WITH THE HID	
WALKTHROUGH 6: FIND SHARED HID DATA THAT IS RELEVANT TO YOUR WORK.	8
STEP 1: BUILD A QUERY	
STEP 2: PERFORM A QUERY	
STEP 3: SAVE YOUR QUERY	
STEP 4: LOAD YOUR QUERY	
STEP 5: BROWSE YOUR QUERY RESULTS	
WALKTHROUGH 7: DOWNLOAD DATA FROM THE HID	10
STEP 1: DECIDING WHICH TYPE OF DOWNLOAD YOU NEED	
STEP 2: CREATE A DATA BUNDLE	
STEP 3: CREATE A BATCH QUERY	
STEP 4: DOWNLOAD DATA TO YOUR LOCAL COMPUTER STEP 5: DOWNLOAD INDIVIDUAL IMAGING SERIES	
STER J. DUWNLUAD INDIVIDUAL IMAGING SEKIES	12

LIST OF FIGURES	12
Figure 1.1: HID Login Screen	
Figure 1.2: HID Homepage	
Figure 2.1: Add Experiment Screen	
Figure 2.2 – Select Experiment Screen	
Figure 2.3: Manage Experiment Screen	
Figure 2.4: Mange Study Group Screen	
Figure 2.5: Enroll Subject Screen	
Figure 2.6: Add Subject Screen	
Figure 2.7: Subject Lookup Screen	
Figure 2.8: Manage Subject Screen – New Visit	
Figure 2.8b: Manage Subject Screen – Visit Added	
Figure 2.8c: Manage Subject Screen – Study and Segment Added	
Figure 2.9: Subject Lookup – Search Results Screen	
Figure 2.10: New Visit Screen	
Figure 2.11: Manage Study Screen	
Figure 2.12: New Segment Screen	
Figure 2.12b: Segment Management Screen – New Segment	
Figure 2.12c: Segment Management Screen – Assessments Added	
Figure 2.13: Assessment Page	
Figure 2.14: Double Data Entry – Show Entries Screen	
Figure 3.1: Assessment Query Builder – Select Assessments	
Figure 3.2: Assessment $\tilde{Q}$ uery Builder – Select Scores	
Figure 3.3: Assessment $\tilde{Q}$ uery Builder – Query	
Figure 3.3b: Assessment Query Builder – Mediated Query	
Figure 3.4: Save Query Screen	
Figure 3.5: Assessment Query Builder – Load a Saved Query	
Figure 3.6: Query Results Screen	
Figure 3.6b: Query Results Screen – Mediated Query	
Figure 3.7: Subject Visit Information Screen – Details Hidden	
Figure 3.7b: Subject Visit Information Screen – Details Shown	
Figure 3.8: Data Exploration Screen – Univariate Analysis	
Figure 3.8b: Data Exploration Screen – Bivariate Analysis	
Figure 3.9: Statistics Results – Univariate Analysis	
Figure 3.10: Statistics Results – Bivariate Analysis	
Figure 3.11: Batch Query Submission Screen	
Figure 3.12: Shopping Cart Management Screen	
Figure 3.12b: Shopping Cart Management Screen – Navigation Tree	
Figure 3.13: Scheduled Download Confirmation Message	
Figure 3.14: Subject Visit Information Screen – Image Series	51
Figure 3.15: Job Management Screen	

# **HID Walkthroughs**

This document is a supplement to the HID Manual. It is a guide that is intended to walk you stepby-step through some common activities, as well as considering a few different starting points for your work with the HID. These walkthroughs assume a basic understanding of how to login and navigate the HID web application, as well as an understanding of the terms used to describe the HID and its functions. It is recommended that you refer to the HID Manual's glossary if there are terms you do not understand. All words in italics are included in the glossary. Please refer to the HID Manual for more detailed instructions on how to use the *HID web app* or if you need help trouble-shooting.

### List of Walkthroughs

Walkthrough 1: Complete Data Entry from Paper Assessment Forms

Walkthrough 2: Complete Data Entry using Existing Online Assessments

Walkthrough 3: Enter or Alter Data for an Existing Subject

Walkthrough 4: Migrate Data to the HID

*Walkthrough 5: Design a new Assessment Protocol that is Compatible with the HID* 

Walkthrough 6: Find Shared HID Data that is Relevant to Your Work

Walkthrough 7: Download Data from the HID

The Walkthroughs in this document address two primary activities relevant to the HID: entering data and downloading data. There are however, different starting points that initiate these activities

- If you have paper assessment forms and want to complete data entry into the HID, see walkthrough 1;
- If you want to use existing online assessments in the HID to enter new data, see Walkthrough 2;
- If you want to enter data or alter data for an existing subject, see Walkthrough 3;
- If you have existing data that is entered into a database other than the HID and want to migrate it to the HID, see Walkthrough 4;
- If you want to design a new assessment protocol that is compatible with the HID, see Walkthrough 5;
- If you want to peruse data in the HID that is relevant to your work, see Walkthrough 6; or
- If you want to download data from the HID, see Walkthrough 7.

# Walkthrough 1: Complete Data Entry from Paper Assessment Forms

All subject data that is entered into the HID by hand uses an online assessment form. The HID already contains many study protocols and online assessment forms used by others to enter data. If this is your first time using the HID to enter data, or it is the first time you are using the HID to enter data from a particular project, the chances are that an online assessment form that matches your paper assessment forms, does not exist in the HID. You may want to make sure that this is the case by seeing what assessment forms are available online through the HID. To check the available assessments, follow the instructions below, otherwise skip to Step 2:

## Step 1: See if an existing online assessment form suits your needs.

Login to the HID and click on the Query Assessments Link in the navigation bar. This will take you to the first page of the Assessment Query Builder. A list of existing assessments in the database is provided on this screen. If one of these assessments appears to fit the assessment you would like to enter, you can proceed to enter data using that assessment. Follow Walkthrough 2 to locate the assessment for data entry purposes. Part of the benefit of using the HID, however, is to use online assessment forms that are identical to the paper forms to enhance the ease of data entry. If you find that the assessment you located is not appropriate for data entry, proceed to Step 2 of this walkthrough.

## Step 2: Create a new online assessment form

The HID is intended to be used in conjunction with other BIRN tools. The Clinical Assessment Layout Manager, (CALM), is used to create online assessment forms. This tool allows you to create an online assessment form that is identical to the paper assessment form used in your research, to increase the ease of data entry. CALM provides an editing tool that can be used with no technical or programming experience. The CALM tool automatically links the input fields in the form you create with those in the HID database. Please download the CALM tool and refer to the CALM manual to create a new assessment. Once you have completed your new online assessment form, you can proceed to Walkthrough 2.

# Walkthrough 2: Complete Data Entry using Existing Online Assessments

In this walkthrough you are entering data into the HID using an existing online assessment form. To see a list of existing online assessment forms, login to the HID and click on the Query Assessments Link in the navigation bar. This will take you to the first page of the Assessment Query Builder. A list of existing assessments in the database is provided on this screen. You should see the name of the online assessment form you will be using. If not, please return to Walkthrough 1.

To begin entering data into a particular online assessment form you must first create the subject for which you will enter data and associate this subject to an experiment. This walkthrough assumes that you have not already created an experiment. To enter subjects to an existing experiment and study group, skip to Step 3.

## Step 1: Create an Experiment

Login to the HID and click on the *add icon* under the "Experiment" menu item in the *navigation bar*.



**Detail: Experiment Menu** 

This will take you to the "Add Experiment" screen (see Figure 2.1). Provide the mandatory experiment name, select the contact person from the available contacts dropdown menu, provide an optional experiment description, and press the "Add" button. This will take you to the "Experiment Information" screen (see Figure 2.3).

## Step 2: Create a Study Group

This step is optional. If you wish to organize your subjects in this experiment by study group, you will have to enroll each subject in a study group. From the "Experiment Information" screen (Figure 2.3), press the "Add Study Group" button to add a new study group. This will take you to the "New Study Group" screen (Figure 2.4). Select the research group type from the *dropdown list*, provide the name of the new study group, provide an optional study group description and press the "Add" button at the bottom right of the screen when you are done. This will return you to the "Experiment Information" screen.

### Step 3: Create a new subject

To add a new subject press the *add icon* in the Subject section of the *navigation bar*.



**Detail: Subject Menu** 

This will take you to the subject addition screen (see Figure 2.6). Press the "Create SubjectID" button to create a new unique BIRN ID for your subject. You may also enter a date of birth, a Local ID and a subject name. These fields are optional but recommended. The Local ID and subject name are *protected data*, which means that only users of the HID at your local site will be able to view this information.

After creating a subject, the subject will not be associated to any experiment; the next step will be to enroll the new subject in an experiment. You must note the BIRN ID number for your new subject so that you can enroll them in the experiment you created.

## Step 4: Enroll the Subject in the Experiment and Study Group

Return to the "Experiment Information" screen (Figure 2.3) by clicking on the *lookup icon* in the Experiment section of the *navigation bar*.



Press the "Enroll" button on the to enroll a new subject in the experiment. This will take you to the "Subject Enrollment" screen (see Figure 2.5). Select the newly created subject from the "Available Subjects" *scroll menu*, and then select the study group the subject will be in from the "Subject Groups" *scroll menu* and press the "Enroll" button. This will return you to the "Experiment Information" screen (Figure 2.3). You will see the subject ID number in the "Enrolled Subjects" list with the name of the Study Group in parentheses to the right of their ID number.

## Step 5: Begin Entering Subject Data

The next step is to add a visit and segment for the subject. From the "Experiment Information" screen (Figure 2.3), *double-click* on the ID number of the subject to go to the subject management screen for that subject (see Figure 2.8). If you need to find this screen you can also click on the *lookup icon* in the "Subjects" section of the *navigation bar* and locate the subject from the "Select A Subject" *scroll menu. Double-click* to go to the subject's subject management screen.

In the subject management screen (see Figure 2.8), click the "New Visit" button. Provide the mandatory visit date, visit time, and optional description and click the "Add" button. You will now see an "Add Study" button (see Figure 2.8b); click the "Add Study" button. Provide names and descriptions for the Study and Segment. The date and time are mandatory and will by default match the date and time of the visit. The visit date and segment date must be the same. Violation of this will result in a validation error.

After that, you will see the first visit and its first segment for the newly created subject in the subject management screen (see Figure 2.8c). Now, you are ready for adding clinical assessments to visit segments

## Step 6: Add Clinical Assessment Data

From the subject management screen (Figure 2.8c), click the "Manage" button in the "Segments" section of the screen. This will take you to the "Segment Management" screen (see Figure 2.12b). From this screen you can also edit and add additional segments.

