Prostate SPORE Task Force on NBN Implementation

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DFHCC Prostate SPORE

11 SPOREs in Prostate Cancer

Baylor College of Medicine	Timothy Thompson, PhD
Johns Hopkins University	William Nelson, MD, PhD
University of Michigan	Kenneth Pienta, MD
Mayo Clinic	Donald Tindall, PhD
University of California, San Francisco	Marc Shuman, MD
MD Anderson Cancer Center	Christopher Logothetis, MD
Memorial Sloan-Kettering Cancer Center	Peter Scardino, MD
Northwestern	Chung Lee, PhD
Fred Hutchinson Cancer Research Center	Paul Lang, MD
University of California, Los Angeles	Jean deKernion, MD
Dana-Farber/Harvard Cancer Center	Philip Kantoff, MD

Prostate SPORE Task Force for NBN Implementation

Pathology/Tissue Processing

Mark Rubin, Chair (DFHCC)
Larry True (FHCRC)
Timothy McDonnell (MDA)
Gustavo Ayala (Baylor)
Angelo De Marzo (JHH)

Clinical and Epidemiology

Paul Lang, Co-Chair (FHCRC)
James Montie (UM)
Alan Partin (JHH)
Bruce Trock (JHH)

Laboratory Medicine

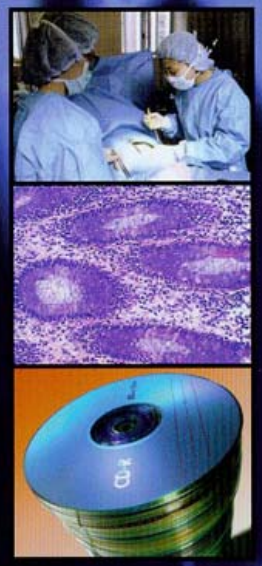
George Klee (Mayo)
Herbert Fritsche (MDA)

Bioinformatics

Paul Fearn (MSKCC)
Berko Javanovic (NW)

Regulatory Affaires Biotechnology

Teri Mielese (UCSF)



National Biospecimen Network Blueprint

Constella Group, Inc.

The NBN Blueprint:

" … to take full advantage of the power of new informatics tools to compare results across multiple investigators requires genetic and clinical data to be available in a standardized format. In brief, to accelerate discovery for cancer research, scientists need timely and equitable access to biospecimens that are annotated with clinical information and collected specifically for genomic and proteomic studies, as well as a platform for comparing analysis with the results of other researchers."

Recommendations 1-10:

1. Decentralized network with a virtual data repository.
2. Specimens of all cancer types.
3. Investigator derived data from NBN samples linked back to the original samples.
4. A central architect needed to build the bioinformatics infrastructure.
5. The bioinformatics system should be Standards-based.
6. Effective communication between stakeholders.

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1. Develop a prototypic inter-institutional repository system for solid tissues, cells, and fluid specimens.
2. Develop standard operation procedures for specimen collection, processing, and preservation.
3. Develop and/or adopt state-of-the-science data management systems for the annotation of specimens with clinical and laboratory data elements. This bioinformatics system is to be compatible with all institutions implementing the NBN.

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4. The Task Force should implement the prospective biomarker study using the NBN data management system(s).

5. Design and initiate the conduct of a periodic review and update of the NBN standard operating procedures and the NBN bioinformatics systems (Q/A).

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- **SCALABLE**: While the Task Force activities are focused on prostate cancer, the Task Force organization should anticipate an evolution toward the integration with similar biospecimen networks with other organ sites and other organizations

Development of Protocols

General agreement that we do not need to re-invent the wheel:

