



IMMUNOLOGY DATABASE  
AND ANALYSIS PORTAL

# ImmPort v2.3 Data Submission Discussion

29 July 2008

Teleconference # 1-866-740-2200

Pass code 5630833



IMMUNOLOGY DATABASE  
AND ANALYSIS PORTAL

**Agenda**  
**ImmPort v2.3**  
**Data Submission Changes**  
**(July 2008)**

- DAIT Minimum Information Standards
- HLA Metadata 'Silver Standard'
- Effects on ImmPort Data Submission
  
- Comments



IMMUNOLOGY DATABASE  
AND ANALYSIS PORTAL

## Take Home Message

**Please contact ImmPort staff before sending your data submission packages. We will be happy to assist with updating your files.**

**[helpdesk@import.org](mailto:helpdesk@import.org)**



IMMUNOLOGY DATABASE  
AND ANALYSIS PORTAL

## **DAIT Minimum Information Standards**

DAIT Program Staff, Principal Investigators from the BISC user community, and other researchers developed a set of minimum information standards to describe:

- Research Subjects and their treatments
- Selected assay methods
  - ELISPOT
  - MBAA (Multiplex Bead Array Assays)
  - Q-PCR
  - Flow Cytometry

These revised standards are intended to provide guidance on how to describe research methods and results, encourage consistency and facilitate data interoperability.