Choose the segment to which you wish to add an assessment from the date and time *dropdown list*. Next, choose an assessment type from the *dropdown list* of assessments just before the "Add Assessments" button and click the "Add Assessment" button. If you already have an existing assessment, the name of the existing assessment will be listed with some data from the assessment (see Figure 2.12c).

You will arrive at the cover page of the selected assessment (Figure 2.13). On this screen there are always 5 mandatory fields, namely:

- Date – the date, in mm/dd/yyyy format, the assessment is done (which is the same as the date of the segment);

- Time the time, in hh:mm military time format i.e. 13:45 and 01:45 are 12 hours apart.
- Informant ID the BIRN ID for the informant
- Informant Relation the relation of the informant to the subject.
- Clinical Rater

Press the "Next" button at the bottom of the screen to go to subsequent pages of the assessment if any exist. Click "Previous" to go back to a previous page in the assessment. Click the "Submit" button on the last page of the assessment to exit the assessment. All "Next," "Previous," and "Submit" buttons save data already entered. After each assessment page, the data entered so far is saved to the database. You may leave an assessment and return later to continue data entry on an existing assessment.

For questions in the assessment data that are left unanswered, use the *pull down* list provided to the left of the question heading to provide a reason why the question was not answered.

Once the assessment is finished, you can click the *edit icon* in the Subject section of the *navigation bar*. This will return you to the subject management screen for the subject you are currently working on. Select the visit you want to view from the "Visit Date" *dropdown* list. A list of all existing segments will be shown in the "Segments" section of the screen, (see Figure 2.8c). Click the "Manage" button to go to the segment management screen (Figure 2.12c) and select the segment you just added from the segment date and time *dropdown* list. You can start editing the assessment (if you want) by click the "Edit" button next to it. You can also complete double data entry for extra precaution against human error by clicking the "Add Second Entry" button. See the HID Manual for a discussion of the Double Data Entry Support feature (Section 2.3).

# Walkthrough 3: Enter or Alter Data for an Existing Subject

This walkthrough will help you to navigate through the HID screens to locate a particular subject, visit, study, and segment so that you can add new data to an existing subject or alter existing subject data.

## Step 1: Locate the Subject

Press the *lookup icon* in the subject section of the *navigation bar*. This will take you to the "Find Subjects / Select a Subject" screen (see Figure 2.7). Locate the subject in the "Select a Subject" scroll menu and *double-click* on the subject ID to go to the subject management screen (See Figure 2.8b or 2.8c). You can also use the search feature to help you find the subject.



**Detail: Subject Lookup Search Feature** 

This will provide you with a set of search results (see Figure 2.9). From the search results, click the "Edit" button to the right of the subject you wish to maintain.

## Step 2: Select the Experiment, Visit, and Segment

If the subject already has visit data, the screen may appear similar to Figure 2.8b, if it already has assessment data, it may appear similar to Figure 2.8c. (If there are no existing visits, you need to add a visit. See Walkthrough 2, Step 5 to add a visit.)

Select an experiment from the experiment *pull down* list in the "Experiment" section of the screen. The screen may take a moment to refresh with the data for that experiment. Next, select a visit by choosing the appropriate visit date from the visit date *pull down* list in the "Visit" section of the screen. The screen will momentarily refresh with the information for that visit. Select a study from the "Study Name" *pull down* list in the "Study" section of the screen. Click the "Manage" button in the "Segments" section of the screen. This will take you to the "Segment Management" screen (Figure 2.12c). Select the segment from the segment date and time *pull down* list. The screen will momentarily refresh with the information for that segment. You should see a list of the existing assessments for that segment in the "Assessments" section of the screen. You can use the plus sign  $\boxdot$  and minus sign  $\boxdot$  to view and hide the details for each assessment.

## Step 3: Add new data or edit existing data

Click the "Edit" button to the right of the assessment name that you wish to edit, or click select an assessment from the *pull down* list and click the "Add Assessment" button to add a new assessment.

You will arrive at the cover page of the selected assessment (similar to Figure 2.13). On this screen there are always 5 mandatory fields, namely:

- Date the date, in mm/dd/yyyy format, the assessment is done (which is the same as the date of the segment);
- Time the time, in hh:mm military time format i.e. 13:45 and 01:45 are 12 hours apart.
- Informant ID the BIRN ID for the informant
- Informant Relation the relation of the informant to the subject.
- Clinical Rater

Press the "Next" button at the bottom of the screen to go to subsequent pages of the assessment if any exist. Click "Previous" to go back to a previous page in the assessment. Click the "Submit" button on the last page of the assessment to exit the assessment. All "Next," "Previous," and "Submit" buttons save data already entered. After each assessment page, the data entered so far is saved to the database. You may leave an assessment and return later to continue data entry on an existing assessment.

For questions in the assessment data that are left unanswered, use the *pull down* list provided to the left of the question heading to provide a reason why the question was not answered.

Once the assessment is finished, you can click the *edit icon* in the Subject section of the *navigation bar*. This will return you to the subject management screen for the subject you are currently working on. Select the visit you want to view from the "Visit Date" *dropdown* list. A list of all existing segments will be shown in the "Segments" section of the screen, (see Figure 2.8c). Click the "Manage" button to go to the segment management screen (Figure 2.12c) and

select the segment you just added from the segment date and time *dropdown* list. You can start editing the assessment (if you want) by click the "Edit" button next to it. You can also complete double data entry for extra precaution against human error by clicking the "Add Second Entry" button. See the HID Manual for a discussion of the Double Data Entry Support feature (Section 2.3).

## Walkthrough 4: Migrate Data to the HID

It will often be the case when you decide to use the HID to share and maintain data that you will already have existing methods for collecting and entering your data. A benefit of the *HID web app* is that it aims to transition you to your new HID projects smoothly by allowing you to retain many of your existing practices. The Clinical Assessment Layout Manager (CALM) allows you to create online assessment forms that are identical to the paper assessment forms you have used in the past. The CALM tool requires no technical or programming experience and automatically links the input fields in your new online assessment form with the HID database. However, there are times that you will have massive amounts of data that you have already

entered into database software such as Microsoft Excel. You may not want to create an online assessment form and re-enter the data by hand. Instead you will want to migrate your data to the HID in bulk.

In order to migrate your data in bulk you will have to make modifications to your data so that it is compatible with the HID. You should consult your local *HID web administrator* as well as members of BIRN and the BIRN Coordinating Center (BIRN-CC). They will help you to modify your existing database. You will begin by creating an online version of your assessments through the CALM tool. A member of BIRN can then use this to create an excel template that has the appropriate columns and format that will match your data and the HID's requirements. You will then migrate your data into the new template. One change that may arise in this transition is that the HID requires all data for a particular assessment score variable to be entered as a numerical value that refers to the answer given by the subject. For example if the answers to a particular assessment question are a) subject has experienced headaches, b) subject has not experienced headaches, both a) and b) will be entered for all subjects, and a value of 1 or 2 will indicate which score was noted for a particular subject. The creation of an online assessment form using the CALM tool will help to negotiate this transition.

You then will need to contact your local *HID web administrator* to have them upload your HIDready data to the HID. This will require use of an "upload script" that can only be used by web administrators. This "upload script" is likely to be made available to general users in the future, whereby the entire process of bulk migration of data to the HID will be automated.

# Walkthrough 5: Design a new Assessment Protocol that is Compatible with the HID

If your current project requires you to create a new assessment protocol, this is a perfect opportunity to make use of the benefits of the BIRN tools, while making your data easier to maintain, share, and query. Consider your requirements for a paper form that you will use during data collection. Next, use the Clinical Assessment Layout Manager (CALM) to design your assessment form. CALM provides an editing tool that can be used with no technical or programming experience. The CALM tool automatically links the input fields in the form you create with those in the HID database. By using CALM you will be able to complete data entry into an online form that is identical to the one you use for data collection. Please download the CALM tool and refer to the CALM manual to create a new assessment. The CALM tool will also provide you access to the layout templates for existing assessments in the HID database as well as other example templates. Use these templates to help you design your new assessment protocol.

After completing your data collection, you can now use the HID for data entry. The HID enables you to add experiments, study groups, and subject visits. You can then add the assessment data for each subject with ease. To locate and enter data for a subject, see Walkthrough 2.

# Walkthrough 6: Find Shared HID Data that is Relevant to Your Work

The HID provides an "Assessment Query Builder" so that you can customize a query to suit your research needs. It is likely that you will want to perform different queries on the same set of data. The Assessment Query Builder allows you to build a data set that is relevant to you, which you can then query repeatedly using different search parameters. You can save any query that you build to search through the derived data set for that query at a later time.

# Step 1: Build a Query

Login to the HID and click the "Query Assessments" menu item in the *navigation bar*. This will take you to the "Assessment Selection" screen (Figure 3.1). This screen provides a full list of assessment types with a brief description of each, where provided. Select by clicking the checkbox next to each assessment type you wish to include in your query. You can select one or more assessments to include in your query. Click the "Continue" button. This will take you to the "Score Selection" screen (see Figure 3.2 for an example). This provides a list of the available scores for each assessment that you previously selected. Select by clicking the checkbox next to those scores you wish to include in your query. You can press the "Previous" button at any time to make changes to your previous selections. Press "Continue" when you are done building your query. This will take you the "Query" screen (Figure 3.3).

## Step 2: Perform a Query

Once you have completed the selection of assessments and scores, the HID has essentially derived a data set to query. It has collected all the data sets that match your selection of assessment scores. As you can see, the "Query" screen allows you to set parameters for the values or range of values for each of the assessment scores you selected in the Assessment Query Builder. This means that there are many different queries you might perform on this derived data set. You can set the parameters and run the query by clicking the "Query" button, or you can save the derived data set for future use by clicking the "Save Query" button.

## Step 3: Save your Query

On the "Query" screen (Figure 3.3) you can save a query by clicking the "Save Query" button at the top left side of the screen. This will take you to the "Save Query" screen (Figure 3.4). Provide a unique name for your query in the "Query Description" field. You will use this name to access your saved query in the future. Press the "Save Query" button when you are done providing a description.

