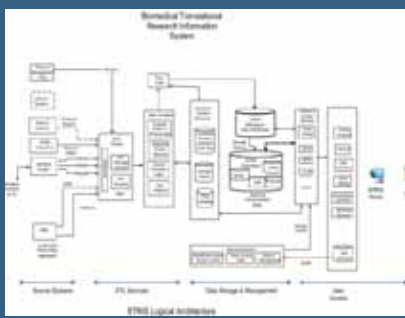
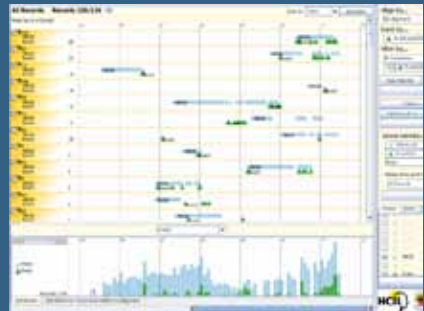
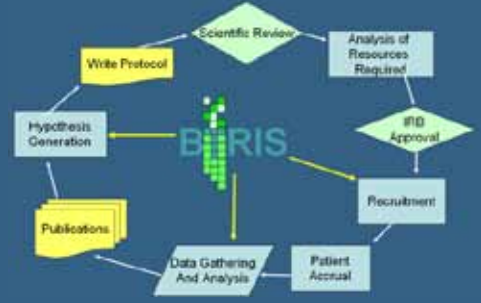
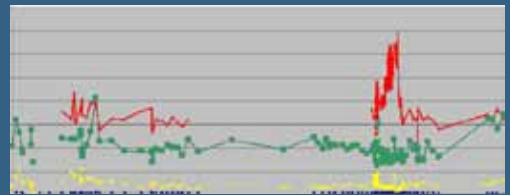


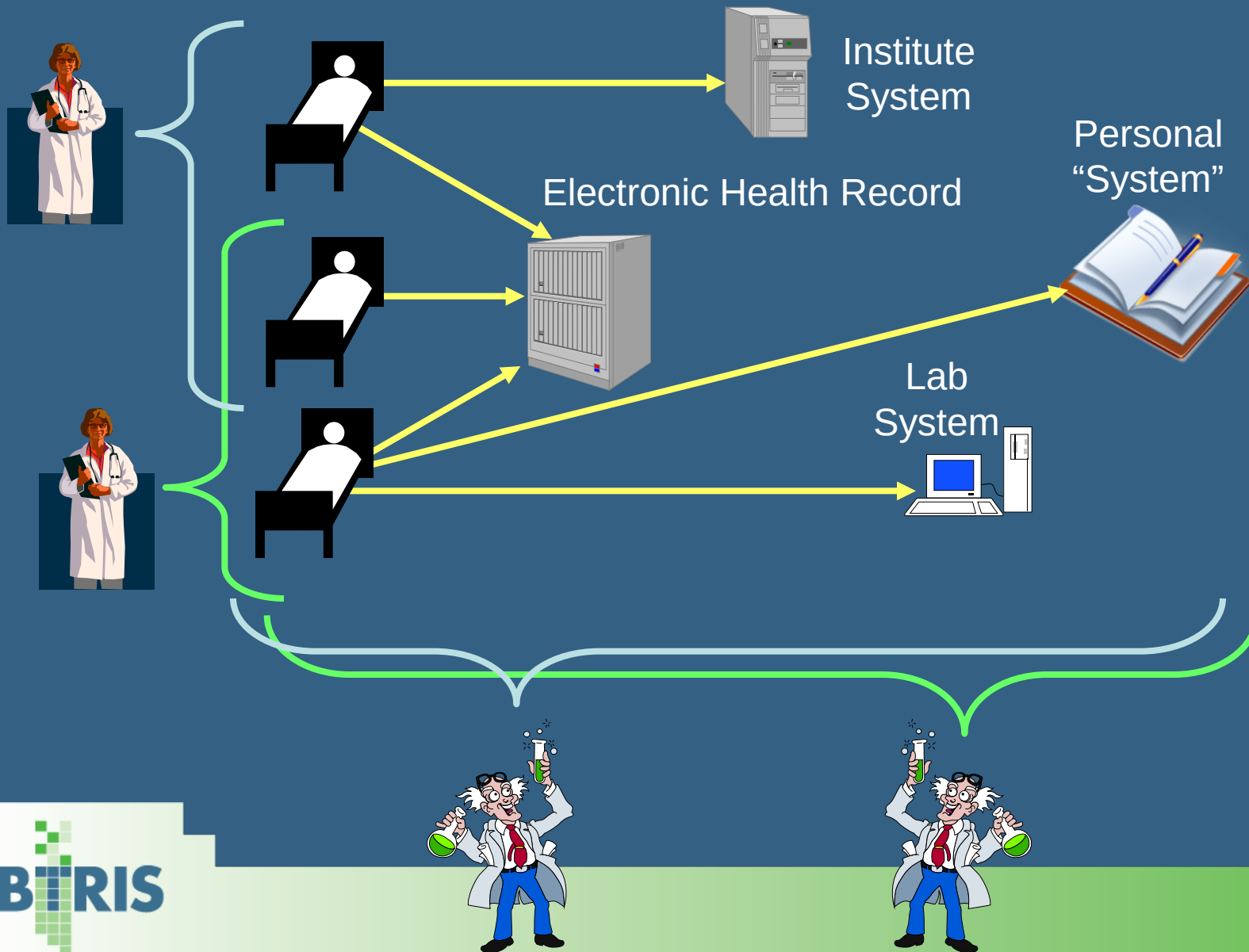
BTRIS: The NIH Biomedical Translational Research Information System



