

# Global Centers for Biological Resources: the Coriell/BioRep Experience

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### **Presentation Outline**

- Organization
- Background & Rationale for European Expansion
- Partnership Engagement
- Contracting Opportunity
- Current and Future Biobanking "Drivers"
- Conclusions, Questions & Answers



### Introduction to the Coriell Institute

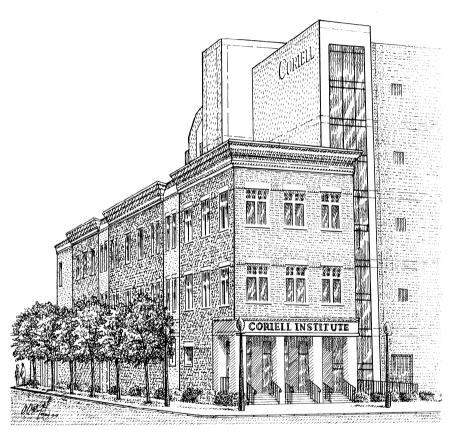
Founded in 1953

Private Not- for- Profit, 501(c) (3) Corporation

Basic bio-medical research Institute, committed to basic biological research, biobanking, and education

Research focus: genome informed medicine, operationalized through the "Coriell Personalized Medicine Collaborative (CPMC)"

Home of the *Coriell Cell Repositories* - the world's largest repository of living human cells for use in research.





### International Biobanking Experience

- Ships and receives specimens from 40-60 countries annually
- Site of the National Institutes of Health (NIH), National Human Genome Research Institute's (NHGRI) "Haploid Mapping Project
- Manages public and private collections
- "Custodian" for these and other private collections, assuring compliance to the wishes of the collection sponsor.
- Recognized for its uncompromising commitment to quality.





### **Expansion Rationale**

- Coriell negotiated a large pharmaceutical agreement
- Completed a corporate/ intense QA/QC Audit
- European strategy compromised contract execution





### Global Initiative Strategy

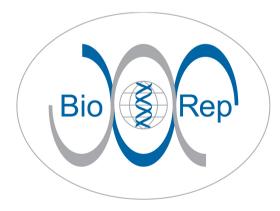
- International Partnerships
- Application of ISO9001:2000 standards
- Driven by a commitment to excellence in biobanking
- Information Technology would serve as the central "backbone"
- Specimen management would be achieved via laboratory design
- Unwavering compliance to EU/US regulatory requirements





### Strategy Implementation

# Negotiated an international collaboration with BioRep S.r.L.



facilitating research worldwide



### Introduction to BioRep

- Founded in 2003, initiated operations December 2005
- Private, Independent biorepository service provider
- Committed to basic biological research, biobanking, and education
- Home of the EuroHD Network the world's first BioBank for Huntington's Disease
- Investors: Sapio Life, Angelantoni Industries, and Integrated System Engineering





### Global Partnership

### Purpose:

services to the international market



Camden, NJ **USA** 

Milano. Italy





### **Contractual Agreements**

# Licensing Agreement





Services Agreement



November 5, 2008



## Essential Terms Licensing Agreement

- Long term Agreement (2015)
- Non-transferable, non-sublicenseable, limited license to Coriell "know-how"
- Exclusivity: EU Countries (2004)
- Availability of Services "24/7"
- Digital data collection and transmission
- Ownership of Intellectual Property
- Confidentiality
- Compliance with Law/Jurisdiction





## Essential Terms Services Agreement

- BioRep: Plan, Develop, Open, and Operate the Lab
- Coriell: Provide "start-up" services
- On-Going Services: Consultation, Training, and Compliance Auditing
- Reporting, Performance & Accreditation
- Independent Contractors
- Assignment and Subcontracting
- Conflict of Interest





### Global Partnership

### Coriell/BioRep negotiated an agreement with the HIGH Q FOUNDATION



In Europe:

Euro HD Network

(European Huntington's
Disease Network)

In the United States:

COHORT

(Cooperative Huntington's
Observational Research Trial)