## Step 4: Load your Query

By saving your query you can use it again during the same session using the HID or login at a later time and use the same query. To use a saved query, click the "Query Assessments" link on the *navigation bar*. On the first screen of the Assessment Query Builder (Figure 3.5) a "Saved Queries" dropdown list will appear at the top of the screen. Select the query name you provided and click the "Load" button. This will automatically load the assessment types from the list that you included in your saved query. Click the "Continue" button to proceed to the "Score Selection" screen (Figure 3.2). You can also make modifications to the loaded query on any page of the Assessment Query Builder. Click the "Continue" button to proceed to the "Query" screen. You can set parameters for your query and run the query by clicking the "Query" button.

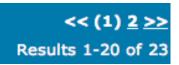
If you are connected to multiple HID sites, you will also be able to perform a *mediated* query. Click the "Mediated Query" button to perform your query on data in all the HID sites to which you are connected. For more information about *mediated* queries, see the HID Manual Section 3.4.2.

## Step 5: Browse your Query Results

Once you have selected parameters and clicked the "Query" button you will be taken to the Query Results screen (Figure 3.6). This screen provides a list of derived data that matches the selections you have made in the Assessment Query Builder. The list will include the Subject ID number, the experiment name, the visit number and date, the segment number, the site ID for the HID database where the data resides, and the values that matched your search. If there are no results from your query an error message will appear.

From this screen you can explore the derived data, run some statistical analysis on the derived data using the tools on this screen, export a comma-separated-values file, or schedule downloads of the data for analysis on your local computer using your own methods and tools.

To Browse your results, navigate through the pages of results by clicking on a page number to go to that page or by using the double >> for the next screen and the double << for the previous screen.



#### **Detail: Navigating Multiple Pages of Results**

You can also view some *metadata* for each Subject that was returned by your Query. Click on the Subject ID number, to see details about each subject. This will take you to the Subject Visit Information Screen, which provides a list of all visits for this subject and experiment (see Figure 3.7). The list includes the Visit Type, Visit Date, Visit ID number, Segment ID number, Protocol, Protocol Version, and Study type.

Click the "Show Detail" button in the upper right corner of the screen to view details about the Segments that matched the criteria from your query. Clicking this button will reveal details about the Assessment and Score values for these Segments (see Figure 3.7b). Click the "Hide Detail" button in the upper right corner of the screen to hide these details.

Scroll down the Subject Visit Information Screen to view visits with imaging data. This imaging data will be available for you to browse directly through the HID.

# Walkthrough 7: Download Data from the HID

This walkthrough assumes that you have located data that you wish to download for analysis on your local computer. The HID provides some web-based statistical analysis tools. For more information about these tools see the HID Manual Section 3.5.3.

It is important to understand that the *HID web app* allows you to browse and explore the data resulting from your Query, however in order to download the resulting datasets you must first schedule a download. This is because the data that you can browse and explore is in the form of *metadata* which is accessible due to the HID's software which tracks this *metadata*. To download the datasets to your local computer the HID must first download the dataset to the local web server from the site where the data resides. Because the speed of this download depends on your server as well as those at the data site, the *HID web app* allows you to schedule a download to complete and then download the results from the HID to your local computer. You may also logout and return later to download the results to your local computer There are three different ways of download imaging data in bulk through the Data Bundles download feature, or you can browse and download individual image series.

# Step 1: Deciding which type of download you need

First, follow Walkthrough 6 to locate data relevant to your research. If your query has narrowed down on a set of subjects whose imaging data you know will be of interest to you, use the Data Bundles method to download these imaging data: proceed to Step 2. If you have been browsing through the subjects matching your query and viewing their image data directly through the HID and locate an image series you wish to download, then this is the best method: proceed to Step 5. If you have derived a large pool of subject data and want to perform some statistical analysis on this data, then you should use a Batch Query: proceed to Step 3.

# Step 2: Create a Data Bundle

From the Query Results screen (Figure 3.6), select a subject to include in your Data Bundle, by clicking the *shopping cart icon* here next to that subject. An alert message to the right of the Shopping Cart will inform you of how many items you currently have in your Cart.



3 items

After clicking the shopping cart next to all the subjects you wish to include, click the Data Bundle Shopping Cart in the upper right corner of the Query Results screen.



Click once on the Shopping Cart to view your Data Bundle Shopping Cart contents. This will take you to the Shopping Cart Management screen (see Figure 3.12).

On this screen you will see a list of all the Subject data that you have placed into your Shopping Cart. Each data item will be listed by Subject ID number and a *navigation tree* allows you to view the experiments, visits, assessments/segments, and score variables included for each

subject. Click on the plus sign 🗈 to reveal more details (see Figure 3.12b). It may take a moment for the Shopping Cart contents list to populate with details. If no details are available this is because these Subjects' data contain no image data.

To create a Data Bundle, provide a name for the Data Bundle in the "Bundle Name" field at the top of the screen. (This name will be used to identify your Bundle on the "Manage Jobs" screen when the Data Bundle is ready for you to download to your local computer.) Next, select which data items in your Shopping Cart to include in the Bundle. Click on the checkbox to the left of the Experiment Name to include the entire experiment for a Subject in your Bundle. If you wish to include only particular visits, assessments/segments, or score variables in your Data Bundle click on the plus sign + to reveal these details (see Figure 3.12b) then click on a checkbox next to the items you wish to include.

After selecting the Subject image data items to include in your Data Bundle, the "Download Size" alert will confirm how large the download will be (in bytes). The "Download Size" alert message is located just below the "Bundle Name" field at the top of the screen.

#### Download size (in bytes) : 0

#### **Detail: Download Size Alert**

When you are ready, click on the "Schedule Download" button at the bottom right of the screen. After clicking the "Schedule Download" button, a confirmation message will appear (see Figure 3.13) that contains a Job ID number. Proceed to Step 4.

#### Step 3: Create a Batch Query

The Batch Query allows you to download full assessment data sets for the subjects that resulted from your Query. To run a Batch Query, click on the "Batch Query" button at the top left corner of the Query Results screen (Figure 3.6). This will take you to the "Batch Query Submission" screen (see Figure 3.11). Provide a description or name for your Batch Query in the "Description" field. Select which Assessments you would like to download for the subjects that matched your Query. When you are ready click the "Batch Query" button at the bottom right corner of the screen.

Once you have completed your Batch Query submission you will be returned to the Query Results screen. A message on the *navigation bar* above the "Manage Jobs" menu item will alert you to the number of Batch Jobs you have scheduled or that are ready for you to download.

### Step 4: Download Data to your local computer

Again, it is important to understand that by creating a Data Bundle or Batch Query you and scheduling a download, you have not downloaded the data to your local computer. When you schedule a download, the HID downloads the data to the local web server from the site where the data resides. Once the data is downloaded to your local web server, you can download it to your local computer by clicking on the "Manage Jobs" menu item in the *navigation bar*. This will take you to the Job Management screen (see Figure 3.15). This screen lists the downloads you have scheduled and the Job ID number, data type, date of download, data description, download status, size of data (in bytes), and number of downloads for each job. The data type will indicate which kind of job you have scheduled. The data description will be the name you provided

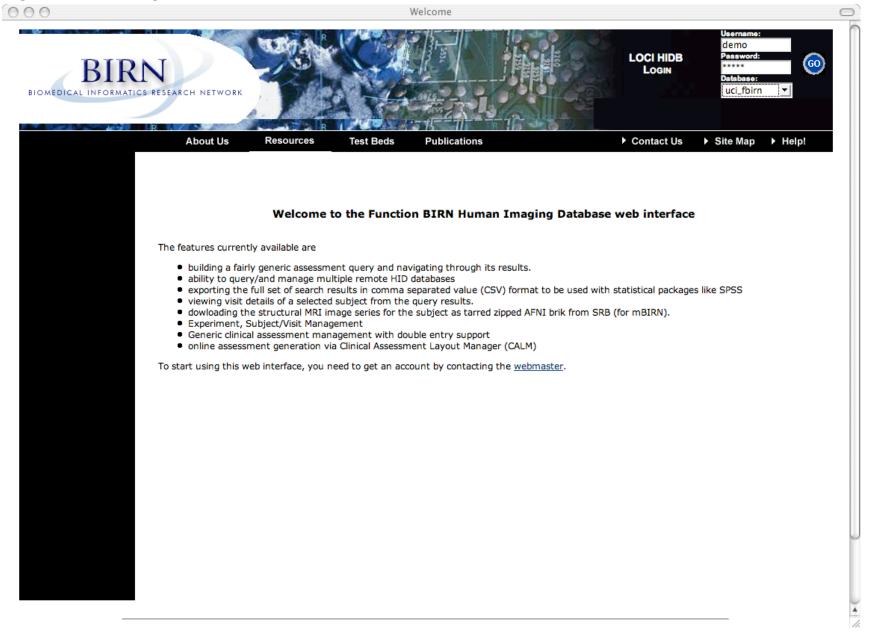
where applicable. The status will indicate if the scheduled job is ready for you to download to your local computer. To remove a scheduled job from this list, click the "Remove" button for that job. You can download the same job multiple times; for example you may log on to the HID from different machines and wish to download the data to multiple computers. The number of downloads indicator will keep track of how many times you have downloaded the same set of data.

Clicking on the "Download" button will open up a dialogue window on your local computer asking you how and where you prefer to save the download. A Batch Query will download as a Comma Separated Values file. You may then use this file with your own database or statistical analysis software. Your download is now complete, you can skip Step 5.

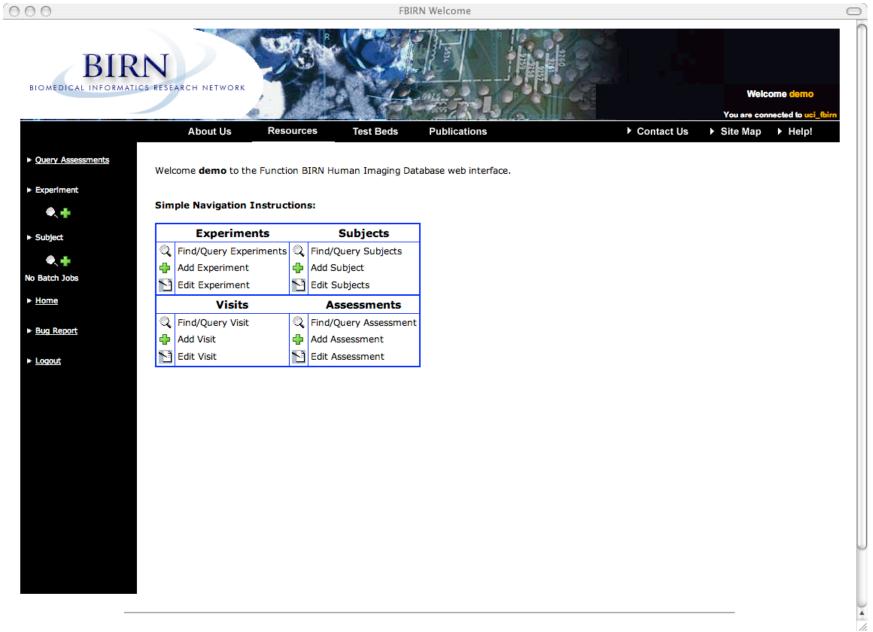
## Step 5: Download Individual Imaging Series

You also have the option to download specific image data series directly, while browsing Subject data. From the Query Results screen (Figure 3.6), select a specific subject by clicking on the Subject ID number, which is an *active link*. This will take you to the Subject Screen (Figure 3.7), which contains a list of all visits for this subject and experiment. After browsing to the image data for the subject, where applicable, you will see a message for each image data series explaining how to download that particular image series (see Figure 3.14). Click the "Download as AFNI BRIK" button to download that image series. You may also browse for a specific image by clicking the "Browse Image Data" button. From the Browse Image Data screen you can select a single image to download.

