The Importance of Best Practices to Patients, Advocates & The Public

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TRAC- Translating Research Across Communities
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Across The Scientific Spectrum



Physical Behavioral Social Cultural **Economic Political** Spiritual **Technological**

HOPE



The Art of Translation...

"From the standpoint of medicine as an art for the preparation and cure of disease, the man who translates the hieroglyphics of science into the plain language of healing is certainly more useful."

-William Osler, Physician

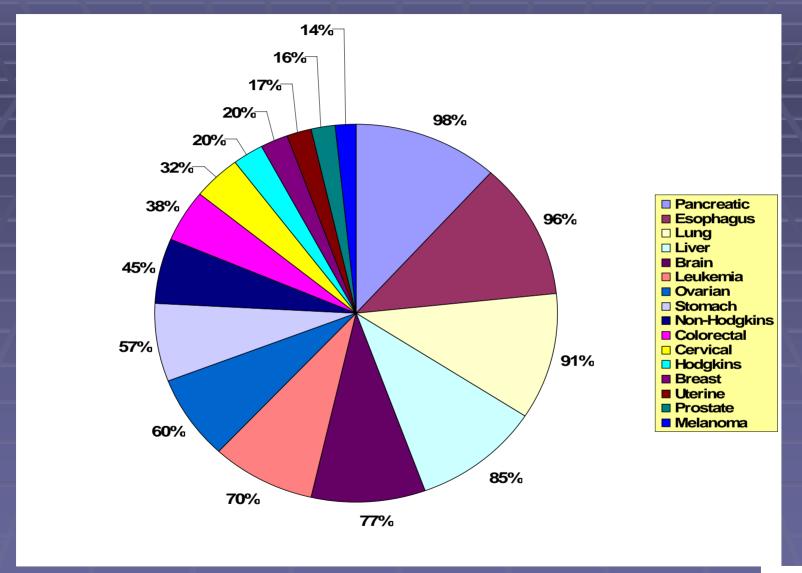


100 Years and Counting...

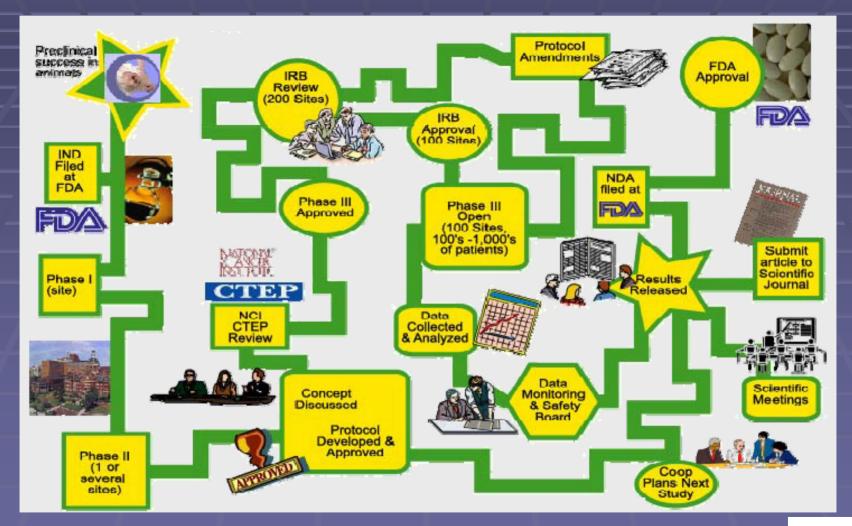
- It has taken more than a century, but the marrying of biospecimens, technology, and science for patient benefit is coming of age
- Biospecimens are precious human resources filled with unique genetic information
- The <u>privilege</u> of using these resources to advance and translate research into clinical application for patient progress brings great responsibility not to be taken lightly
- Biospecimens are part of resource toolkit



U.S. Cancer Mortality Rates



Getting a New Product Through This Process Is Not Easy... Many Years and Lots of \$\$\$



Patient Dilemma with Words and Decisions...

Invasive? Non-invasive?

Academic Center ? Local ?

Informed Consent?

Do my kids need genetic testing?

Where is my tissue?

Eligible ? Insurance ?