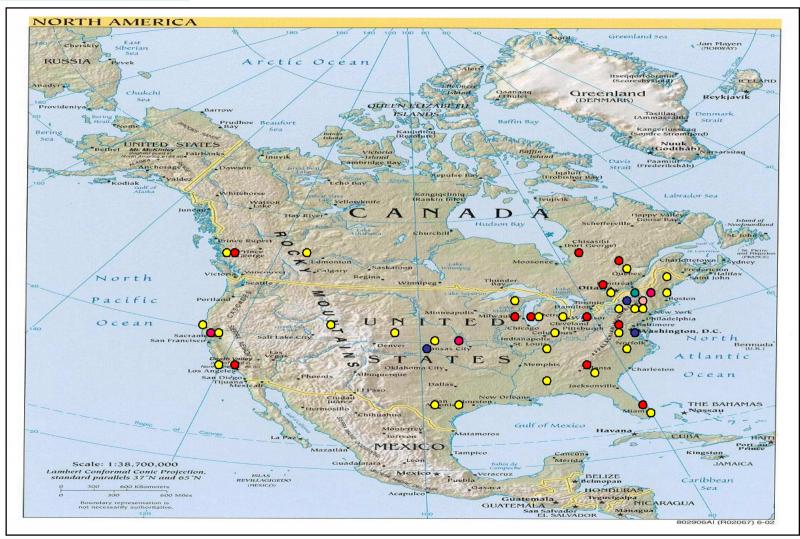


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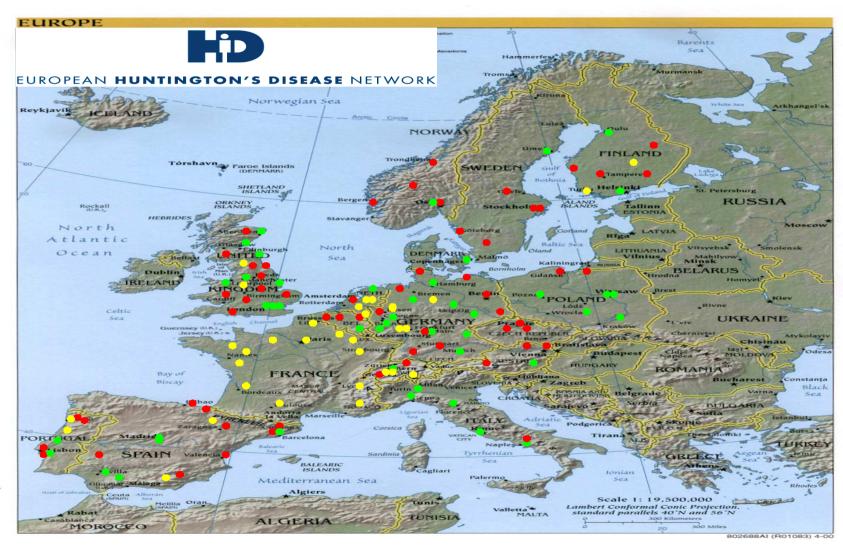
### **COHORT**