#### Figure 1.1: HID Login Screen



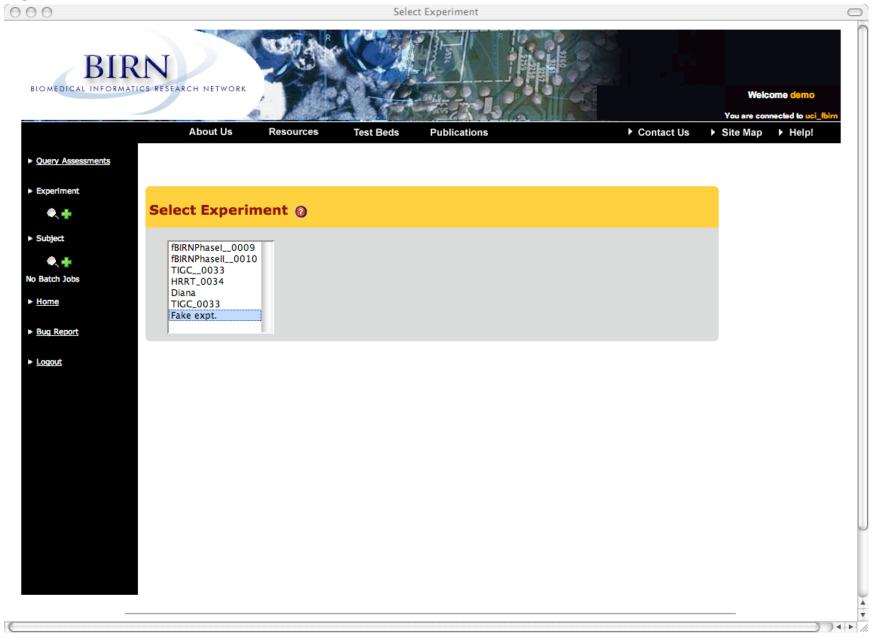
#### Figure 1.2: HID Homepage



# Figure 2.1: Add Experiment Screen

0			Add Experi	ment				
BIR OMEDICAL INFORMATIC	N CS RESEARCH NETWORK				and a second	.		ome demo nected to uci_fbir
Query Assessments	About Us	Resources Te	st Beds Pub	lications		Contact Us	<ul> <li>Site Map</li> </ul>	
xperiment	Add Experime	ent						
Subject The second sec	Experiment Name: Contact Name:	Fake expt. Demo Demo		Description:	This is a demo	experiment		
ome ug Report								Add
ogout								

#### Figure 2.2 – Select Experiment Screen



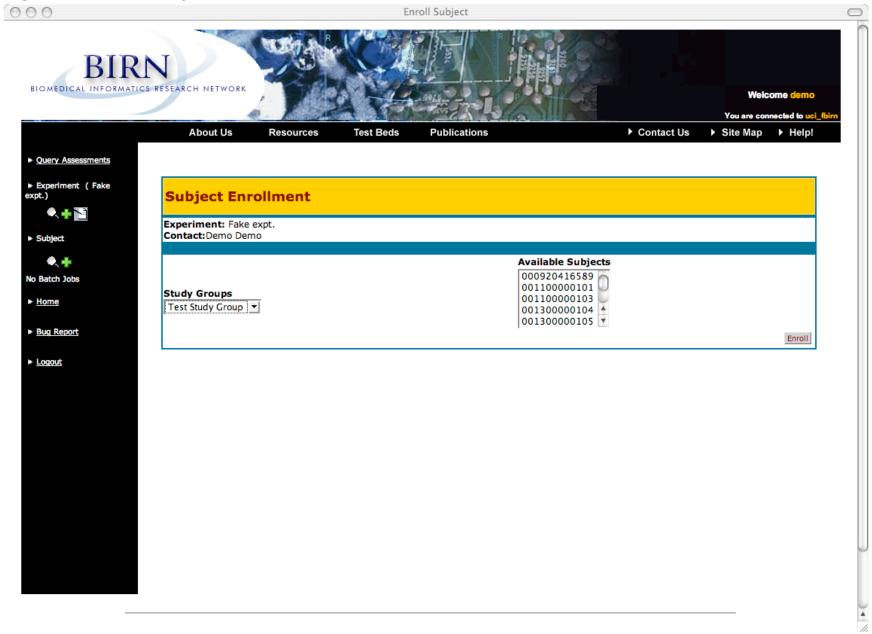
# Figure 2.3: Manage Experiment Screen

0 0	Manage Experiment
BIR BIOMEDICAL INFORMATIO	
Query Assessments	About Us Resources Test Beds Publications
Experiment (Fake pt.)	Experiment Information
Subject • + Batch Jobs	Experiment Name:       Fake expt.         Contact Name:       Demo Demo         Last Modified:       06/19/2007
Home	Update
<u>Bug Report</u> Logout	Enrolled Subjects     Change Group     Enroll     Unenroll     Image Group       Study Groups     Image Group     Image Group

# Figure 2.4: Mange Study Group Screen

00		Manage Study Group		
BIR BIOMEDICAL INFORMAT	ICS RESEARCH NETWORK			elcome demo onnected to uci_fbirn
Query Assessments	About Us Resources	Test Beds Publications		b Help!
Experiment (Fake (pt.)	New Study Group			
Subject • + Batch Jobs	Experiment: Research Group Type: Name:	Fake expt. control Demo Study Group This Study Group is a demo study group.	-	
lome lug Report	Description:			Add
<u>ogout</u>				

#### Figure 2.5: Enroll Subject Screen

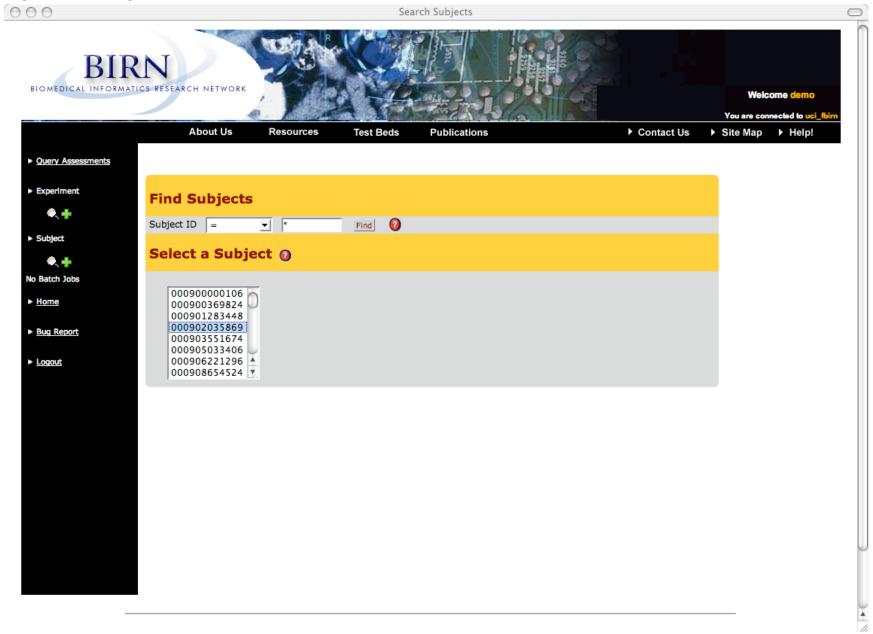


19

# Figure 2.6: Add Subject Screen

00			Add Subject			
BIOMEDICAL INFORM	RN ATICS RESEARCH NETWORK				Yo	Welcome demo
Query Assessments		sources Test Beds	Publications	▶ Con	tact Us	e Map
Experiment	Subject					
۰. +	Subject ID:	000945723348	Create SubjectID	Name (Protected):	John Doe	
► Subject	Local ID (Protected):	JDoe45		Birthdate (mm/dd/yyyy):	01/31/45	
•.+						Subject Add
No Batch Jobs						Bubjeet Add
► <u>Home</u>						
Bug Report						
Logout						

#### Figure 2.7: Subject Lookup Screen



## Figure 2.8: Manage Subject Screen – New Visit

0		Manage Subject	
	RN ATICS RESEARCH NETWORK		Welcome demo You are connected to uci_fbirn
Query Assessments	About Us Resources T	est Beds Publications C	contact Us
• Experiment	Subject Subject ID: TEST0000004 Local ID (Protected):	Name (Protected): John Doe Birthdate (mm/dd/yyyy): 01/31/0045	
• +	Experiment		
► Subject	Experiment Name: Visit	Fake expt. 💌	
• +	VISIC		New Visit
Batch Jobs			
Home			
Bug Report			
Logout			
Logout			