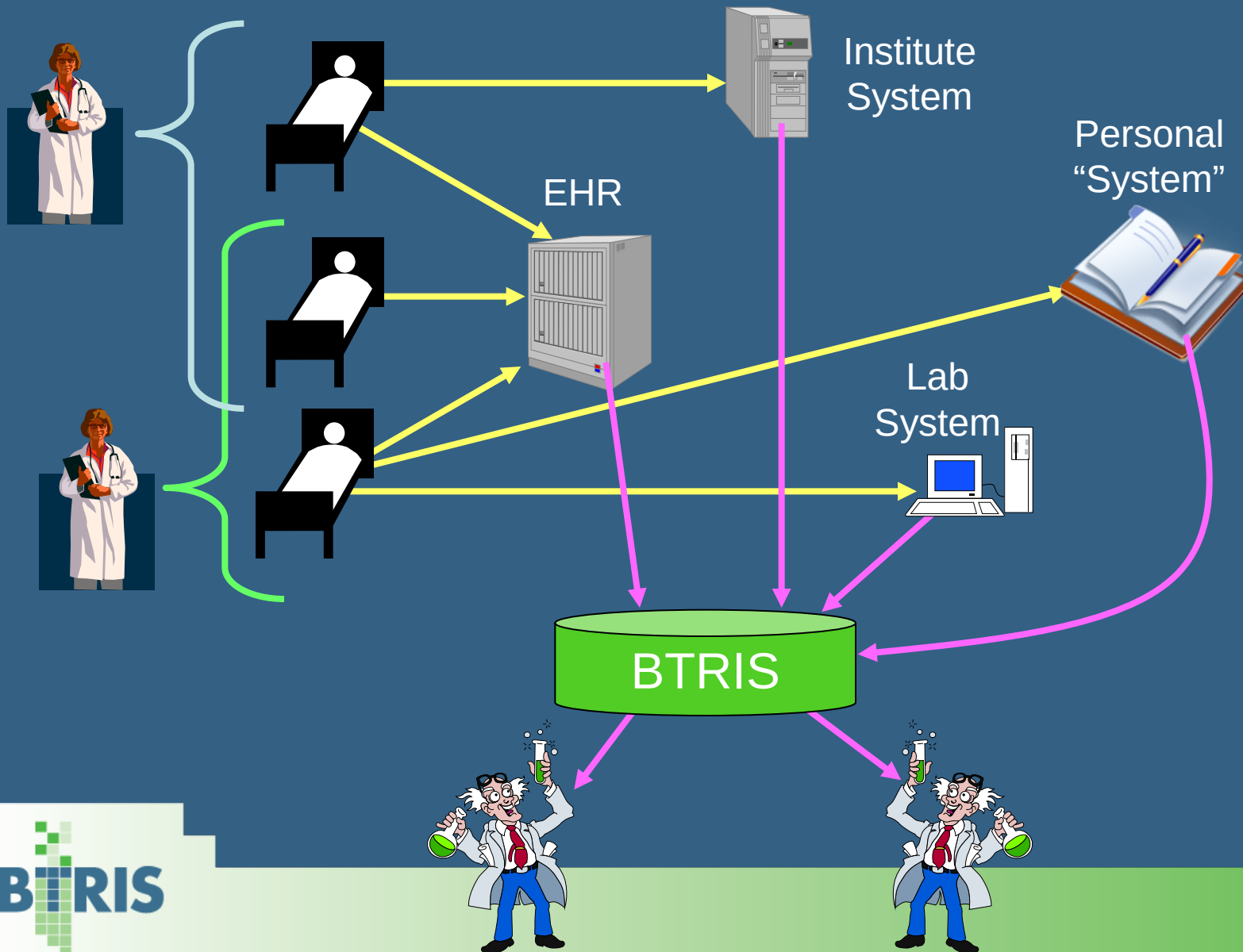
James J. Cimino
Chief, Laboratory for Informatics Development
NIH Clinical Center

