Dr. Amanda Winters

"We would not have been able to acquire this instrument without funding from WillStrong," says Dr. Amanda Winters of the new digital DNA amplifier that is helping to advance her groundbreaking research.

"The capabilities that we have in the clinic are good, but our ability to change or adjust therapy is only as good as the technology we have available," says Dr. Winters. "This emerging technology allows for more sensitive detection of disease and will help us to identify patients who are at risk of relapse, so that we can intervene before they actually relapse clinically."

Funding Supports Better Treatment Options

Because medial research requires a ready supply of tissue samples, WillStrong recently made a three-year commitment for equipment and salary support for a lab technician to work in the "biobank" at the Center for Cancer and Blood Disorders. The biobank contains solid tumor, blood and bone marrow cells from patients who have consented to have their samples stored and used for future research purposes. Having "fresh" samples to study is important because it allows researchers to study cancer and other diseases in their most relevant form — and see how unique cells respond to emerging therapies.

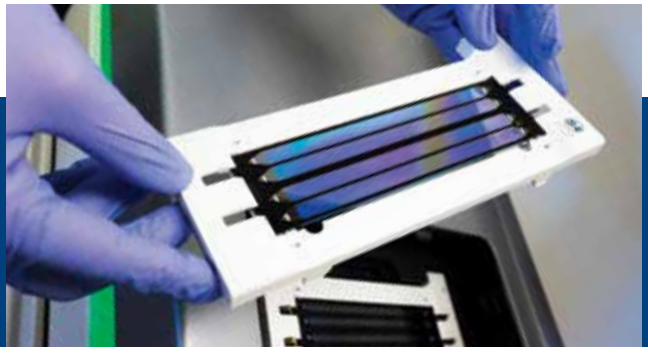
"Much of the work researchers do is based on cell lines from patients from decades ago that have been propagated over and over again," explains Dr. Winters. "That's a starting point, but those cells don't retain all of the biology of the original disease, so it's not as accurate as studying primary patient samples."

Currently, the biobank contains about 100 ALL and 50 AML samples, so Dr. Winters and other researchers will now have the material they need to explore new ideas for treatment for many years.

WillStrong also supports the hospital's participation in a multi-institutional clinical trial to test the effectiveness of a new drug combination — venetoclax and azacytidine — in treating myelodysplastic syndrome (MDS), a pre-AML type of bone marrow disease.

"The combination of these two drugs has shown a great deal of promise in treating adult AML," says Dr. Winters. "Now we want to study this drug regimen more in-depth with pediatric patients — not those with relapsed or refractory disease, but as a first-line therapy. This way, we can better understand how the drugs work and try to predict when and for whom they will or won't be effective, so we can develop more targeted treatments."

"Research like this could hold the key to unlocking novel therapies," concludes Maniatis. "Ultimately, that's what we all want: we want to give these kids a fighting chance."



"Ultimately, we want to give these kids a fighting chance."

Claudia Maniatis, founder of the WillStrong Cancer Foundation