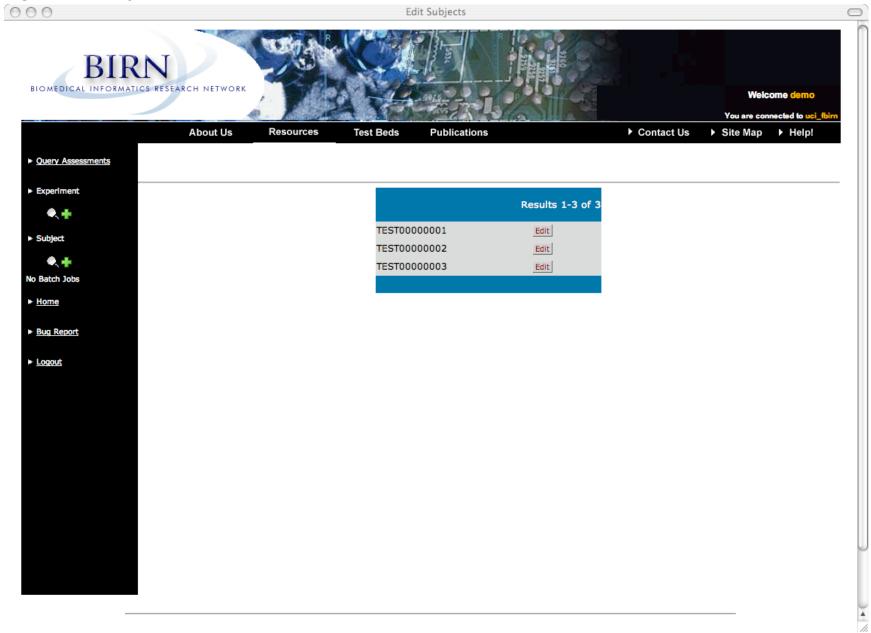
# Figure 2.8b: Manage Subject Screen – Visit Added

0	Manage Subject	
BIOMEDICAL INFORMAT	NUCS RESEARCH NETWORK	Welcome demo
		You are connected to uci
<u>Query Assessments</u> Experiment (Fake pt.)	Subject Subject ID: TEST00000004 Name (Protected): John Doe	Site Map → Help!
• + 📔	Local ID (Protected): Birthdate (mm/dd/yyyy): 01/31/0045 Experiment	
Subject ST00000004)	Experiment: Fake expt.  Visit	
• 🕂 🎦	Visit Number: 1 This is the first visit for this	aub i a at
Batch Jobs Home	Visit Date: 06/14/2007 Visit Type: screening Name: Test Visit	subject.
Bug Report		New Visit Edit
Logout	Studies	
		New Study
	Segments	
		New Segment

BIR	T	100 Mar 10			A DESCRIPTION OF A DESC			
MEDICAL INFORMATICS		WORK		5-1-1				ome demo
	About U	Js Resources	Test Beds	Publications		Contact Us	You are conr ► Site Map	Help!
ery Assessments								
periment ( Fake )	Subject Subject ID: Local ID (Pr	TEST00000004		Name (Protecte Birthdate (mm)	ed): John Doe /dd/yyyy): 01/31/00	45		
🔍 🕂 🞦	Experiment	t						
ibject 100000004)		Fake expt. 💌						
	Visit Visit Numbe	er: 1						
atch Jobs					This is the first	t visit for the	is subject.	
<u>me</u>	Visit Date: Name:	06/14/2007 💌 Test Visit	Visit Type: screening	Description:				
ig Report							New Visit	Edit
gout	Studies							
	Study Name	e: Test Study 💌						
							New Study	Edit
	Segments							
								Manage
	Segment ID Date: Name:	06/14/2007 Segment 1	Time: Description:		tocol: Subject s segment in the New Stu	screening protocol : udy.	L	

## Figure 2.8c: Manage Subject Screen – Study and Segment Added

## Figure 2.9: Subject Lookup – Search Results Screen



# Figure 2.10: New Visit Screen

0	New Visit	
		Welcome demo
Query Assessments	About Us Resources Test Beds Publications   Contact Us  Sit	te Map → Help!
E	New Visit	
Experiment	Subject ID: TEST00000004 Experiment: Fake expt.	
• +	This is the first visit for the	his subject.
Subject	Visit Date: 06/14/2007 Visit Type: screening	
Subject	Name: Test Visit Description:	
۹. 🕂		
o Batch Jobs		
		Add
Home		Aug
Bug Report		
Bug Report		
Logout		
Logout		

# Figure 2.11: Manage Study Screen

		Manage	e Study	
		TWORK		Welcome demo
	About	Us Resources Test Beds P	ublications	You are connected to uci_fbir Contact Us ► Site Map ► Help!
uery Assessments				
xperiment (Fake .)	Study Mar	nagement	Experiment:	Fake expt.
e, 🕂 📔	Subject ID	: TEST00000004	Visit:	1
ubject T00000004)	Study			
•+	Date:	06/14/2007	Time: 14:20	
	Name:	New Study		
atch Jobs		This is a new study.		
ome	Description	1:		
ug Report	Segments			
ogout				
	Date:	06/14/2007	5	
	Name:		ect screening protocol Version 1	
		This is the first segment in the Ner		
	Description			
		1		Add Study
				Add Study

# Figure 2.12: New Segment Screen

00			New Segment			
BIOMEDICAL INFORM	RN ATICS RESEARCH	A NETWORK				Welcome demo
	A	bout Us Resourc	es Test Beds Publicat	ions		re connected to uci_fbirn Map ► Help!
Query Assessments						
<ul> <li>Experiment (Fake expt.)</li> </ul>	Segment N	lanagement			Experiment:	Fake e
۹. 🕂 📔	Subject ID:	: TEST0000004			Visit:	2
<ul> <li>Subject</li> <li>TEST00000004)</li> </ul>						
۵. 🕂 🞦	Date: Name:	07/20/2007 Test Segment	Time: 00:00	Protocol:	Subject screening protocol Version 1	
lo Batch Jobs	Name:	This is the first	segment added.		-	
► <u>Home</u>	Description		-		Add Segment	
Bug Report						
Logout						
					)	).

	About Us	Resources Test Beds	Publications	You are connected to uci_ ► Contact Us ► Site Map ► Help!
<u>y Assessments</u> riment (Fake	Subject Subject ID: TEST00	000004	Experiment: Visit:	Fake expt. 1 (06/14/2007)
ect 0000004)	Common to			
+	Segments			New Segment
ch Jobs	Segment:	06/14/2007 14:25 💌		
e	Segment ID: 1 Date:	Study: New Study 06/14/2007	Time: 14:25 Protocol:	Subject screening protocol 1
Report	Name: Description:	Segment 1 This is the first segment in the	New Study	Edit
ut	Description		nen stady.	
	Abnormal Involuntary	Movement Scale 📃 Add As	ssessment	

# Figure 2.12b: Segment Management Screen – New Segment

DIDAL				100	
BIRN					
AL INFORMATICS RESEA	RCH NETWORK		A State of the second sec		Welcome demo
	About Us	Resources Test Beds	Publications	► Contact Us	You are connected to uci ► Site Map ► Help!
essments					
t (Fake Sul	bject				
	Subject ID: TEST00000004		Experiment:	Fake expt.	
Sul			Visit:	1 (06/14/200	)7)
)4)					
Se	gments				
					New Segment
Se	gment:	06/14/2007 14:25 -			
Se	gment ID: 1	Study: New Study			
	te:	06/14/2007	Time: 14:25 Pi	rotocol: Subject screeni	ng protocol 1
Na	me:	Segment 1			
	scription:	This is the first segment ir	the New Study.	Edit	
As	sessments Col	lapse All			
An	xiety Status Invento	ry (ASI)	Add Assessment		
Abr	normal Involunta	ary Movement Scale 🛛 🖯		Edit	Delete Add Second Entry
	ID	ASS	TYPE	P4	AIMS1
	1 AIMS2	1 AIM53	1 AIMS4	0 AIMS5	0 AIMS6
	0	AIM53 0	AIM54 0	0 AIM55	AIM56 0
	AIMS7	AIMS8	AIMS9	AIMS10	AIMS11
	0	0	0	0	0
	AIMS12	AIMS13			
	0	0			
				Edit	Delete Add Second Entry
Age	eOfOnset 🗉				
Age	onset_age	num_episodes	prodromal_onset	comments	

# Figure 2.12c: Segment Management Screen – Assessments Added

## Figure 2.13: Assessment Page

BIF OMEDICAL INFORMA	TICS RESEARCH NETWORK	Welcome demo You are connected to uci_fb
Query Assessments	About Us Resources Test Beds	Publications  ► Contact Us ► Site Map ► Help!
Experiment (Fake t.)	AIMS ABNORMAL INVOLUNTARY MOVEMENT SCALE	
• 🕂 🎦	ID	
Subject ST00000004)		
• + 📔	ASSESSMENT	
Batch Jobs	1st time studied	C 1
ome	2nd time studied	C 2
lone	3rd time studied 4th time studied	C 3 C 4
sug Report		(,) T
	TYPE TYPE	
ogout	Proband/Subject	C 1
	Informant	C 2
	Consensus	C 3
	Blind	C 4
	Other	C 5
	Consensus II	C 6
	DATE (mm/dd/yyyy)	06/14/2007
	TIME (hh:mm)	14:25
	Informant ID	TEST00000
	Informant Relation	self

# Figure 2.14: Double Data Entry – Show Entries Screen

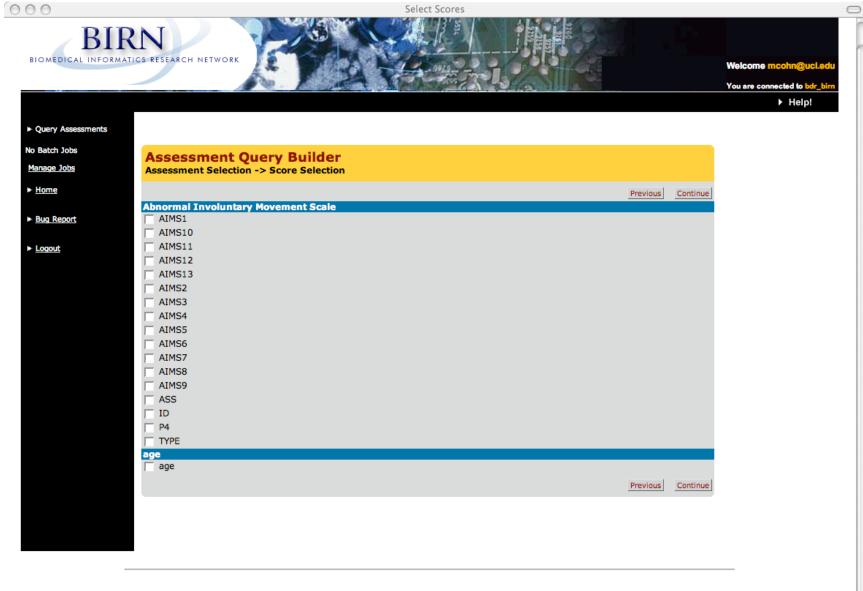
		ALC: NOTE OF		14 T	You are connected to uci_ft
Query Assessments	About Us Resou	irces Test Beds	Publications	Contact L	ls ▶ Site Map ▶ Help!
xperiment (Fake )					Back
·, • + 📔	Miss	ing Values and Entries F	or Assessment 'Abnormal I	nvoluntary Movement So	ale'
	Question		Score Name	Missing From En	ry
ubject \$700000004)	Month assessment was done		ASS	2	
۹. 🕂 🞦			Entries		
Batch Jobs	Entry 1				
	ID	ASS	TYPE	P4	AIMS1
ome	1	1	1	0	0
	AIMS2	AIMS3	AIMS4	AIMS5	AIMS6
ug Report	0	0	0	0	0
	AIM57 0	<b>AIMS8</b> 0	AIMS9	AIMS10	AIM511 0
ogout	AIMS12	AIMS13	0	0	0
	0	0			
		U			
	Entry 2 ID	ASS	ТҮРЕ	P4	AIMS1
	1	A35	2	0	0
	AIM52	AIM53	AIMS4	AIMS5	AIMS6
	0	0	0	0	0
	AIMS7	AIMS8	AIMS9	AIMS10	AIMS11
	0	0	0	0	0
	AIMS12	AIMS13			
	0	0			