Am I Going to Live?

Personalized medicine? Biospecimen?

Targeted Therapies?

EGFR Inhibitor? Biopsy?

Proteomics?





The Promise



- Targeted Therapies
- Seek and Control instead of Search and Destroy
- Genetic Testing
- Reduced Toxicities
- Predictive/Preventive Capability
- Reduced drug failure rates
- A CURE



All Drugs Are Targeted Therapies

The problem is the numbers of <u>compounds</u> AND <u>targets</u> known to work together well are few and far between...here are a few examples of working ones

Trastuzumab-Herceptin®

HER 2

Cetuximab-Erbitux®



EGFR

Imatinib mesylate-Gleevec® _____ KIT

Erlotinib-Tarceva®



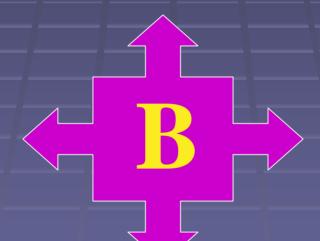
EGFR



Connect The Dots

Research: Patients, Volunteers, Groups & Public

Research:
Academic &
Community



Research: Public Agencies & Policy Makers

Research: Industry & Private Sector



Why We Need To Keep Moving In the Right Direction

- Information is not knowledge
- Competing Funding Priorities
- More Survivors; Still Feared
- Shrinking Budgets
- Increased Regulations
- Fast Moving Science
- Requirements and Expectations



RISK DENEFIT

ADVANCE PUBLIC HEALTH

- @ Federal Law
- @ HIPAA; IRB;
- **@** Black Letter Law
- @ Benefit
- © Simplification
- @ Misuse
- O No patient uptake
- @ No biospecimens
- No progress
- @ No cures

- © State Law
- @ Common Rule
- **@** Common Sense
- @ Risk
- © Complication
- @ Appropriate
- No participation
- No research
- O answers
- @ No hope



Earning Public Trust & Confidence

Confidence in you and your team Confidence in the reason **Confidence in the test Confidence in the system** Confidence in the procedure Confidence in the test results Confidence in the diagnosis Confidence in the recommendation Confidence in the outcome Confidence...period



Biospecimen Best Practices Are More Than Just Freezer Temperature and Hold Time

- @ Partnering with the public
- Privacy and patient protection
- © Data Sharing and bioinformatics
- @ Handling of biospecimens
- @ Promoting access for research
- @ Intellectual property
- @ Future patient access to sample
- @ Intellectual Property



Consequences of Poor Practices- 🤄

- -False + and False -
- Inaccuracy; nonreproducibility
- Erodes public confidence
- -Wastes time & money
- -Impedes clinical benefit
- -Takes another 100 Years



Practice, Process, Performance = Product

- Joist
- Fascia
- 200 psi
- 4 in 12
- 20/30 finish
- Romex
- Title 24
- Combi
- TJI

- Is the footing designed to carry a live load of 100 lbs PSF?
- Do you nail drywall at 6" o.c. or 12" o.c?
- Does the concrete cure for 28 or 40 days?
 - Imagine making choices and decisions that affect our lives...without access to guidance, information, and resources?
- Imagine trying to build your dream house without well designed plans and standards or a qualified architect or builder ..
- BEST PRACTICES, STANDARDS AND BLUEPRINTS ARE CRUCIAL WHETHER IT'S A HOUSE OR A BIOSPECIMEN!

Benefits for All

Commitment for:

Infrastructure + resources + best practices can yield high-quality biospecimens

The Potential Upside data with integrity that becomes information transformed into knowledge that puts real discovery into real life in real time for patient benefit



Research Advocates: Partners In Progress

- © Scientific committees
- @ Clinical trial design
- @ IRB; Data Safety Monitoring Board
- **@** Grant Review
- @ Biospecimens
- @ Bring The Patient Perspective



Why We Must Get This Right...

" We must harness the scientific, industrial, and social will to accelerate discoveries into accessible and meaningful clinical applications. Patients, families, friends, and loved one are counting on us...Because in the end, it's not about you, or me, or the science, it's about the patient."



Patient & Advocate Perspectives

Don't Leave Home Without Them