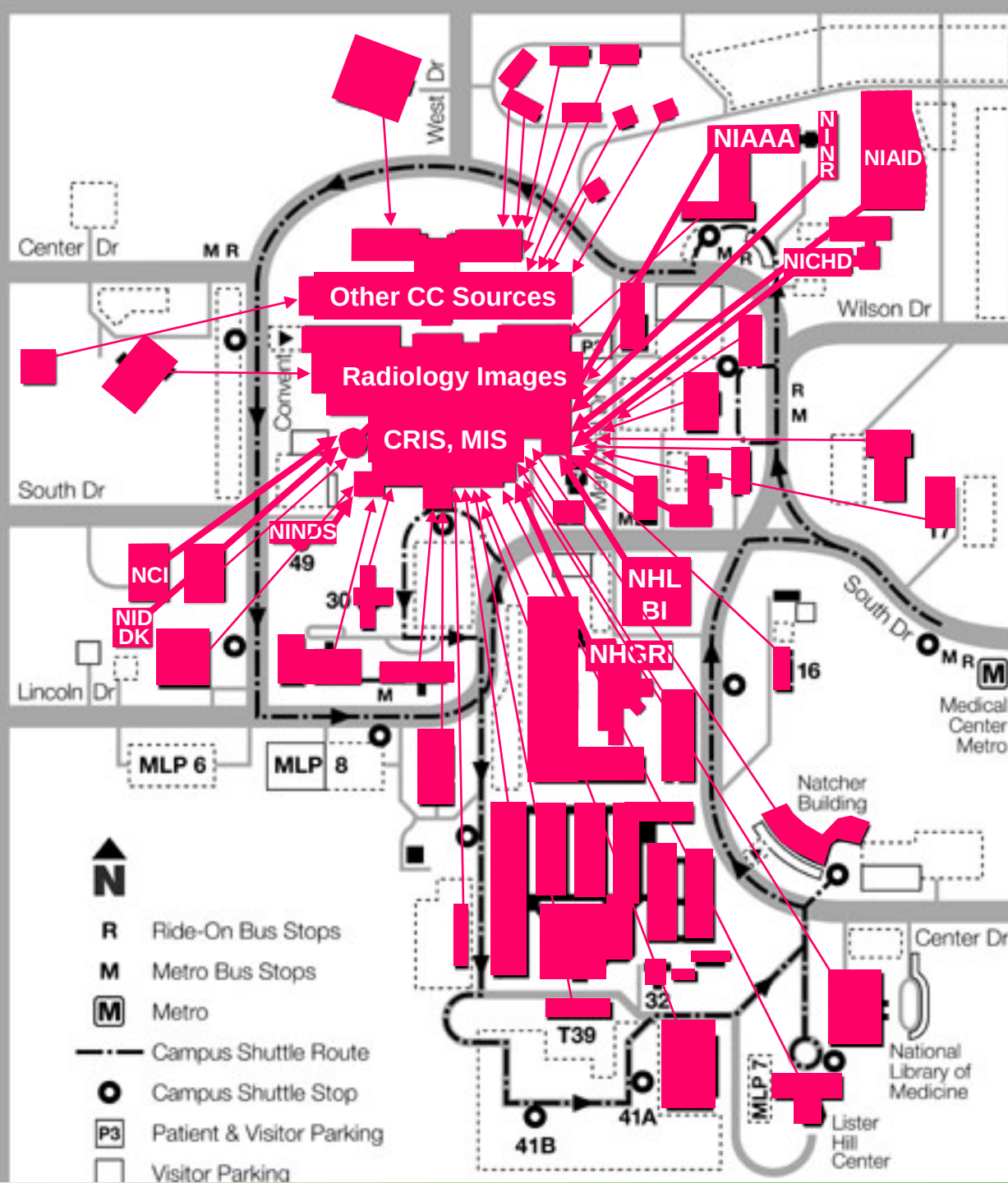


Clinical Data at NIH



Clinical Data at NIH





Data Queries

- CRIS
 - Alerts
 - Allergies
 - Anatomic Pathology
 - Blood Bank
 - Clinical Documents (unstructured)
 - Clinical Documents (structured)
 - Demographics
 - Diagnoses/Problems
 - Echocardiograms
 - Electrocardiograms
 - Lab Tests and Panels
 - Medication Administration
 - Medication Orders
 - Microbiology
 - Radiology Reports
 - Radiology Images
 - Vital Signs
- MIS
 - Blood Bank
 - Demographics
 - Lab Tests and Panels
 - Microbiology
 - Radiology Reports
 - Vital Signs
- Other institutes
 - NIAID (CRIMSON): Labs, Meds)
 - NIAAA (Clinical Assessments)
 - NCI (Labmatrix, C3D)
 - NICHD (CTDB: Forms)
 - NHGRI (Labmatrix)



Reports - Identified Data on Active Protocols

Select a report from the selections on the left side of screen. Report prompts and reports will display on right side of screen.

Summary Reports

Name

IRB Inclusion Enrollment

Subject Data Reports

Name

- Alerts
- Demographics
- Diagnosis
- Echocardiogram
- EKG
- CBC Panel
- Chem 20 Panel
- Laboratory Panel(s)
- Laboratory Test(s)
- Microbiology
- Pathology
- Medication Orders
- Medication Administration
- Radiology
- Transfusion
- Vital Signs

Lists

Name

- Laboratory Panel List
- Laboratory Test List
- Medication List
- Subject List

[Back to default entry](#)

General Lab Report -- Individual Test(s)

Select "Protocol Number (s)" first (mandatory). All other prompts are optional. After completing desired prompts, select "Finish" to begin running report.