32

#### Figure 3.1: Assessment Query Builder – Select Assessments

000 Select Assessments  $\bigcirc$ BIRN BIOMEDICAL INFORMATICS RESEARCH NETWORK Welcome mcol You are connected to bdr\_bi Help! Query Assessments No Batch Jobs **Assessment Query Builder** Manage Jobs Assessment Selection Continue Home Abnormal Involuntary Movement Scale age Bug Report Anxiety Status Inventory (ASI) Barnes Akathisia Rating Scale Logout Beck Depression Inventory (BDI) Calgary Depression Scale Deficit Syndrom ScoreSheet Demographics Edinburgh Handedness Inventory education ethnicity ExcelTest Fagerstrom Test for Nicotine Dependence father's education father's occupation favorites gender hairstyle Hallucination handedness InterSePT living arrangement marital status Modified Positive and Negative Symptom Scale mother's education mother's occupation North American Adult Reading Test (NAART) number of children **A** occupation

### Figure 3.2: Assessment Query Builder – Select Scores

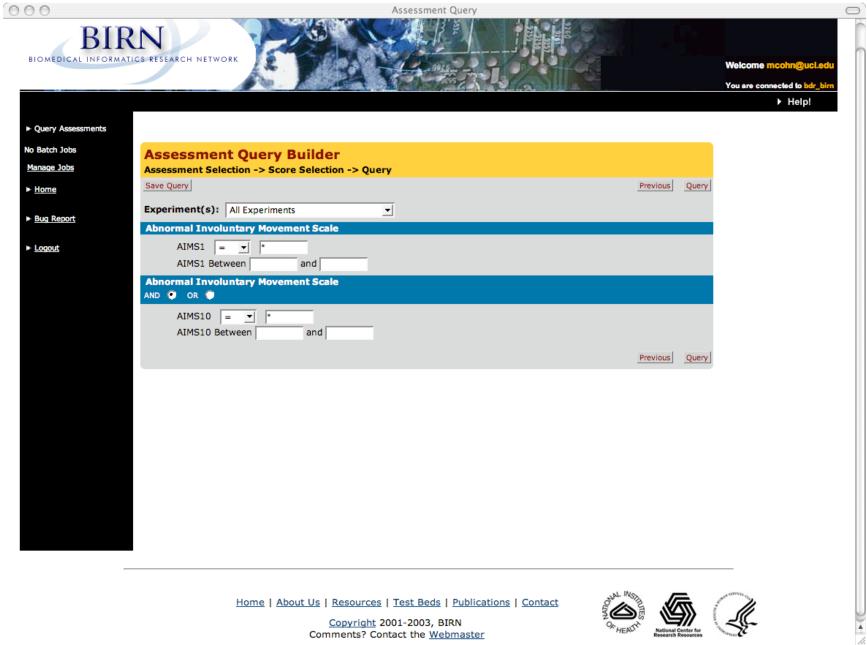


Home | About Us | Resources | Test Beds | Publications | Contact

Copyright 2001-2003, BIRN Comments? Contact the Webmaster



### Figure 3.3: Assessment Query Builder – Query

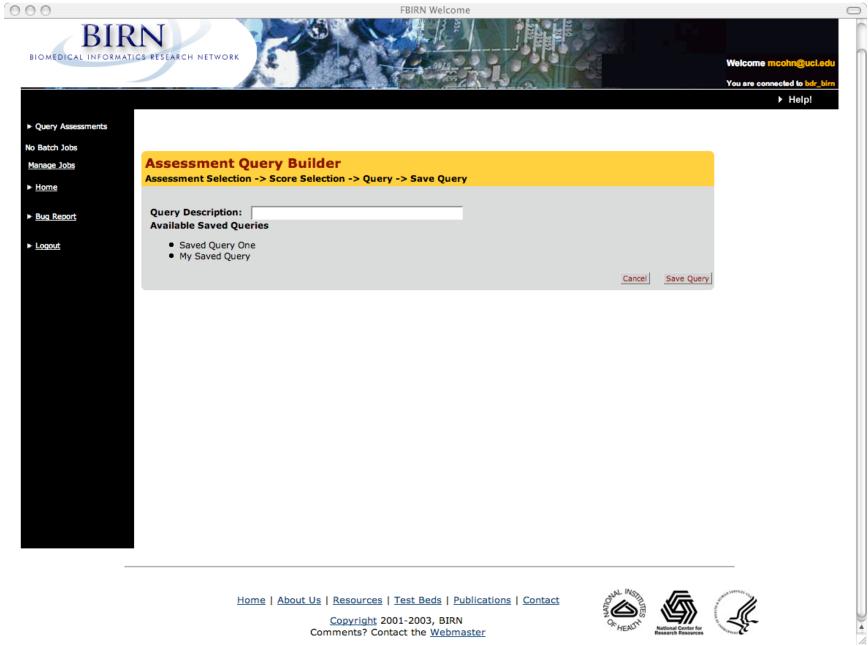


35

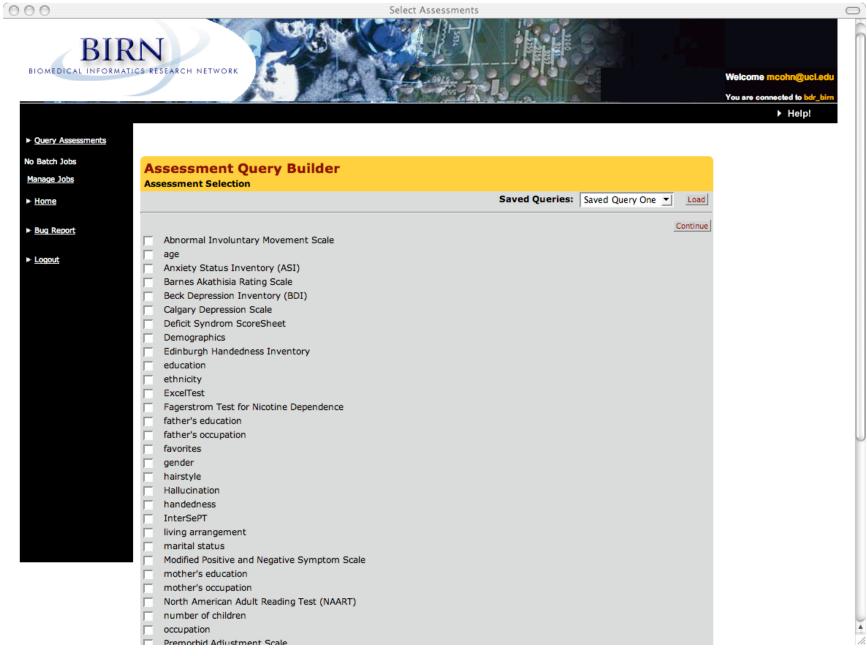
# Figure 3.3b: Assessment Query Builder – Mediated Query

	About Us Resources Test Beds Publications	Contact Us	Welcome demo           You are connected to uci_fbit           ▶ Site Map         ▶ Help!
Query Assessments			
Experiment	Assessment Query Builder Assessment Selection -> Score Selection -> Query		
۰, 🕂	Save Query Previous	Mediated Query Quer	y
Subject	Experiment(s): All Experiments		
۰.	Abnormal Involuntary Movement Scale		
Batch Jobs	AIMS1 = <u> </u>		
<u>Home</u>	AIMS1 Between and and		
Bug Report	Abnormal Involuntary Movement Scale		
Logout	AIMS10 = v v and and		
	Previous	Mediated Query Quer	y

### Figure 3.4: Save Query Screen



### Figure 3.5: Assessment Query Builder – Load a Saved Query



# Figure 3.6: Query Results Screen

0			Assessment Se	arch Results			
	RNATICS RESEARCH NETW	ORK					Welcome mcohn@uc You are connected to bdr
							► Help!
uery Assessments							
Batch Jobs							
nage Jobs							
hage Jobs							
lome	Explore Data 🔞	Batch Query 🔞 Export CSV					<b>3</b>
Bug Report							<< (1) >>
	Cubicet 7D			Site ID	Aba anna l Zauch		Results 1-16 of 16
ogout	Subject ID			Side TD	ADHOFMAI INVOIL	Intary Movement: AIMS13	AIMS12
	001200635031	Experiment: fBIRNPhaseII_0010	+Ì⊒		AIMSI	AIMS15	AIMSIZ
		Date: 02/02/2005	~	BDR	0	1	0
		Experiment: fBIRNPhaseII_0010	+Ì <u></u>		-	-	
	Visit: 1 Seg: 13	Date: 11/17/2005	~~	BDR	0	0	0
		Experiment: fBIRNPhaseII_0010	+)				
	Visit: 1 Seg: 12	Date: 06/28/2005	••	BDR	0	0	0
	001230208362	Experiment: fBIRNPhaseII_0010	+Ì <b></b>				
	Visit: 2 Seg: 11	Date: 05/12/2005		BDR	0	0	0
	001239290481	Experiment: fBIRNPhaseII0010	+)⊒(+				
	Visit: 1 Seg: 12	Date: 02/18/2005		BDR	0	0	0
	001240781939	Experiment: fBIRNPhaseII_0010	+)				
	Visit: 1 Seg: 12	Date: 04/20/2005		BDR	0	0	0
	001244211548	Experiment: fBIRNPhaseII0010	+)⊒				
	Visit: 1 Seg: 13	Date: 06/07/2005		BDR	0	0	0
	001244495680	Experiment: fBIRNPhaseII0010	+Ì⊒				
	Visit: 1 Seg: 11	Date: 08/26/2005		BDR	0	0	0
	001248496933	Experiment: fBIRNPhaseII0010	+ <b>Ì</b> ⊒				
	Visit: 1 Seg: 12	Date: 06/06/2005		BDR	0	0	0
		Experiment: fBIRNPhaseII0010	+Ì⊒				
	-	Date: 06/30/2005		BDR	0	0	0
		Experiment: fBIRNPhaseII0010	+Ì⊒				
		Date: 06/08/2005		BDR	0	0	0
		Experiment: fBIRNPhaseII0010	+Ì⊒				
	Visit: 1 Sea: 12	Date: 04/14/2005		BDR	0	0	0

