



Don't put all your eggs  
(or research samples)  
in one basket.

# WHITE PAPER

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## Risky Business in Research Continuity

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Risk is inherent in any business. But we tend to associate *risk* with stock market performance, or a business' bottom line instead of with research assets. Why is research a risky business?

North Carolina is widely recognized, with notable distinction, as one of the leading research regions in the country. Anchored by top-rated universities and research organizations, this area develops and attracts highly regarded scientific research. Many of our academic institutions, medical research centers and bio-pharma companies are at great risk for significant disruptions to their operations. An individual event can paralyze operations from a few days to several months. A chain of events can be catastrophic.

What measures can be taken to minimize or altogether eliminate the risk to business continuity, your company's future and ultimately, to new drugs and therapies getting to market? It can come down to management of your biosamples.

### ***Rule-of-Thumb***

Often, a good rule-of-thumb is, "Don't put all your eggs in one basket." The same is true for research samples.

We are all too familiar with the devastation resulting from Hurricane Katrina, and the research community was no exception.

Risky Business in Research Continuity *(continued)*

The loss at Tulane University was estimated in excess of \$200 million.

*"Samples collected from thousands of patients and frozen since 1973, thawed. It's irreplaceable. That's decades of research,"* said Dr. Paul Whelton, senior vice president for health sciences at Tulane.  
*"It makes you want to cry."*



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North Carolina has countless stories of irreplaceable research lost across the state during the Ice Storm of 1993. One local university lost power for 36 hours and today are still cataloging and realizing the extent of the loss.

In June 2001 Hurricane Allison's torrential rains flooded the campus of the Texas Medical Center; a complex of 14 university hospital and research laboratories was destroyed. The estimated damage was \$2 billion.

UC Irvine reported \$3.5 million in damage from a fire in July 2001.

A fire on the campus of UC Santa Cruz in January 2002 caused some \$5 million in damage (not including the value of the refrigerated research material lost and the cost of restarting interrupted research).

While sensational and natural disasters capture our attention, it is often the routine and mundane stories that are most distressing.

The CDC reports that hundreds of thousands of doses of vaccines (against diseases such as flu, diphtheria, tetanus, whooping cough, polio, mumps, measles, chicken pox and the cervical cancer virus) are thrown out each year simply because of poor refrigeration at clinics, hospitals and doctors' offices. Estimated cost – \$20 million each year.

Typically, emergency response and the recovery process that follows any significant disaster are chaotic and disorganized, leaving only widespread uncertainty and dissatisfaction.

## Risky Business in Research Continuity *(continued)*

### ***Who are you going to call?***

With the risk to research, the question often is, “Who are you going to call?”

To provide better advanced protection or provide rescue assistance, every organization needs an answer.

This is where a ***Business Continuity and Disaster Recovery Plan*** becomes indispensable. Including a “Risk Management Team” knowledgeable of your specific requirements, the plan addresses all aspects of your company: facilities, IT, science, finance and business development.

### ***How do you begin?***

Answers to a few questions will serve as the skeleton for an effective plan:

- How will you stabilize your research in the event of a power outage, major fire, gas leak or natural disaster?
- Have you identified your critical activities?
- What are the major supply chains for your laboratory/ research operations?
- What contracts are currently in place with your vendors?
- Is your research data routinely backed up off-site?
- Do you have redundancy in power, HVAC, and freezers?
- Do you have duplicate off-site storage of biosamples?
- Is your staff trained to effectively handle an emergency?
- Do you have an alternate location where your work can continue?

### ***Managing the Risk***

- Make a list of the business-critical files, research data and samples that must be backed up off-site.
- Complete a loss impact analysis.
- Install back-up power generators, ensure sufficient HVAC, and arrange for preventive maintenance of freezers and other equipment in your facility.

A solid Risk Management Team addresses your company’s facilities, IT, science, finance and business development needs.

Risky Business in Research Continuity *(continued)*

***Hazard Analysis and Critical Control Points (HACCP)***

- Identify critical safety hazards in advance.
- Establish preventive measures to control hazards.
- Monitor each critical control point for the hazards.
- Incorporate contingency planning within R&D activities as well as other operations.
- Include risk management in company goals, business development, and employee training and orientation.
- Establish relationships with first responders to minimize the impact from disasters.
- Conduct annual reviews and audits of plans for business interruptions – *“practice makes perfect.”*

To ensure the integrity of our research and save the future of medicine from harm, we must build relationships that reduce and manage the perils of risk. And research is a risky business.