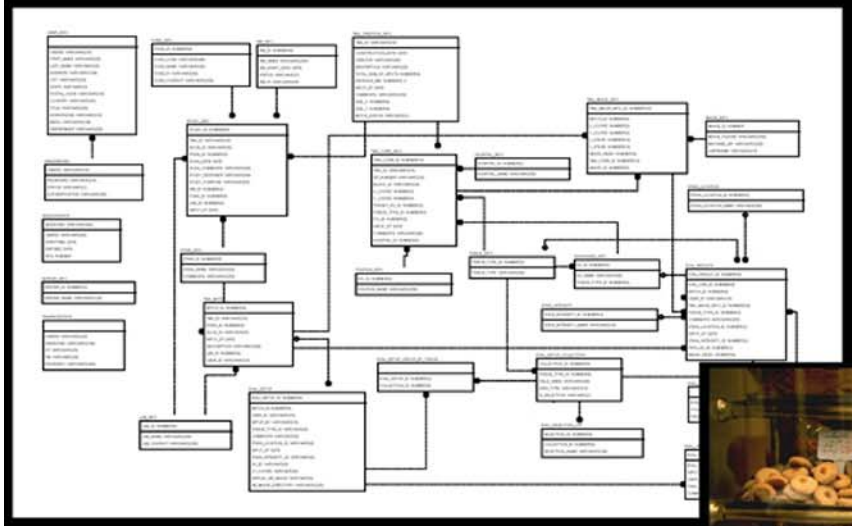
1. The SPOREs have expertise in the collection of samples for translational research.
2. Historic interactions demonstrate that inter-SPORE activities could be a model for the NBN.
3. The inter-SPORE Biomarker proposal is a specific blueprint for this process.

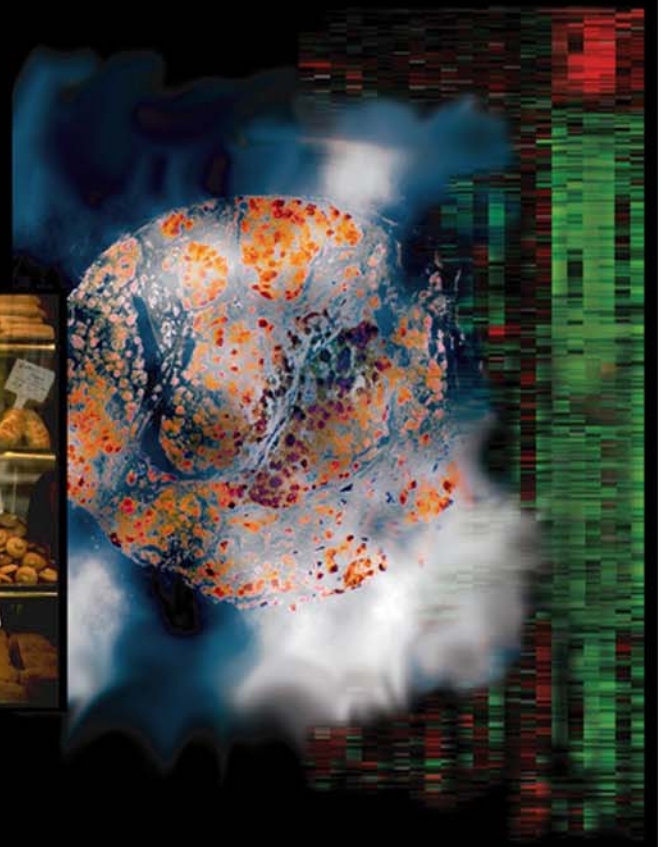
(P.I.s B. Trock/ T. Thompson)

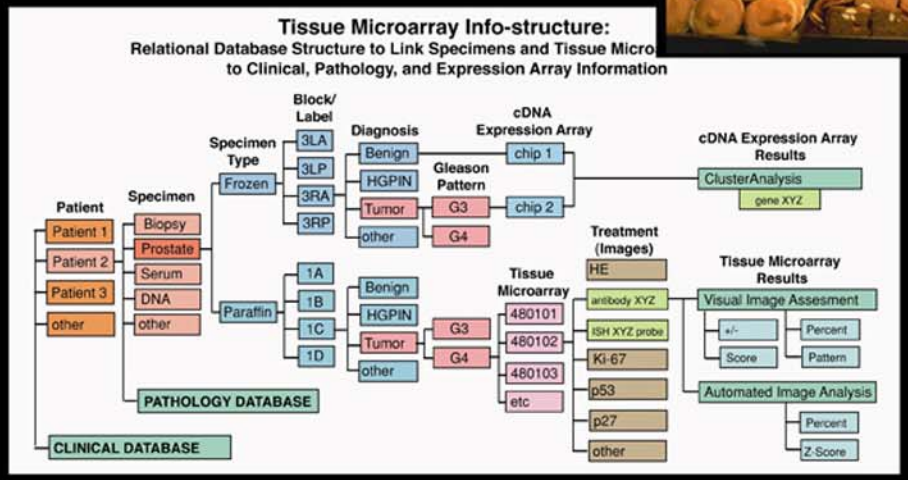
Collection of protocols

1. Tissue-based (De Marzo)
2. Serum/Blood/Lab Medicine (Klee/ Fritsche)
3. Clinical data (Lang, Montie, Partin)
4. Database Management/Bioinformatics/ Systems Analysis and Programming (Fearn/Jovanovic)
5. Regulatory Affaires (Teri Mielese)
6. Epidemiology (Bruce Trock)