# Figure 3.6b: Query Results Screen – Mediated Query

	RMATICS RESEARCH NETWORK		Welcome demo
	About Us Resources Test Beds Publication	s +	You are connected to uci_fbit Contact Us  ▶ Site Map  ▶ Help!
Query Assessments			
• +	Explore Data 🕜 Batch Query 🕜		See al an
Subject	Stats: Univariate Analysis T Statistics Export CSV		<< (1) >>
• +			Results 1-9 of 9
No Batch Jobs	Subject ID	Site ID Anxiety :	Status Inventory (ASI)
► <u>Home</u>			ASI
	001100000101 🆆 Experiment: fBIRNPhaseI0009 +멅		
Bug Report	Visit: 1 Seg: 4 Date: 07/22/2003	UCI	20
	<u>001300000104</u> 📥 <b>Experiment:</b> fBIRNPhaseI0009 +낮		
Logout	Visit: 1 Seg: 2 Date: 07/16/2003	UCI	21
	<u>001300000104</u> <b>≛ Experiment:</b> 4464 +		
	Visit: 1 Seg: 2 Date: 07/16/2003	UMN	21
	001300000104 <b>≛ Experiment:</b> 5911 +		
	Visit: 1 Seg: 2 Date: 07/16/2003	DUKE	21
	<u>001300000104</u> <b>≛ Experiment:</b> 8994 +		
	Visit: 1 Seg: 2 Date: 07/16/2003	UIOWA	21
	001300000105 📥 Experiment: fBIRNPhaseI0009 +💢		
	Visit: 1 Seg: 2 Date: 07/15/2003	UCI	20
	001300000105 <b>≛ Experiment:</b> 4464 +		
	Visit: 1 Seg: 2 Date: 07/15/2003	UMN	20
	001300000105 <b>Experiment:</b> 5911 +		
	Visit: 1 Seg: 2 Date: 07/15/2003	DUKE	20
	001300000105 <b>Experiment:</b> 8994 +		
	Visit: 1 Seg: 2 Date: 07/15/2003	UIOWA	20

## Figure 3.7: Subject Visit Information Screen – Details Hidden

000

DIDNI BIOMEDICA

Subject Visit Information - 1 A 

		N / A VAR		Welcome mcohn@ You are connected to
				► Hel
ssments				
	Subject: 001200635031			Show Detail
	Clinical Visits			Show Detail
	Visit ID	Visit Date		
	-	02/02/2005		
	Segments			
	Segment ID	Protocol	Protocol Version	Study
	1	Subjects screening protocol	1	
	Segment ID	Protocol	Protocol Version	Study
	2	Subjects screening protocol Protocol	1	<b>Church</b>
	Segment ID		Protocol Version	Study
	3	Subjects screening protocol	1 Broto col Morrigo	Shudu
	Segment ID	Protocol	Protocol Version	Study
	4	Subjects screening protocol Protocol	1 Protocol Version	Chudu
	Segment ID 5	Subjects screening protocol	1	Study
	Segment ID	Protocol	Protocol Version	Study
	6	Subjects screening protocol	1	Study
	Segment ID	Protocol	Protocol Version	Study
	7	Subjects screening protocol	1	Study
	Segment ID	Protocol	Protocol Version	Study
	8	Subjects screening protocol	1	Study
	Segment ID	Protocol	Protocol Version	Study
	9	Subjects screening protocol	1	Stady
	Segment ID	Protocol	Protocol Version	Study
	10	Subjects screening protocol	1	otady
	Segment ID	Protocol	Protocol Version	Study
	11	Subjects screening protocol	1	ouby
	Segment ID	Protocol	Protocol Version	Study
	12	Subjects screening protocol	1	
	Segment ID	Protocol	Protocol Version	Study
	13	Subjects screening protocol	1	
	Segment ID	Protocol	Protocol Version	Study
	14	Subjects screening protocol	1	
	Segment ID	Protocol	Protocol Version	Study
	15	Subjects screening protocol	1	
	Segment ID	Protocol	Protocol Version	Study
	Segment ID 16	Protocol Subjects screening protocol	Protocol Version 1	Study

▲ //:

 $\bigcirc$ 

# Figure 3.7b: Subject Visit Information Screen – Details Shown

000

Subject Visit Information

)		S	ubject Visit Information						
BIF MEDICAL INFORMA	RN RTICS RESEARCH NETWORK				Welcome mcohn@ucl.edu				
					You are connected to bdr_birn Help!				
ery Assessments					, noipi				
tch Jobs									
	Subject: 001200635031				Hide Deta				
<u>ge Jobs</u>	Clinical Visits								
ne	Visit ID		Visit Date						
	1		02/02/2005						
D	Segments								
Report	Segment ID	Protocol		Protocol Version	Study				
	1	Subjects screening pro	tocol	1					
gout	Assessments			-					
	Edinburgh Handedness Inventory								
	Handesness_left_v		wing handedness_Left_throwing	Handedness_left_scissors	Handedness_left_toothbrush				
	<u>_</u>	5 0	5 <u> </u>	0					
	Handedness_left_	knife Handedness_left_sp	oon Handedness_left_broom	Handedness_left_match	handedness_left_box				
	0	0	0	0	0				
	Handedness_left_	total Handesness_right_wr	iting Handedness_right_drawing	handedness_Right_throwing	Handedness_right_scissors				
	0	2	2	2	2				
	Handedness_right_to			Handedness_right_broom	Handedness_right_match				
	2	2	2	2	2				
	handedness_right		otal						
	2	20							
	Segment ID	Protocol		Protocol Version	Study				
	2	Subjects screening pro	tocol	1					
	Assessments								
	Socio-Economic Statu								
	ses education subject 4	ses education p_caretaker_prior18 2	ses education p_caretaker_lifetime 2	ses education s_caretaker_prior18 *	ses education s_caretaker_lifetime *				
	ses occupation subject	ses occupation p_caretaker_prior18	ses occupation p_caretaker_lifetime	ses occupation s_caretaker_prior18	ses occupation s_caretaker_lifetim				
	4	3	3	*	*				
	Segment ID	Protocol		Protocol Version	Study				
	3	Subjects screening pro	tocol	1					
	Assessments								
	North American Adult	Reading Test (NAART)							
		total errors	VIQ	PIQ	FSIQ				
		36	96.66	104.28	99.72				
	Segment ID	Protocol		Protocol Version	Study				
	4	Subjects screening pro	tocol	1					

Assessments Fagerstrom Test for Nicotine Dependence •

#### 000 Statistics Wizard $\bigcirc$ BIRN BIOMEDICAL INFORMATICS RESEARCH NETWORK Welcome mcoh You are connected to bdr\_bit Help! Query Assessments No Batch Jobs **Data Exploration** Manage Jobs ► <u>Home</u> Stats: Univariate 💌 Factors Bug Report Continuous Discrete AIMS1 AIMS12 AIMS13 Logout -Output Selection Descriptive Statistics Plot Histogram Shapiro-Wilk Normality Test QQ-Plot Plot Bar Graph Continue **A**

## Figure 3.8: Data Exploration Screen – Univariate Analysis

Home | About Us | Resources | Test Beds | Publications | Contact



# Figure 3.8b: Data Exploration Screen – Bivariate Analysis

000	Statistics Wizard	C
	ICS RESEARCH NETWORK	Welcome demo You are connected to uci_fbirn
		Site Map ► Help!
<ul> <li>Query Assessments</li> </ul>		
► Experiment	Data Exploration	
BIOMEDICAL INFORMATICS RESEARCH NETWORK       Welcome of the second device on the second device		
	Variable Selection	
► <u>Home</u>		
► Bug Report	Bivariate Stats	
h locut		
► <u>Logour</u>		
		_

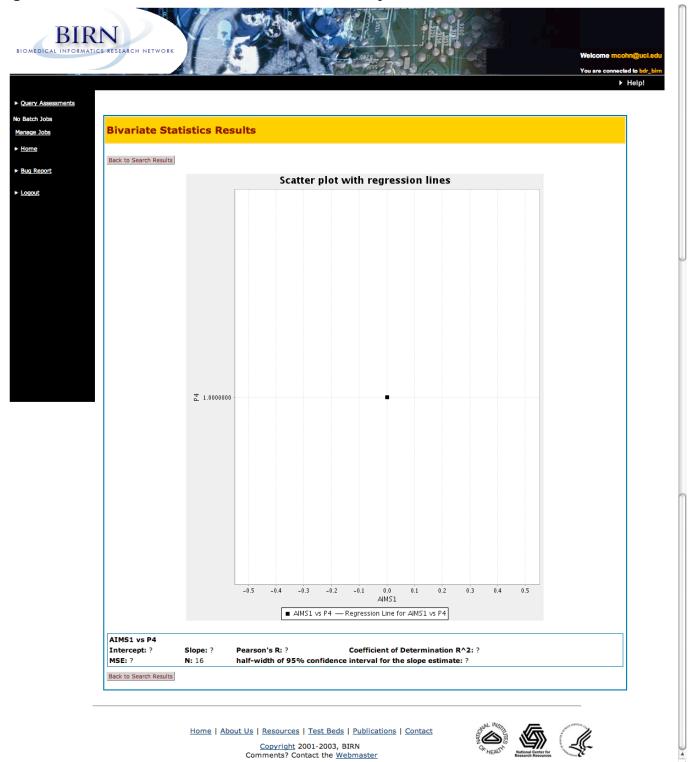
## Figure 3.9: Statistics Results – Univariate Analysis