#### (Cooperative Huntington's Observational Research Trial)



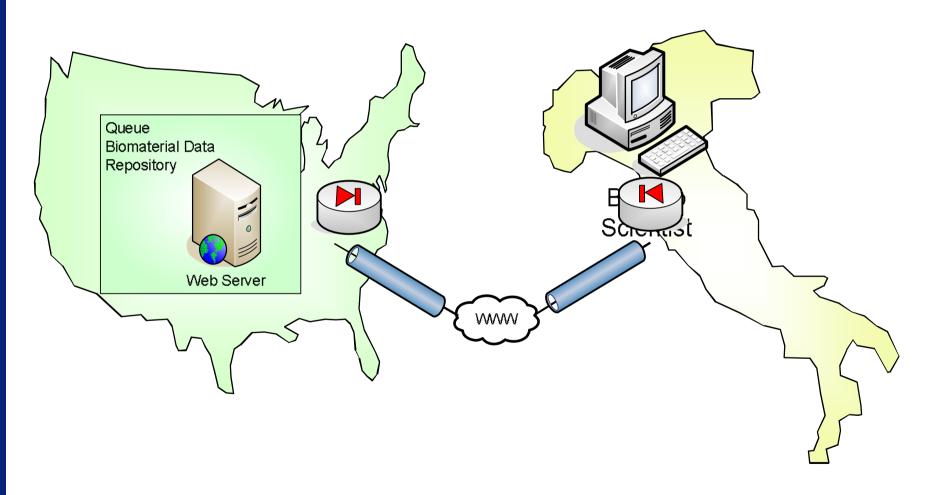


### **Euro HD Network**





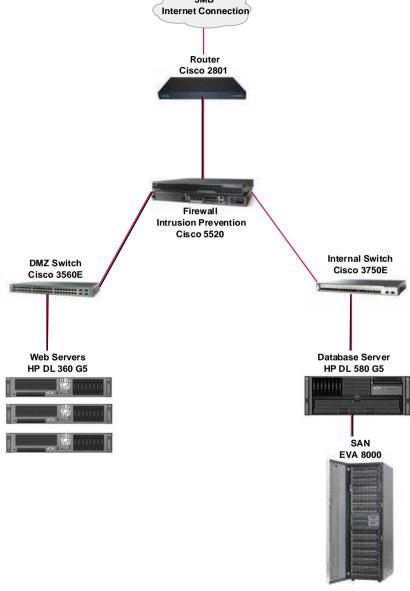
### Informatics Infrastructure



November 5, 2008 Courtesy: P. De Blasio



### Hardware Design



November 5, 2008

Courtesy: F. Nash



#### Coriell's Node on the Internet

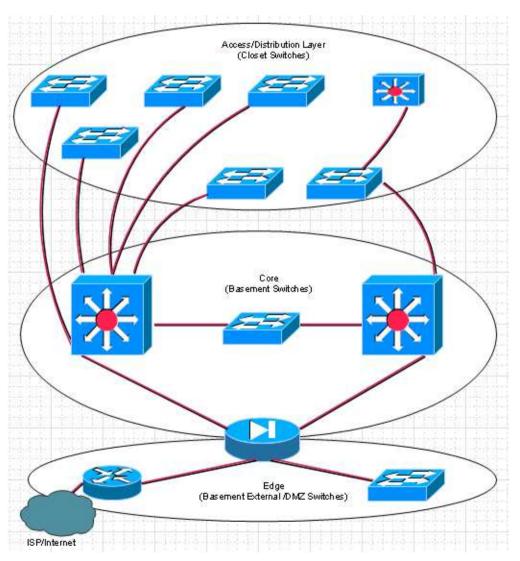
### **Design Objectives:**

Scalability - provide dedicated network for science programs

Security (industrystandard procedures, VPN, HTTPS, auditing, intrusion prevention)

Speed (1GB/sec switches, traffic prioritization)

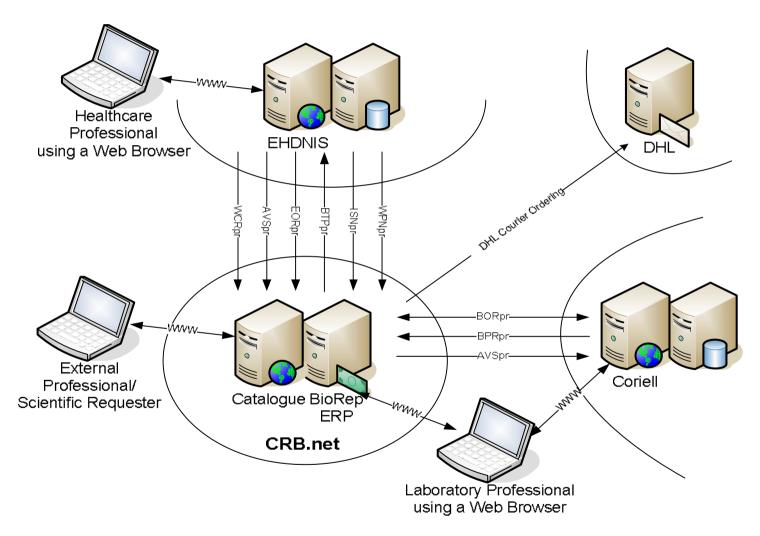
Stability November 5, 2008



Courtesy: F. Nash



### **EuroHDNET - Web Services**



November 5, 2008 Courtesy: F. Nash



### Queue "Q" at Coriell

QUEUE SYSTEM
--Content Management
--User Interface Processor

Queue system is built upon a scalable, web-based architecture, capable of supporting distributed multiple repositories and processes.

-- Security Management
-- Help Documentation Management

WEB SERVER

-- Active Server Pages
-- XML integrator
-- Script Components

BROWSER
CLIENTS
Internet Explorer
Firefox
Netscape

DATABASE SERVER

Sybase
Oracle

- . Integration of data and processes
- 2. Unified data base used to store data for the various system models

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### Considerations for Biobanking in the Future



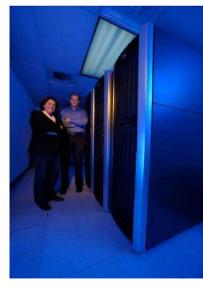
Specialized Collections -Clinically and Scientifically Relevant



**Quality Focused** 



Technology Applications



Pharmaceutical Contracting

**Bioinformatics** 

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### Considerations for Biobanking in the Future



**Data Sharing** 



**Specimen Annotation** 





Human Subjects Engagement



**Partnerships** 



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### ORIELL Considerations for Biobanking in the Future



Health Disparity & Diversity Collections





"Bridge" to Discovery





**Secure Financing** 



### Acknowledgement

Coriell Institute Facility and Staff

2008



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