Cancel

Home

Finish

Please select one or more Protocol Number(s) The number in () indicates the verified subjects in the protocol. Reports will include data on ONLY verified subjects. You can verify, exclude or add subjects in [BTRIS Preferences](#)

- * 08-H-0108 -- All 202 verified
- 09-CC-N202 -- No subjects identified
- 93-I-0119 -- (1261 of 1328 verified)
- BTRIS-TEST-00 -- (9 of 17 verified)
- BTRIS-TEST-01 -- All 18 verified
- BTRIS-TEST-02 -- (5 of 21 verified)

[Select all](#) [Deselect all](#)

(Optional) Please Click 'Subject List' to Display and Select One or More Subject(s)/MRN(s)

Subject List

- ☒ A
- ☒ A
- ☒ A
- ☒ A
- ☒ A
- ☐ A
- ☐ A
- ☐ A

[Select all](#) [Deselect all](#)

Please use EITHER the "Search and Select" prompt OR the "Tree" prompt to find or select Individual Test(s)

Please enter keywords to search and select for Individual Lab Test(s)



General Lab Report -- Individual Test(s)

My Selection(s):

Protocol(s):	08-H-0108 -- All 202 verified
General Lab Test(s):	Albumin Intravascular Test, Alkaline Phosphatase Intravascular Test
Collected Date Range:	From: All Dates To: Current Date
Days Range relative to Subject Initial Consent Date:	From: All Days To: All Days
Value Range:	From: All Values To: All Values

Subject Count: 5

Record Count: 40

Report Format

Standard Format

Protocol Number	MRN	Subject Name	Order Name	Collected Date Time	Observation Name	Observation Value	Observation Comment	Observation Note	Unit of Measure	Normal Range
08-H-0108	3	A :	Hepatic Panel	Oct 11, 2000 12:12:00 PM	Alkaline Phosphatase	137	H		U/L	37-116
			Mineral Panel	Oct 11, 2000 12:12:00 PM	Albumin	4.3			g/dL	3.7-4.7
			Hepatic Panel	May 4, 2001 7:32:00 AM	Alkaline Phosphatase	110			U/L	37-116
			Hepatic Panel	May 11, 2001 8:39:00 AM	Alkaline Phosphatase	116			U/L	37-116
			Hepatic	May 18,	Alkaline	127	H		U/L	37-116

Subject Data Reports

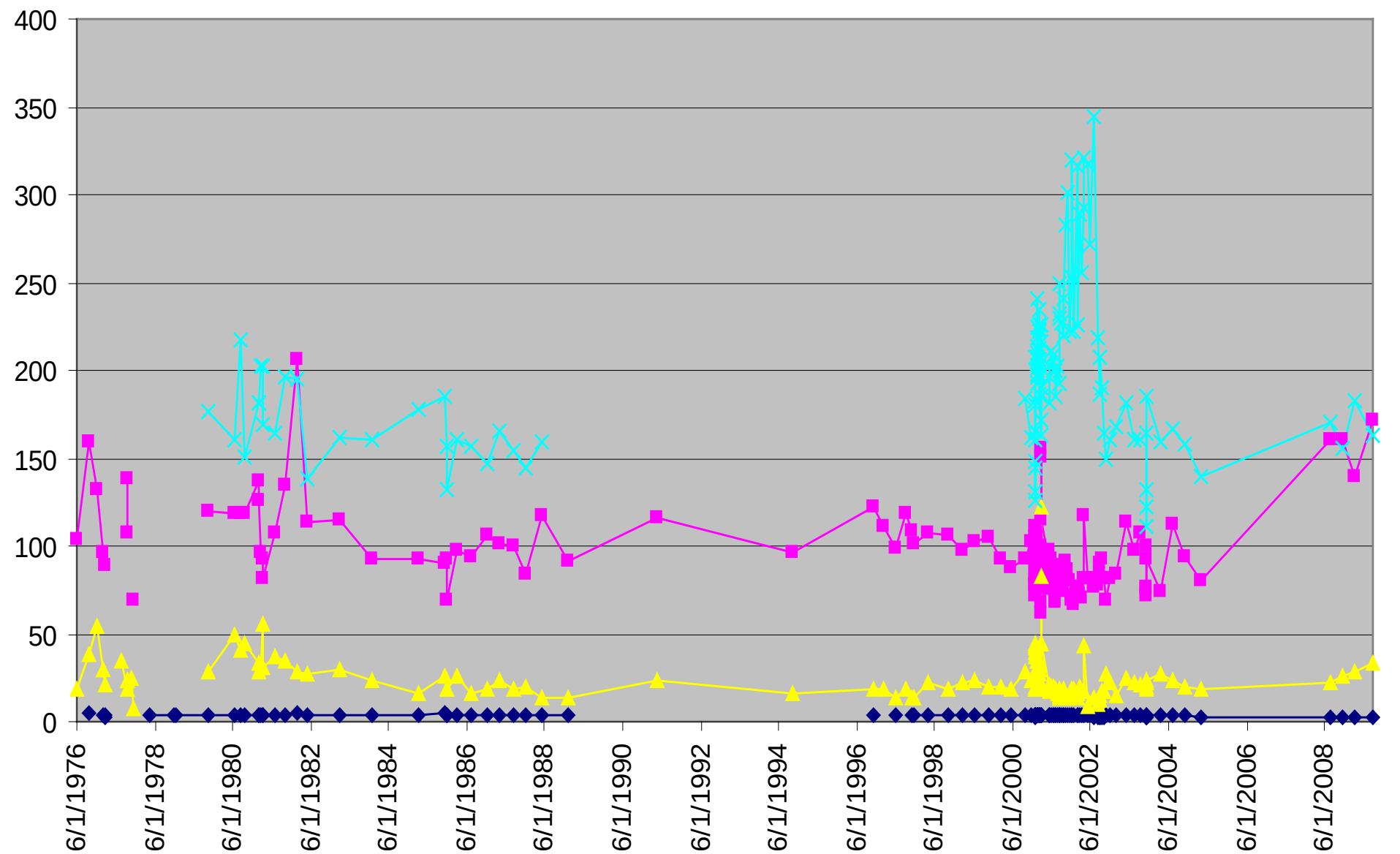
- Name
- Alerts
- Demographics
- Diagnosis
- Echocardiogram
- EKG
- CBC Panel
- Chem 20 Panel
- Laboratory Panel(s)
- Laboratory Test(s)
- Microbiology
- Pathology
- Medication Orders
- Medication Administration
- Radiology
- Transfusion
- Vital Signs

