



Biobanking for Personalized Medicine

Secure Access to Millions of
Research enabled Bio-Samples & Patients
plus
Online Laboratory Information Services

A Presentation to:



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Who Knows?

When **Henry Heyl** filed the first
US Patent for a **STAPLER**

1877



Today....

Infinitely more complex

The integration of clinical laboratory data, medical history and other relevant data has become far more difficult to comprehend and implement!



How do we think about this?

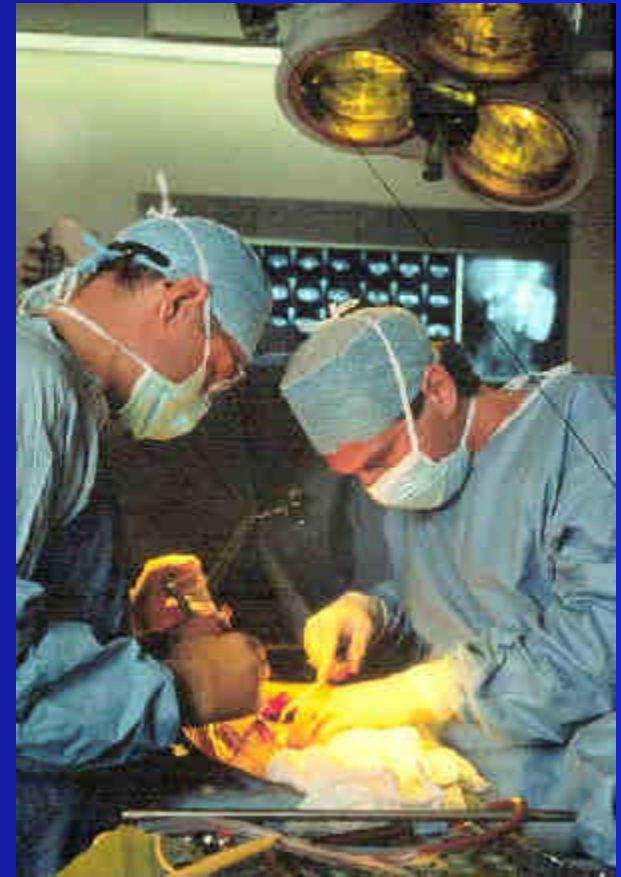
We are Knowledge Engineers
NOT
Data Providers

- Symptoms
- Lab Data
- Clinical History

Where do they come from?

- Personalized handheld devices;
- Hospitals;
- Transplant Centers;
- Cancer Centers;
- Clinics;

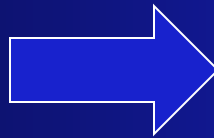
Where the patient is!



Biobank- A Hot Industry

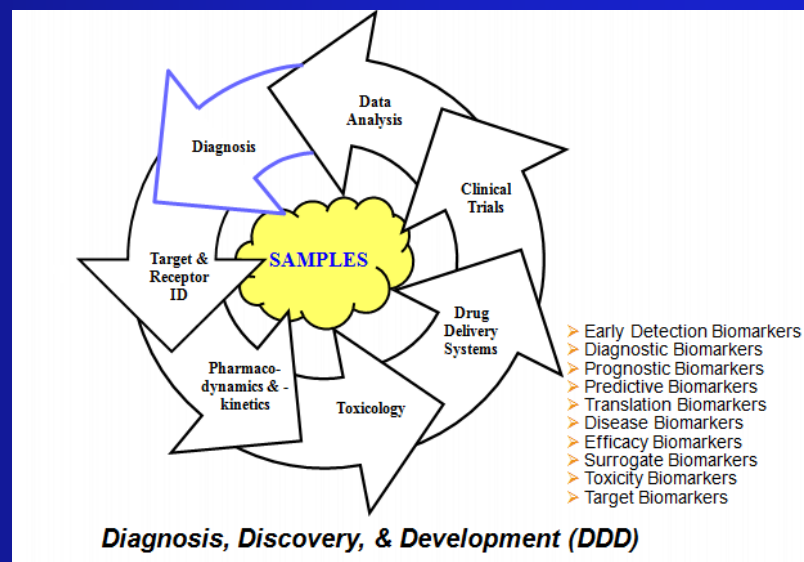
BIOBANKS: The Solution to

- Personalized diagnostics;
- Drug development cost reduction;
- Healthcare risk management;