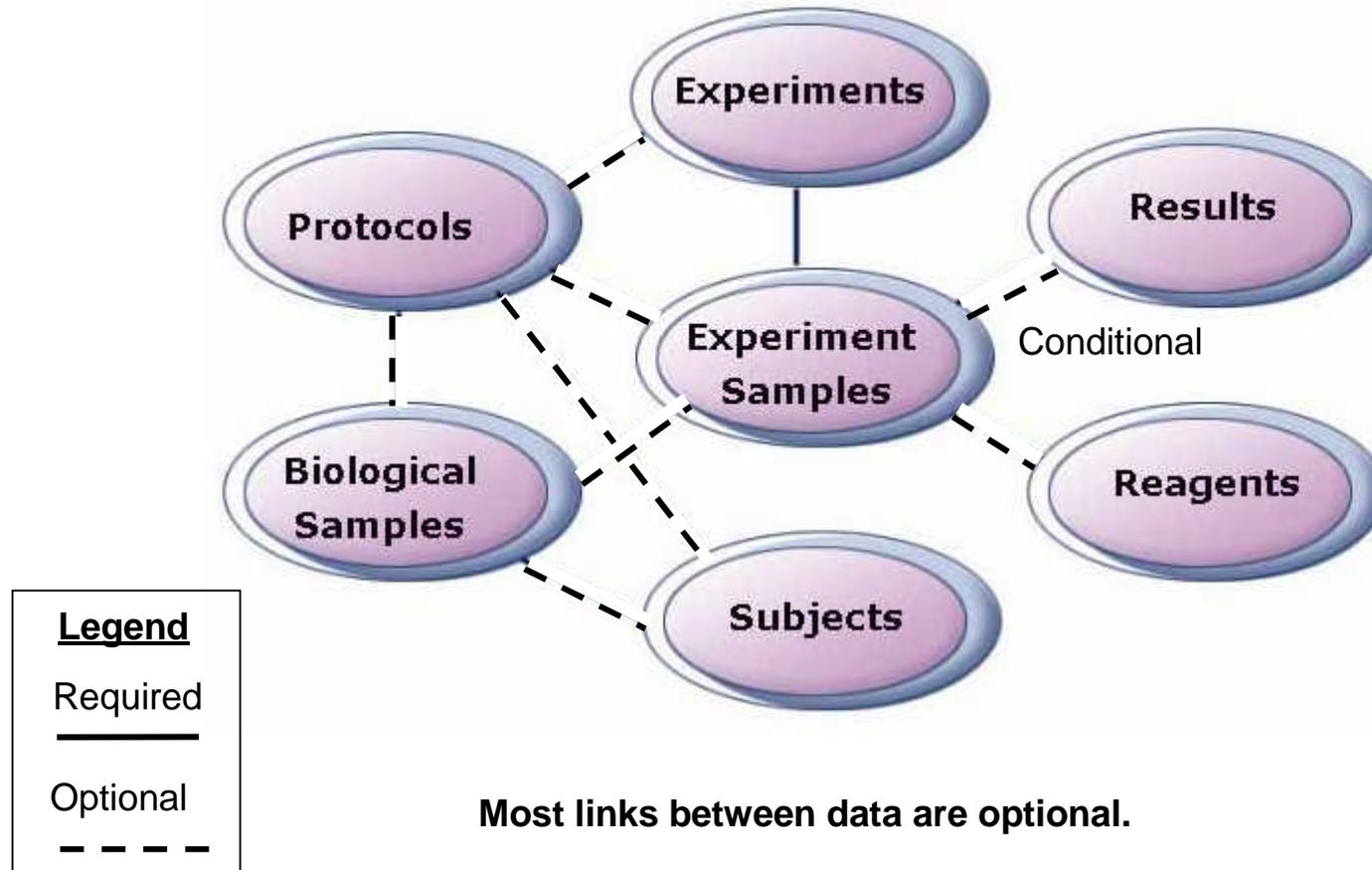


## DAIT Minimum Information Standards Effects on ImmPort Data Submission

- **Links to Protocols from Subjects, Biological Samples, Experiment Samples, and Experiments are required.**
- **Links to Reagents from Experiment Samples are required.**
- **Reagent descriptions will require inclusion of manufacturer and catalog number.**
  
- HLA typing system descriptions are expanded.
  - The reagents.xls workbook has an upgraded HLA typing system worksheet.
  - An optional HLA\_Typing\_System\_Features.xls allows you to describe the probes and features being typed in greater detail.
  - The HLA\_Typing\_System\_Allele\_Ambiguity.xls is another optional file to describe ambiguity status of typing results.
  - Additional human subject descriptive columns are provided (optional).
  
- Selected assay results will have enhanced inclusion criteria:
  - Affymetrix Gene Expression results should include .cel and .txt files.
  - Flow Cytometry results should include a .fcs file.

