Greenville Hospital System Tissue Bank Platform with Total Cancer Care and Target Now

The family of Karl Winn is committed to the belief that cancer treatment can be improved and that we can all do our part.

The Winn Tissue Bank Funded by Winn the Fight:

The Winn Tissue Bank would provide the infrastructure for two critical components in the fight against cancer:

> ***Total Cancer Care (TCC):*** is the database for the future that collects data which will lead to new drug therapies that are personalized to the individual patient, and;
>
> ***Target Now****:* An initiative of real time analysis of the targeted protein, matching tissue to drugs available today, and thereby personalizing medicine, and specifically, cancer care.

How do Total Cancer Care and Target Now work?
GHS and the Cancer Centers of the Carolinas are among a few selected sites in the United States that can offer this type of program: a database that is vigilantly mapping opportunities for your future care, while providing real time opportunities to help you today. The current need is for infrastructure to:

- bank tissue
- advance our analysis of tissue,
- research, and
- connect the appropriate drugs for effective treatment.

This research answers the questions: “Why do some people respond to treatment and some do not?” “Why do some people get serious side effects from treatment?” One person has horrendous side effects, another does not.

How do Total Cancer Care and Target Now benefit me or my family? Just as each of us has a unique fingerprint, every cancer tumor is unique as well. While we can define cancer by its location, breast, lung or pancreas; there are, in fact many variables within each of these cancers. Everything about us starts with our DNA, which is in the genes we inherit from our parents. Cancer can develop when there are problems with those genes.

With recent advancements in technology, we can test each tumor for approximately 30,000 genes. These genes provide a “molecular fingerprint” that is unique for each person’s tumor, just like the lines in our fingertips uniquely define each one us. By studying that “molecular fingerprint,” scientists may eventually develop new drug therapies that are personalized to the individual patient. How do genomes figure into this? Each gene makes a protein that is a potential target as a cause of cancer if it is over expressed--too much of it is being made. The key is to make drugs that target that protein. This is targeted therapy. After the tumor is analyzed, information generated by the analysis is entered in a database containing similar information on other patients involved in the initiative. If in a few months, or even a few years, a new drug is found to be effective for patients with a similar genetic profile, patients fitting this profile are contacted.

Currently, patients at GHS and its satellite campuses can donate tissue that would otherwise be discarded to the tissue bank. Our partners in this initiative include: Clemson University Genomics Institute and the Medical University of South Carolina, as well as Moffitt Comprehensive Cancer Center in Tampa, Florida.

Call to Action**:** We must continue revolutionizing care delivery to cancer patients, and the opportunity to do so is there with your help. The Winn Tissue Bank is both the research platform for the next 20 years of cancer research and for real time clinical results that matter now.