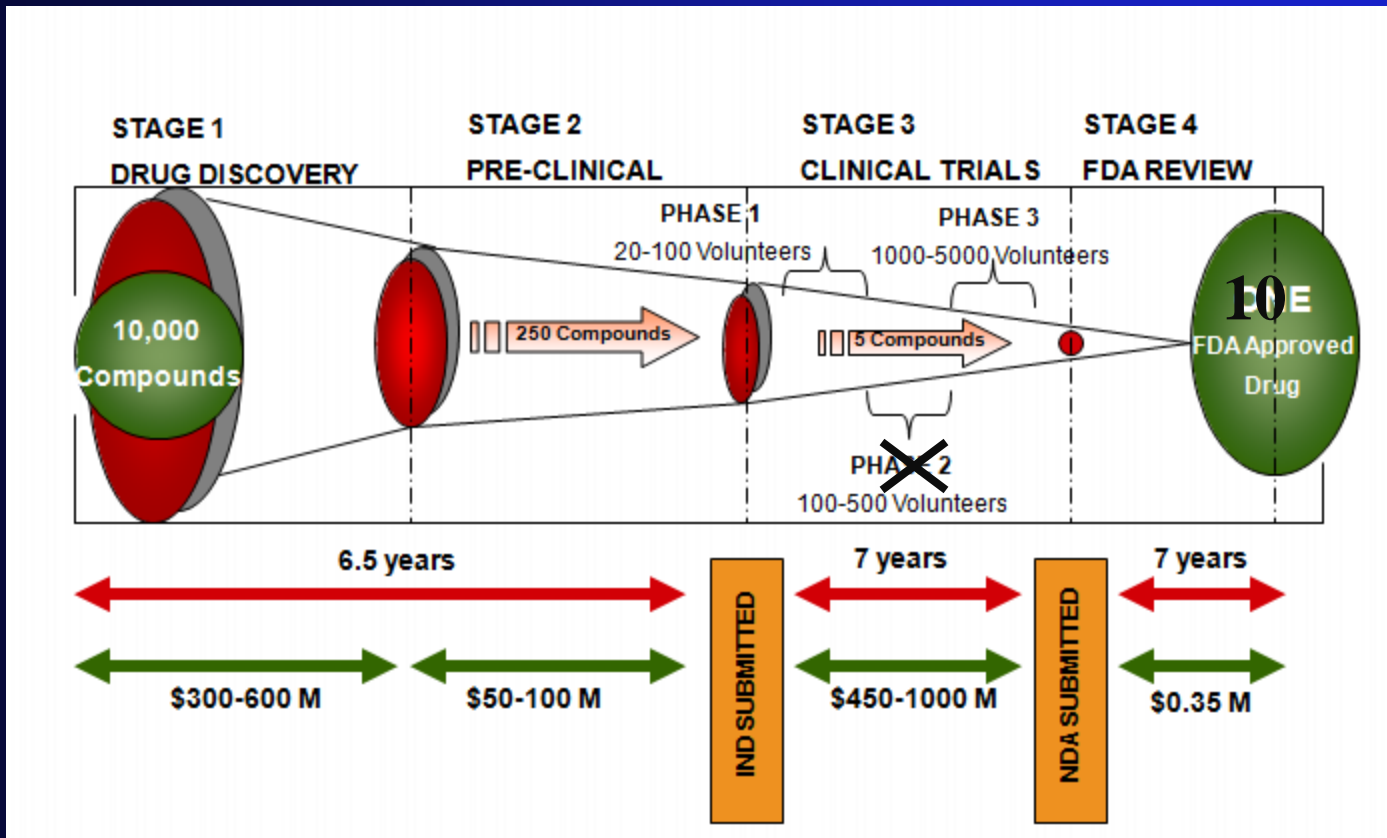


Why are they used?

- Information Source;
- Inexpensive to use for statistical analysis;
- Great tool for Translational Medicine;
- **Essential for biomarker analysis;**
- **Necessary for Clinical Trials accuracy.**



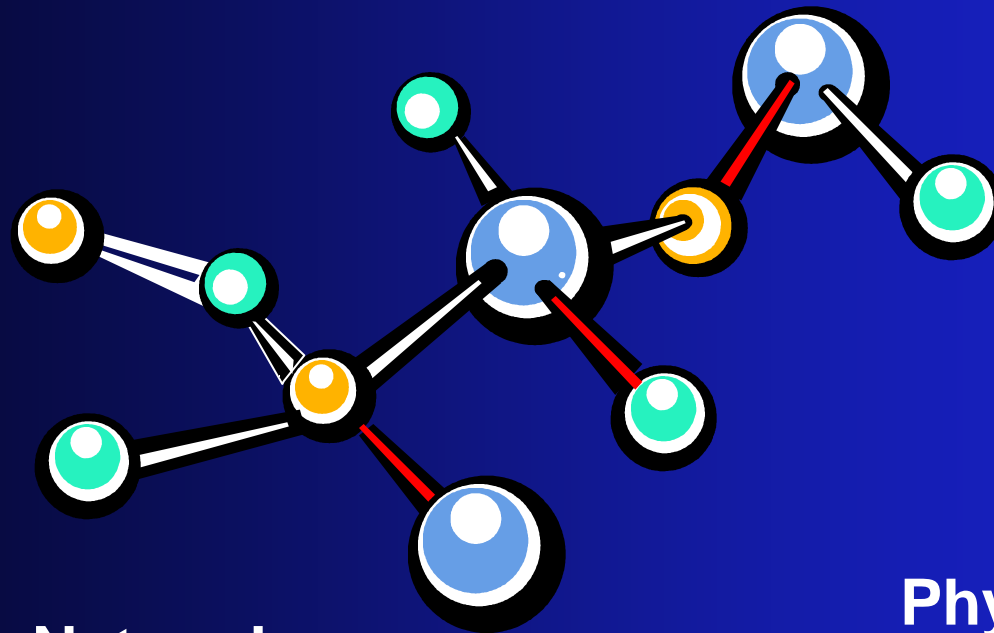
How will they change the future?





Future of Bio-Banking

Collaboration: **Interoperability**, Growth



Networks

Specimen Collection
Processing, Storage,
Retrieval & Shipping
Resource Informatics:
Data Management,
Control &
Inventory Tracking

**Physicians
&
Researchers**



An Actual Example: High throughput result

- Study desires 10,000 samples for epidemiologic analyses

Before using BTM:

- Avg. cost/sample for the study: \$1,200
 - *\$12,000,000 to collect 10K samples*
- Throughput of 5-10 samples/month
 - *120 years to collect 10K with current process.*

After using BTM:

- Avg cost for collection: \$8-9/sample
 - *Costs for collection of 10K samples: \$85,000*
- Avg throughput:
 - *Collection of controls in <1 year*



Summary

- It works!
- Significant tool for tracking clinical history.
- Successful high-throughput sample collection for many studies.
- Significant cost-savings to investigators and research enterprise.



Think Biobank!

Thank you!

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