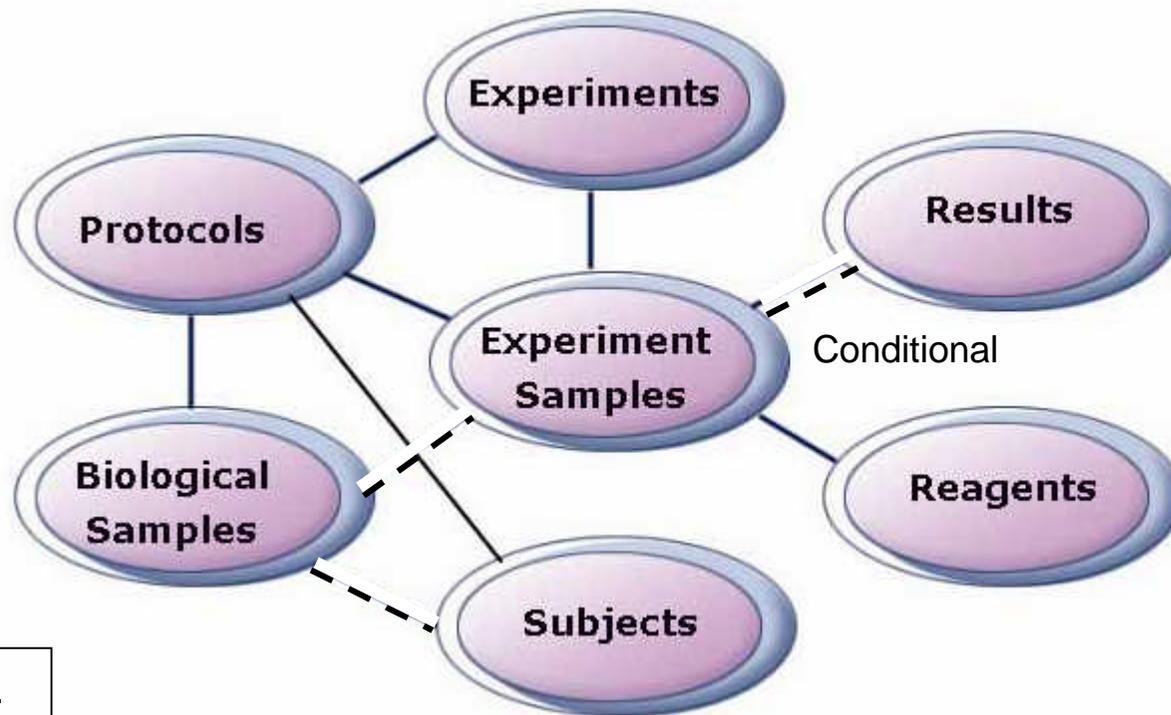


## Links between Data in ImmPort Pre-DAIT Minimum Information Standards





## Links between Data in ImmPort Post-DAIT Minimum Information Standards



### Legend

Required



Optional



More links between data are required.

The link to a protocol is one of the most commonly encountered change.



## Old vs. New ImmPort Data Submission Templates

Experiment Samples	Version 2.2												
Column Name	Experiment Sample User-Defined ID*	Experiment User-Defined ID*	Experiment ImmPort Accession*	Experiment Sample Name	Result File or Folder Name	Reagent User-Defined ID	Reagent ImmPort Accession	Experiment Sample Description	Replicate Group ID	Biological Sample User-Defined ID	Biological Sample ImmPort Accession	Protocol User-Defined ID	Protocol ImmPort Accession

Experiment Samples	Version 2.3												
Column Name	Experiment Sample User-Defined ID*	Experiment User-Defined ID*	Experiment ImmPort Accession*	Protocol User-Defined ID*	Protocol ImmPort Accession	Reagent User-Defined ID*	Reagent ImmPort Accession*	Experiment Sample Name	Result File or Folder Name	Experiment Sample Description	Replicate Group ID	Biological Sample User-Defined ID	Biological Sample ImmPort Accession

**Example:**

For Experiment Samples, the Protocol and Reagent reference column must be completed.

**Legend**

- Required  
White background
- Optional  
Gray background



## Some Practical Consequences for Data Submission

### Referencing Protocols

- Please describe to ImmPort your protocols.  
Attach a file of any format (.doc, .pdf, etc).
- Add a reference to your protocol.  
Complete one additional column in a template.
- A single protocol can be referenced that covers all aspects of the experiments.

### Referencing Reagents

- Many commercially available gene expression and genotyping arrays are pre-loaded into ImmPort and can be referenced as reagents.

Please Download an Updated Version of the Data Validator



IMMUNOLOGY DATABASE  
AND ANALYSIS PORTAL

## Take Home Message

**Please contact ImmPort staff before sending your data submission packages. We will be happy to assist with updating your files.**

**[helpdesk@import.org](mailto:helpdesk@import.org)**



## HLA Silver Standard

Authors:

Glenys Thomson, Steven Mack and HLA Consortium Investigators

Our aim is data validation via a standard reporting of HLA data to include:

- Documentation of the *typing method* used.  
For each locus, this includes:
  - Manufacturer of the typing system used (e.g., Luminex, Dynal, etc.).
  - Version of the typing system used (this may include catalog number).
  - Typing approach used to generate the primary data (e.g., SBT, PCR-SSOP, SSP, RSCP, etc.).
  - Exons interrogated (minimally exons 2 & 3 for class I, and exon 2 for class II loci).
  - A list of the primer and probe sequences used.
  - A list of all alleles detectable using the system.
  - A sublist of all alleles that can be detected unambiguously by the system.
  - A sublist of all allele sets detected ambiguously by the system (i.e., sets of alleles that cannot be distinguished due to polymorphisms that are not detected by the system).
- A listing of *all allele and genotype ambiguities* per individual per locus (given the typing system), formatted to accurately record the ambiguities generated by the typing system.
- Documentation of the *rules* used to assign the two most likely allele “calls.”
- A listing of the two most likely allele “calls.””