)	Statistics Results	
BIRN MEDICAL INFORMATICS RESEARCH NETWO	RK	Welcome mcohn@ucl.ed
		► Help!
tch Jobs		
	Statistics Results	
AIMS1 16	ean SD Min Max Kurtosis Skewness 0 0 0 0 ? 0	
AIMS12 16 Back to Search Resul		
back to Scarch Result		
	Home   About Us   Resources   Test Beds   Publications   Contact	STRAIGH CE CE

Home | About Us | Resources | Test Beds | Publications | Contact



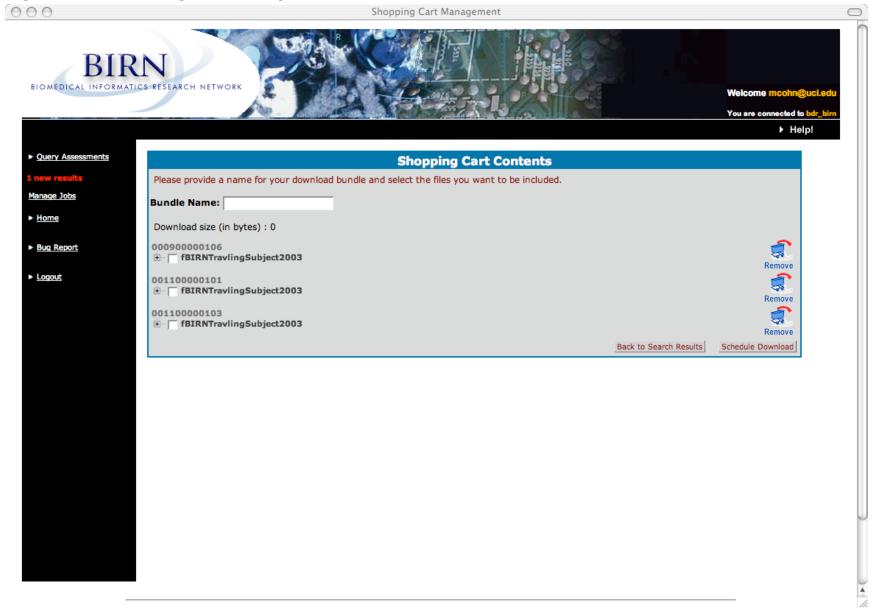
## Figure 3.10: Statistics Results – Bivariate Analysis



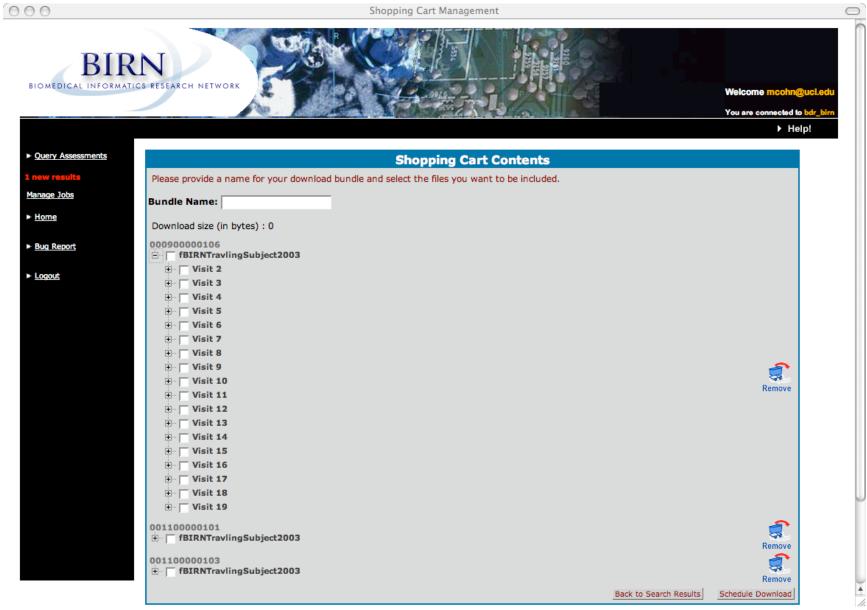
# Figure 3.11: Batch Query Submission Screen

00		Batch Query Submission
BIOMEDICAL INFORM	RN AATICS RESEARCH NETWORK	Welcome mcohn@ucl.er You are connected to bdr_b
		► Help!
Query Assessments		
No Batch Jobs	Particle Onesee	• A la charte de la
Manage Jobs	<b>Batch Query</b>	Submission
► <u>Home</u>	Description:	
	Abnormal	
Bug Report	<ul> <li>Involuntary Movement Scale</li> </ul>	
	✓ age	age in years
► <u>Logout</u>	Anxiety Status Inventory (ASI)	The Anxiety Status Inventory (ASI) was developed by Zung as a rating instrument for anxiety disorders. 20 affective and somatic symptoms associated with anxiety are graded by an observer based on patient interview. Score ranges from 20 to 80. The higher the score the greater the symptoms associated with anxiety. The ASI index converts the raw score by dividing the raw score by 80 then multiplying by 100. References: Zung WWK. A rating instrument for anxiety disorders. Psychosomatics. 1971; 12: 371-379. From http://www.medal.org/adocs/docs_ch18/doc_ch18.06.html#A18.06.02
	Barnes Akathisia Rating Scale	
	Beck Depression Inventory (BDI)	The Beck Depression Inventory (BDI) is a 21-item test presented in multiple choice format which purports to measure presence and degree of depression in adolescents and adults. Each of the 21-items of the BDI attempts to assess a specific symptom or attitude "which appear(s) to be specific to depressed patients, and which are consistent with descriptions of the depression contained in the psychiatric literature." Although the author, Aaron T. Beck, is associated with the development of the cognitive theory of depression, the Beck Depression Inventory was designed to assess depression independent of any particular theoretical bias. 5-9, normal; 10-18, Mild to moderate depression; 19-29, Moderate to severe depression; 30-63, Severe depression; < 4, Possible denial of depression.
	Calgary Depression	n
	Calle Deficit Syndrom ScoreSheet	
	Demographics	
	Edinburgh Handedness Inventory	
	☐ education	education that the subject received.
	🔲 ethnicity	ethnicity defined by NIH 5/2001
	ExcelTest	
	Fagerstrom Test for Nicotine Depender	
	father's education	education that the subject's father received.

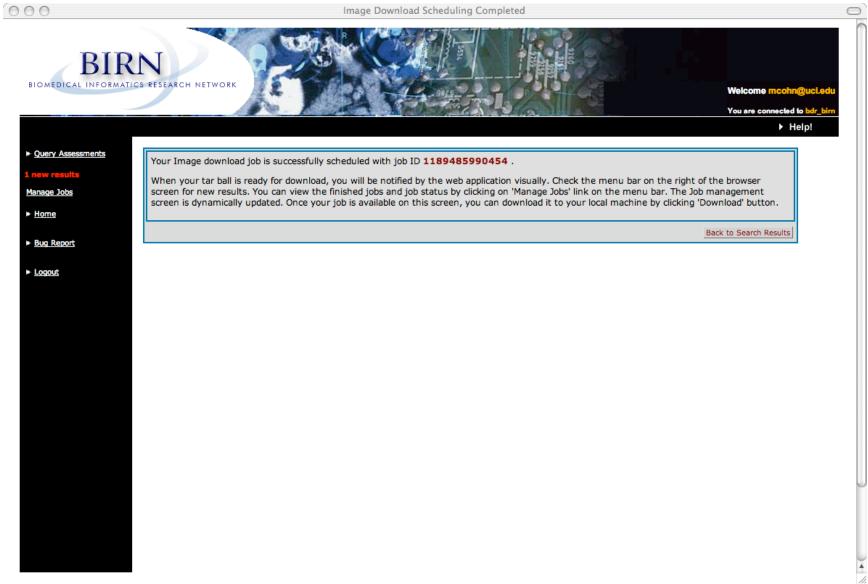
## Figure 3.12: Shopping Cart Management Screen



#### Figure 3.12b: Shopping Cart Management Screen – Navigation Tree



#### Figure 3.13: Scheduled Download Confirmation Message



50

### Figure 3.14: Subject Visit Information Screen – Image Series

000

Subject Visit Information 0 Segment ID Protocol **Protocol Version** Study 15 sensory motor task scan 1 MRI Segment ID Protocol **Protocol Version** Study MRI 16 anatomic scan: 3D FSPGR or T1 scan 1 Segment ID Protocol **Protocol Version** Study 17 post-scan protocol MRI 1 MRI Scan Visits Visit ID Visit Date 9 09/04/2003 Segments Segment Protocol **Protocol Version** Study ID pre-scan protocol 1 MRI You can export the image series for this scan as an AFNI brik. The image series is retrieved from the SRB, converted to an AFNI brik from DICOM and tarred and gziped for transfer efficiency. This operation may take upto a minute (usually around 30 seconds or less), so please be patient. If you hit a cached result either requested earlier or by another user, this operation may take significantly less time. Download as AFNI BRIK Browse Image Data Segment Protocol **Protocol Version** Study ID audio setup phase 1 of 3 1 MRI 2 You can export the image series for this scan as an AFNI brik. The image series is retrieved from the SRB, converted to an AFNI brik from DICOM and tarred and gziped for transfer efficiency. This operation may take upto a minute (usually around 30 seconds or less), so please be patient. If you hit a cached result either requested earlier or by another user, this operation may take significantly less time. Download as AFNI BRIK Browse Image Data Segment Protocol **Protocol Version** Study ID 3 audio setup phase 2 of 3 1 MRI Scanner Info Make: Psychology Software Tools Model: Eprime 1.1 (1.1.4.1), at site 0009 You can export the image series for this scan as an AFNI brik. The image series is retrieved from the SRB, converted to an AFNI brik from DICOM and tarred and gziped for transfer efficiency. 4 11. This operation may take upto a minute (usually around 30 seconds or less) so please be patient

## Figure 3.15: Job Management Screen

1189465702360

Batch Query

00			Manage	Jobs					(
	ICS RESEARCH NETWORK	F			2000 - 2000			Welcome mcohn@ut You are connected to be Help!	ir_birn
Query Assessments     I new results     Manage Jobs     Home	JobID	Туре	Scheduled . Date	Jobs for 'mcohn@u Description	ci.edu' Status	Size	# Downloads		
► <u>Bug Report</u>	1189485990454	Image Download	Mon Sep 10 21:46:30 PDT 2007	download named 'My Bundle'	not_started	N/A	N/A	Download	

Mon Sep 10 16:08:22 PDT 2007

Logout

) **4** 

Download

Remove

finished

19Kb

N/A

52