Lists

- Name
- Laboratory Panel List
- Laboratory Test List
- Medication List
- Subject List
- Vital Sign List

Links

- Name
- BTRIS

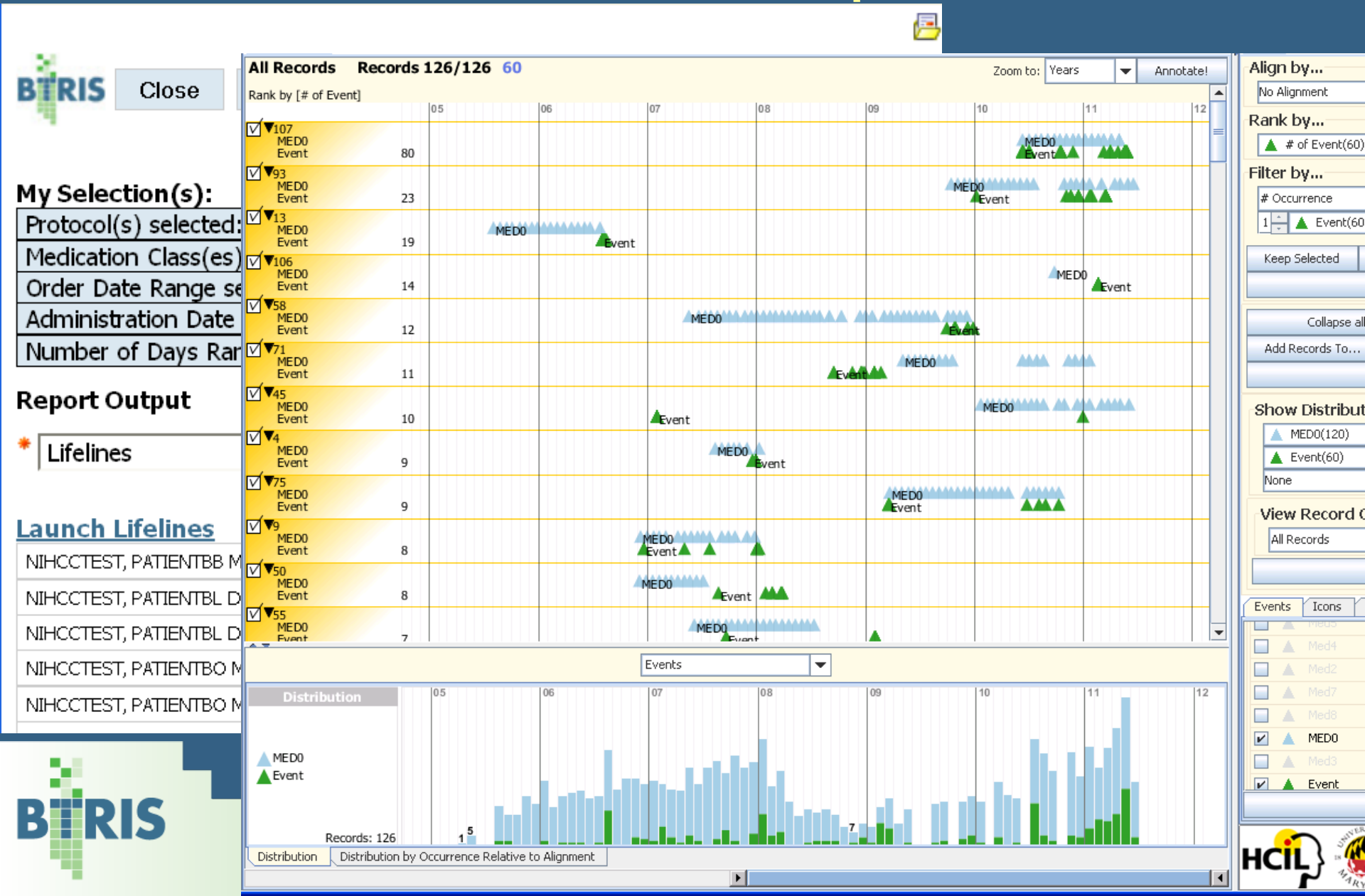


Radiology Report

	Result Date