## DAIT Minimum Information Standards Effects on ImmPort Data Submission

- Links to Protocols from Subjects, Biological Samples, Experiment Samples, and Experiments are required.
- Links to Reagents from Experiment Samples are required.
- Reagent descriptions will require inclusion of manufacturer and catalog number.
- HLA typing system descriptions are expanded.**
  - The reagents.xls workbook has an upgraded HLA typing system worksheet.**
  - An optional HLA\_Typing\_System\_Features.xls allows you to describe the probes and features being typed in greater detail.**
  - The HLA\_Typing\_System\_Allele\_Ambiguity.xls is another optional file to describe ambiguity status of typing results.**
  - Additional human subject descriptive columns are provided (optional).**
- Selected assay results will have enhanced inclusion criteria:
  - Affymetrix Gene Expression results should include .cel and .txt files.
  - Flow Cytometry results should include a .fcs file.



## Silver Standard HLA Typing System Templates

reagents.xls

HLA Typing System User-Defined ID*	Locus Genotyped*	Typing Method*	Exons / Intron Interrogated*	Last Pertinent WHO Report/Update*	HLA Typing Date*	Typing System Manufacturer*	Typing System Version*

HLA\_Typing\_System\_Features.xls

HLA Typing System User-Defined ID*	Locus Genotyped	Feature Name	Feature Type	Feature Location	Nucleotide/Peptide	Start Position	Strand complementarity	Feature Sequence

HLA\_Typing\_System\_Allele\_Ambiguity.xls

HLA Typing System User-Defined ID*	Locus Genotyped	Allele name	Ambiguous/Unambiguous status	Allele set number

### Legend

Required  
White background

Optional  
Gray background



IMMUNOLOGY DATABASE  
AND ANALYSIS PORTAL

## Take Home Message

**Please contact ImmPort staff before sending your data submission packages. We will be happy to assist with updating your files.**