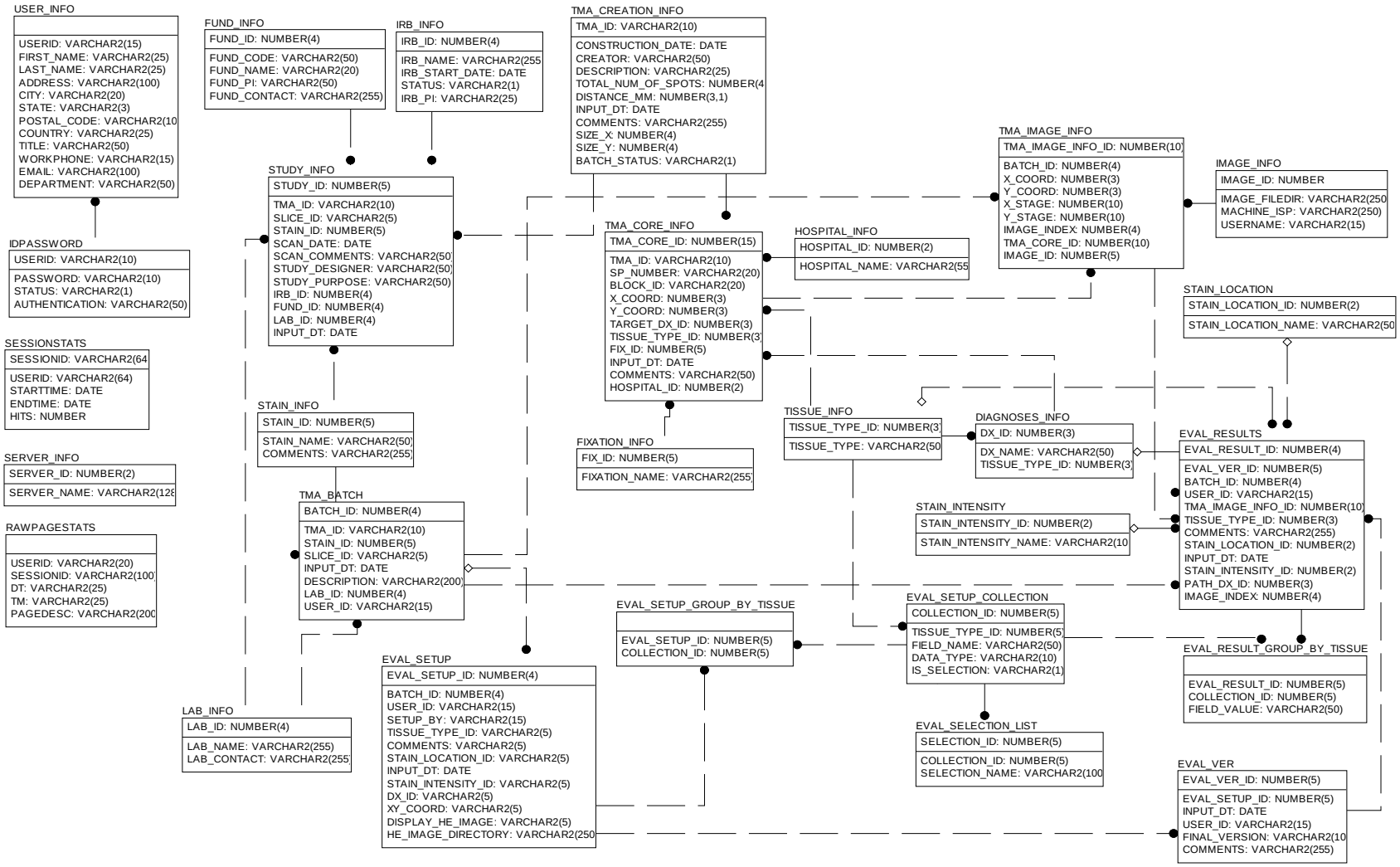
National Biospecimens Network





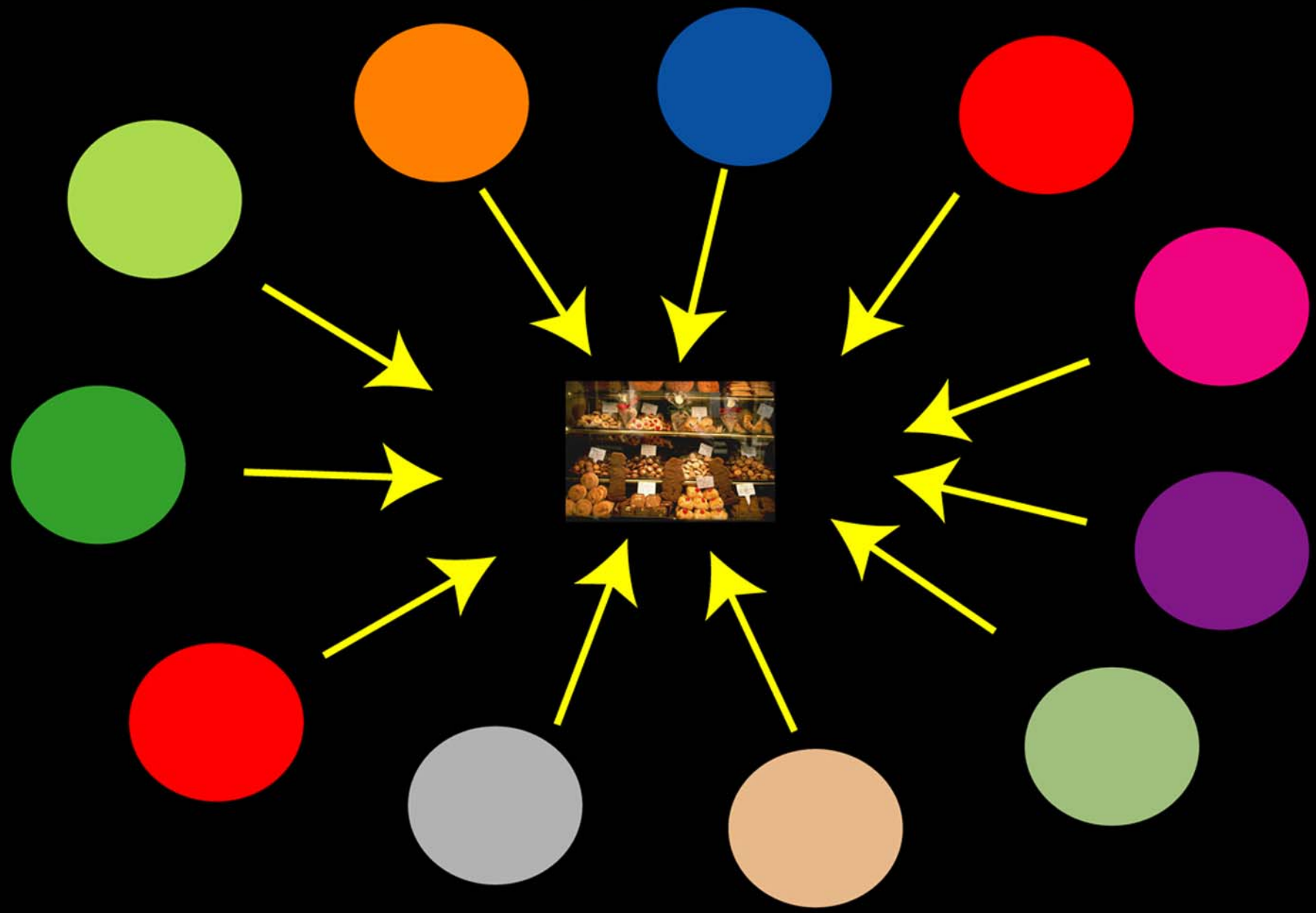


SPORE Databases



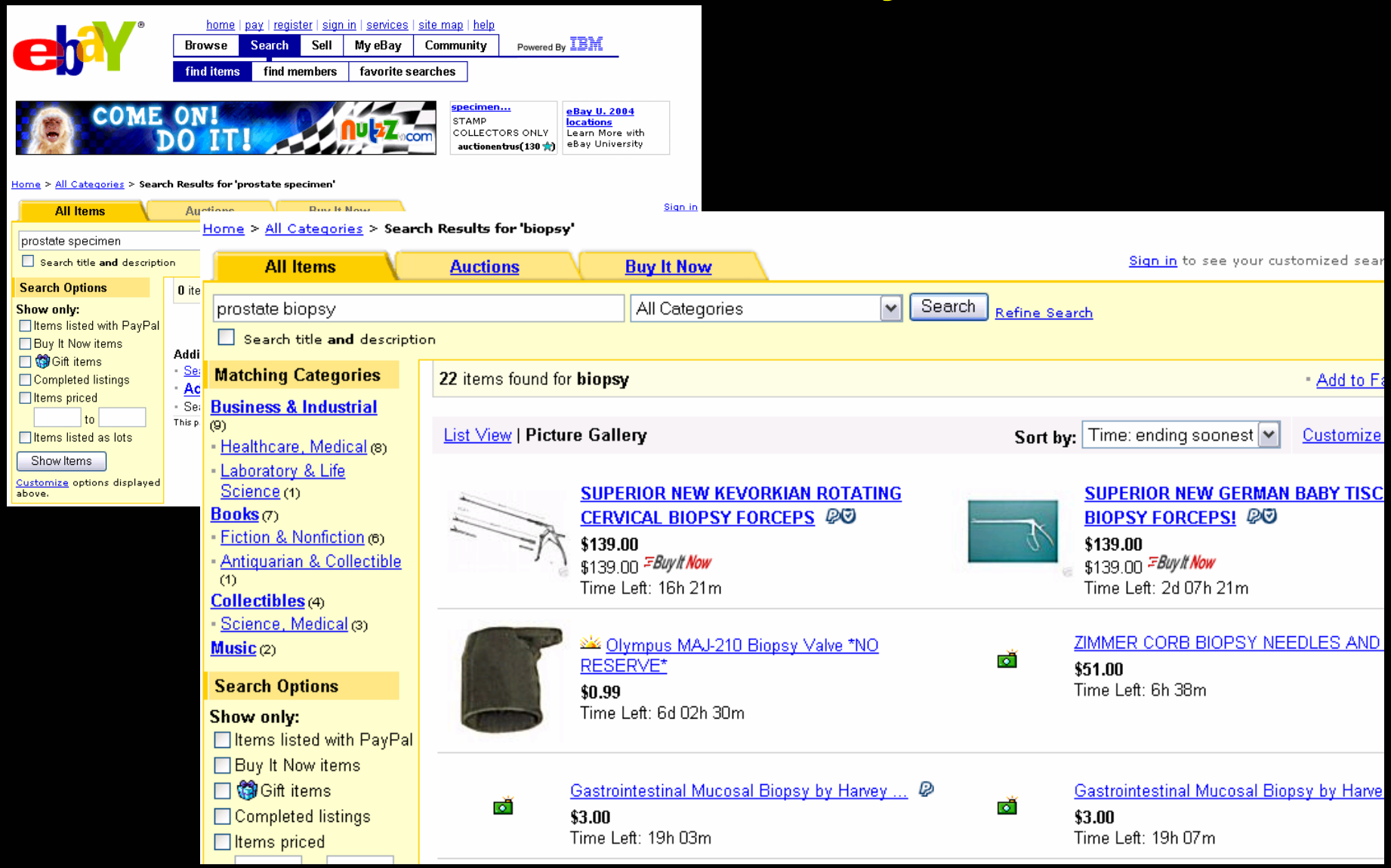
National Biospecimens Network

National Biospecimens Network



National Biospecimens Network

It should be this easy to use!



Integration Through CaBIG

http://cabig.nci.nih.gov/caBIG

Development of a Pilot Project for the NBN

1. The Task Force will present at plan to the PIs of the prostate SPOREs by August 1st, 2004 for a prostate cancer mini-NBN.
2. This proposal would address all recommendations except recommendation 2 (multiple tumor types).
3. The prostate cancer biomarker proposal will be used to test this plan once in place.
4. Feasibility studies could be proposed. For example, merging clinical data in a HIPPA compliant manner for a large nomogram study.