	Apr 5, 2010 10:14:00 AM



Visualization of Temporal Data



New Data Modalities

BTRIS Close Re-Prompt

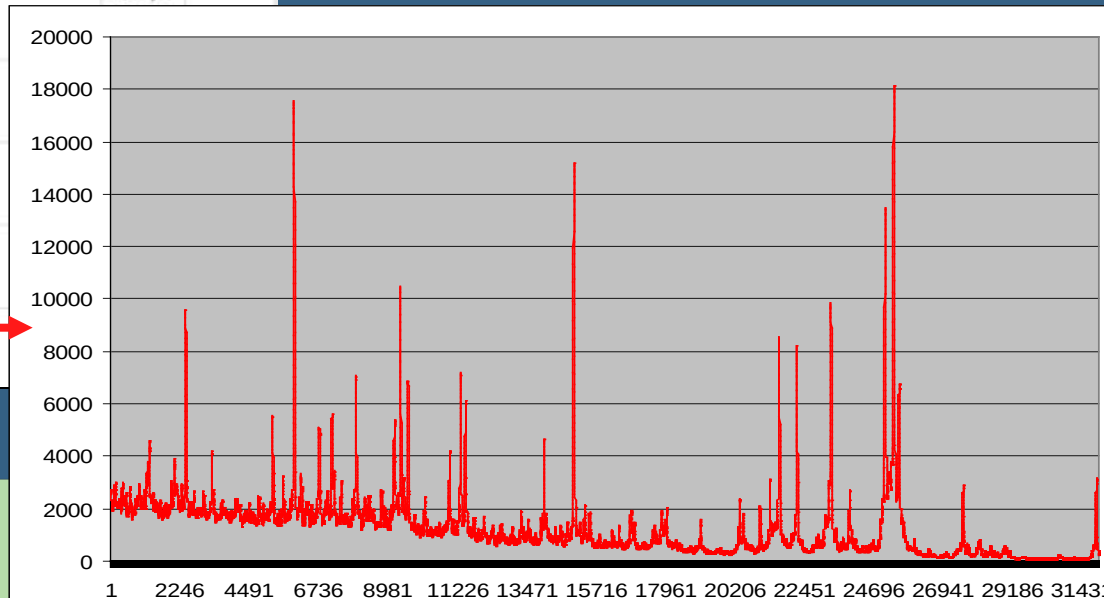
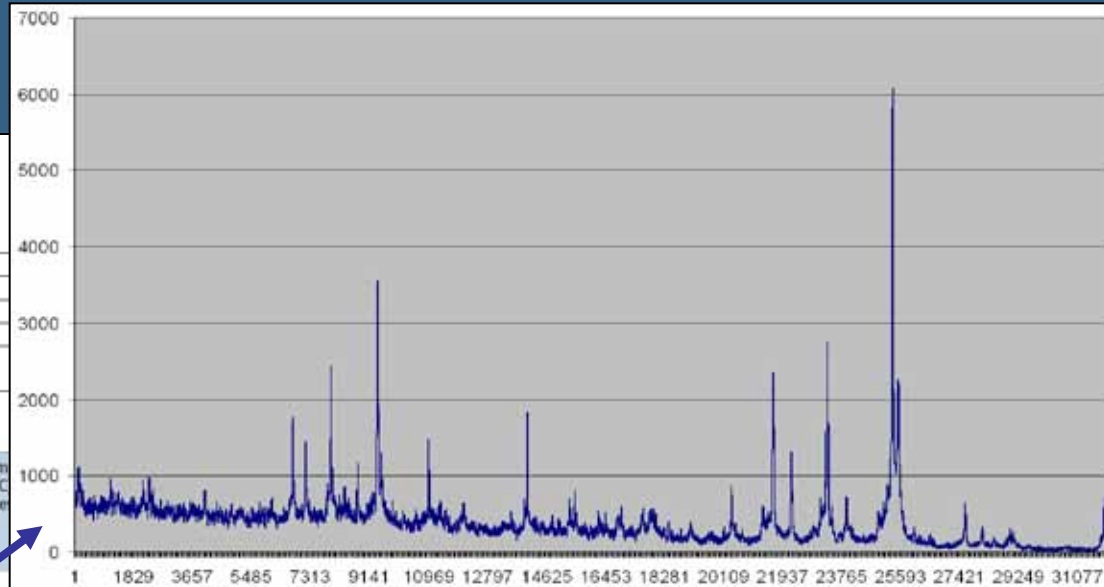
My Selection(s):