**[helpdesk@import.org](mailto:helpdesk@import.org)**



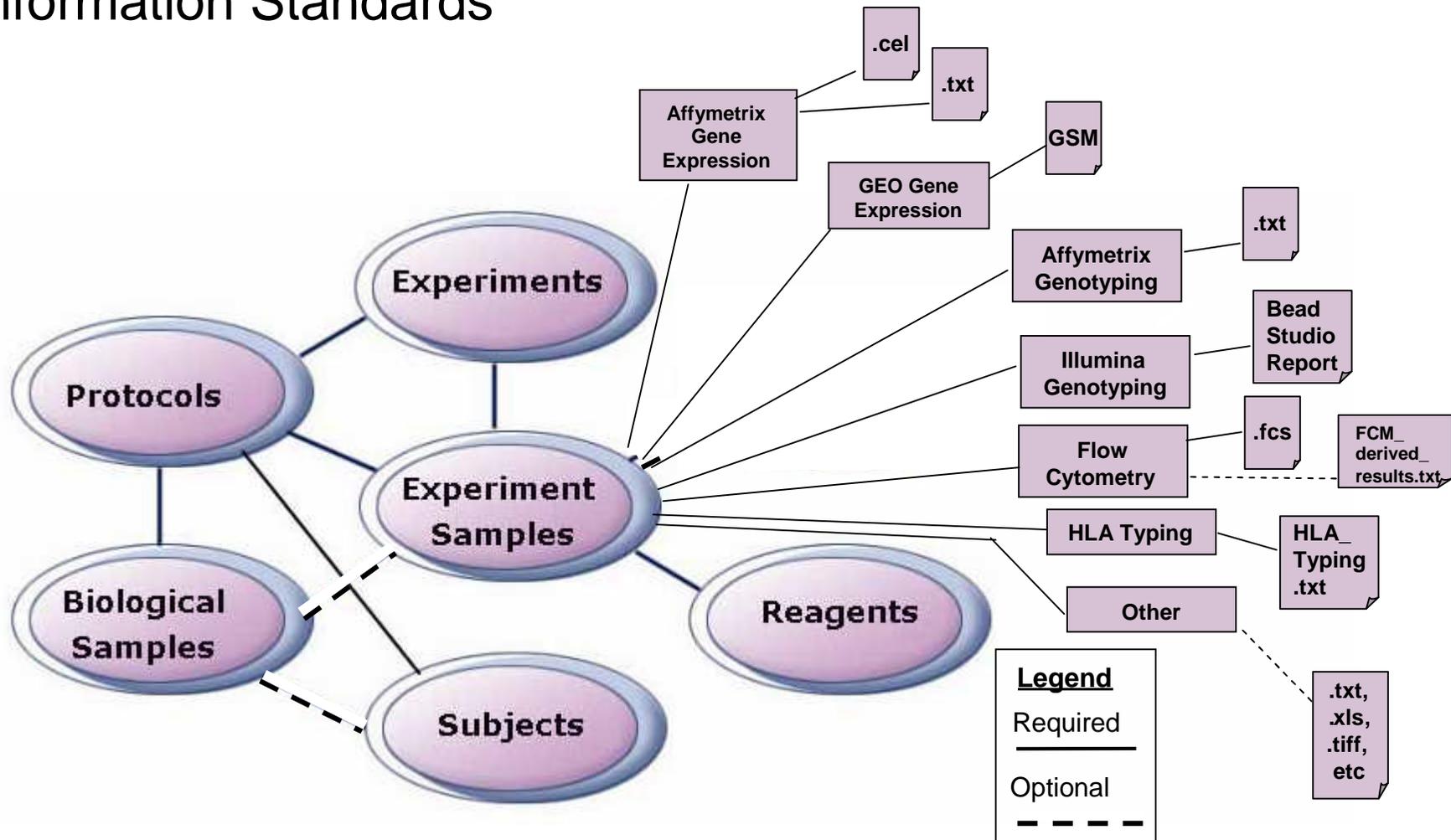
IMMUNOLOGY DATABASE  
AND ANALYSIS PORTAL

## DAIT Minimum Information Standards Effects on ImmPort Data Submission

- Links to Protocols from Subjects, Biological Samples, Experiment Samples, and Experiments are required.
- Links to Reagents from Experiment Samples are required.
- Reagent descriptions will require inclusion of manufacturer and catalog number.
  
- HLA typing system descriptions are expanded.
  - The reagents.xls workbook has an upgraded HLA typing system worksheet.
  - An optional HLA\_Typing\_System\_Features.xls allows you to describe the probes and features being typed in greater detail.
  - The HLA\_Typing\_System\_Allele\_Ambiguity.xls is another optional file to describe ambiguity status of typing results.
  - Additional human subject descriptive columns are provided (optional).
  
- Selected assay results will have enhanced inclusion criteria:**
  - Affymetrix Gene Expression results should include .cel and .txt files.**
  - Flow Cytometry results should include a .fcs file.**



## Results Data File Formats: Post-DAIT Minimum Information Standards





IMMUNOLOGY DATABASE  
AND ANALYSIS PORTAL

## Take Home Message

**Please contact ImmPort staff before sending your data submission packages. We will be happy to assist with updating your files.**

**[helpdesk@import.org](mailto:helpdesk@import.org)**



IMMUNOLOGY DATABASE  
AND ANALYSIS PORTAL

## Comments and Questions?

helpdesk@import.org