Protocol(s):	BTRIS-TEST-02 -- (12 of 31 verified)
Microbiology Test/Class(es):	All Tests
Microbiology Organism:	All Organisms
Collected Date Range:	From: Sep 1, 1980 To: Current Date
Days Range relative to Subject Initial Consent Date:	Start: All Dates End: All Dates

Subject Count: 2
Record Count: 109

Protocol Number	MRN	Subject Name	Collected Date	Organism	Organism Comment	Amikadn Sensitivity Test (CC, AK)	Amox/K Clav/Ate (C) Sensitivity Test (CC, AUG)	Am (C) Te
BTRIS-TEST-02	1000007	TEST, PATIENT LAB INPATIENT 1	Sep 24, 1980 10:06:00 PM	HAEMOPHILUS INFLUENZAE		> 128, R		
			Sep 24, 1980 10:06:00 PM	LISTERIA SPECIES		32, MR		
			Sep 24, 1980 10:06:00 PM	NEISSERIA MUCOSA		, ILLEG		
			Sep 24, 1980 10:06:00 PM	PASTEURELLA MULTOCIDA		, ILLEG		
			Sep 24, 1980 10:06:00 PM	PASTEURELLA SPECIES		128, R		

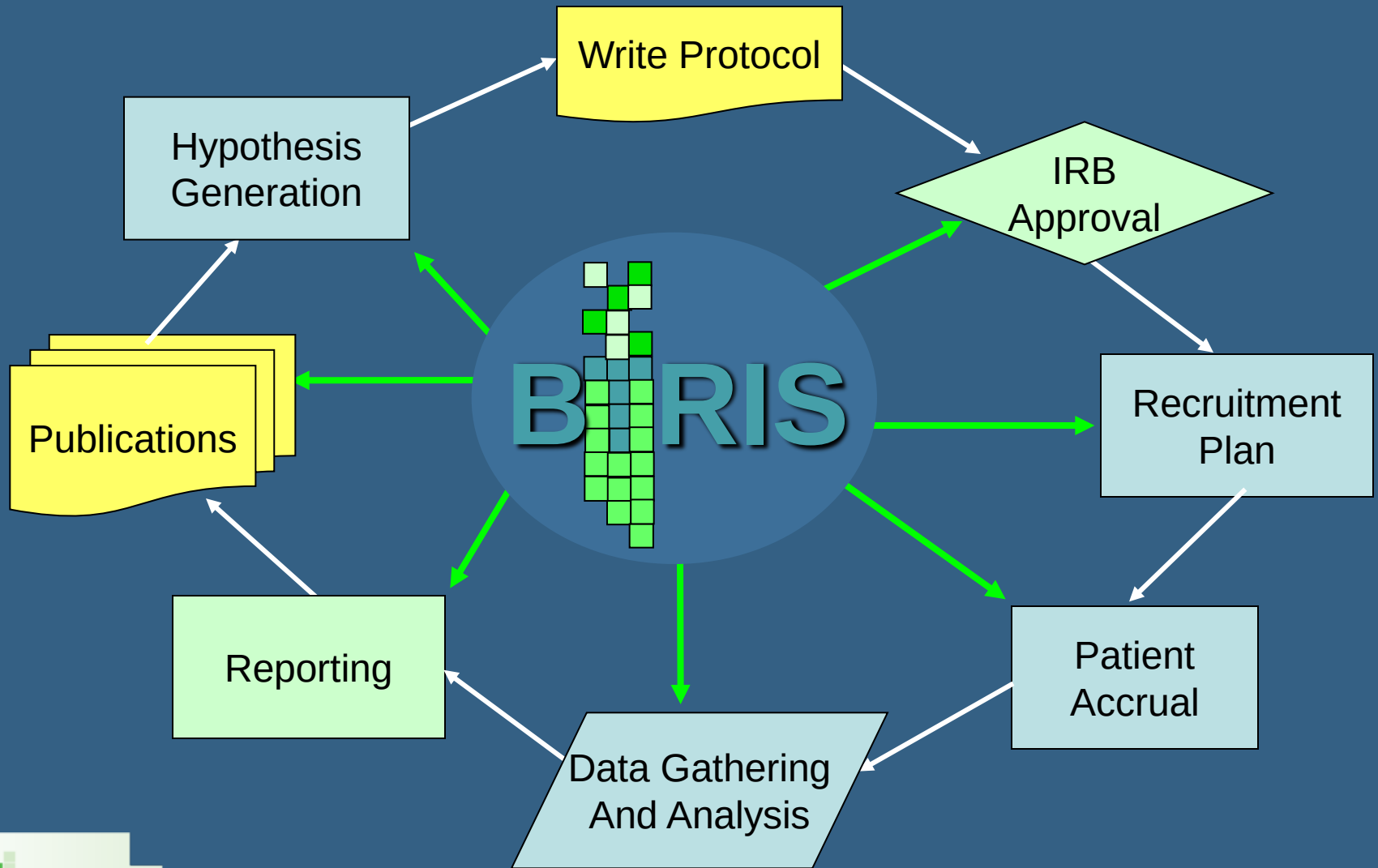
Top Page up Page down Bottom



The “Value-Added” of BTRIS

- Data are centralized
- User empowerment
- Concept-based queries
- Automated reporting
- Data available for re-use

BTRIS in the Research Process



Data Representation Issues

- When are different sources synonymous?
- Data Granularity $\neq$ Concept Granularity
- Capturing the context of the research

Inclusion of Genomic Data

- What is important to index?
- How do we cope with changing methods?

Policy Considerations

- Access is based on informed consent:
 - Access limited to approved investigators
 - Data limited to enrolled subjects
 - Data range limited by protocol
- Original investigators notified of reuse



BIOMEDICAL TRANSLATIONAL RESEARCH INFORMATION SYSTEM

National Institutes of Health

Home

NIH BTRIS

>> BTRIS Presentations

>> BTRIS Lecture Podcasts

>> BTRIS In The News

>> The Catalyst (3 MB)

>> The Record

>> CC News Articles

>> Staff Only

Welcome to BTRIS

The Biomedical Translational Research Information System (BTRIS) is a resource available to the NIH intramural community that brings together clinical research data from the Clinical Center and other NIH Institutes and Centers. BTRIS provides clinical investigators with access to identifiable data for the subjects on their own active protocols, while providing all NIH investigators with access to de-identified data across all protocols. BTRIS provides users with advanced search, filtering, and aggregation methods to create data sets to support ongoing studies and stimulate ideas for new research. BTRIS Version 1.0 contains subject data from CRIS/MIS, NIAID (Crimson) and NIA/AA. Future versions of BTRIS will contain additional historical and clinical data back to 1976, images, and subject data from other IC Systems such as NCI.

BTRIS is two distinct but interrelated applications, BTRIS Data Access and BTRIS Preferences. ([Refer to the graphic below](#))

BTRIS Data Access is the data repository where principal investigators or their designee create reports on their active protocols with identified subject data. The following reports will be available in BTRIS 1.0: IRB Inclusion Enrollment Report, Patient Demographics, Patient Lists, Laboratory and Microbiology Results, Vital Signs, Medication orders and administration. Additional reports will become available through the fall of 2009. In September, 2009 access to de-identified data will begin for research.

BTRIS
in their
investi
Data A

http://btris.nih.gov

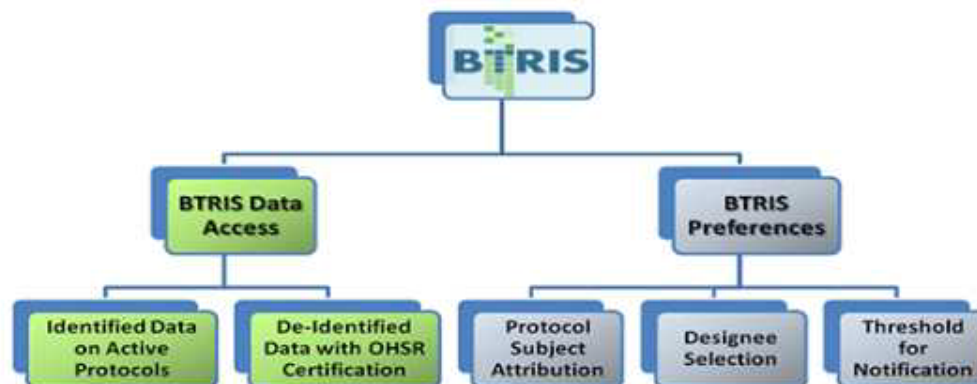
enrollment
principal
in BTRIS

For questions or comment about BTRIS contact [Dr. Jim Cimino](#), Chief, Laboratory for Informatics Development, NIH Clinical Center, National Institutes of Health, Bethesda, MD

Latest News

>> [Video: Town Hall Meeting and Information Session](#)

Held on September 15, 2009
Jim Cimino, MD, Chief of the NIH
Clinical Center's Laboratory for
Informatics Development



This graphic shows the two applications within BTRIS: BTRIS Data Access and BTRIS Preferences. BTRIS Data Access allows researchers to access identified data on active protocols, or de-identified data with approval from the Office of Human Subjects Research. BTRIS Preferences allows researchers to attribute subjects to their protocols, designate alternate users, and set thresholds