New Rochelle doctor makes cancer discovery

By ALEXANDRA BOGDANOVIC

After roughly four years of hard work, a research team led by a New Rochelle resident recently made a significant discovery in the battle against an often-lethal type of leukemia.

The team, directed by Dr. Ulrich Steidl and based at Albert Einstein College of Medicine of Yeshiva University in the Bronx, identified a specific gene found in the most deadly cases of acute myeloid leukemia. The gene was over-activated, meaning it produced too much material and stimulated leukemic cell growth, Steidl said. By "knocking the gene down" or altering the way it generates, the researchers found leukemic cell growth decreased in 80 percent of patients.

Dr. Ulrich Steidl, a New Rochelle resident, recently made a discovery in the battle against a type of leukemia. Contributed photo

"It was a very exciting moment when we as a team discovered that, wow, this had a big effect–that leukemia cells were dying when we knocked down this gene," Steidl said.

Although most think of leukemia as a childhood cancer, acute myeloid leukemia affects older adults. It causes non-specific symptoms such as fatigue and bleeding, and puts people at an increased risk for infection, Steidl said.

According to the National Cancer Institute, one in 254 people will be diagnosed with the disease in their lifetime. This form of cancer will claim approximately 10,200 lives this year alone, the institute estimates. Most people succumb to the disease within only a few years after they are diagnosed.

Steidl hopes the discovery his team made in pre-clinical research can lead to the development of new drugs to fight the disease, since only one-third of patients can be cured with current therapies. In an ideal world, clinical trials could begin in 12 to 18 months, he said. But getting a new drug approved by the Food and Drug Administration is a much longer process, and typically takes five to eight years, he said.

Steidl, who holds an MD and a PhD, treated patients for a number of years before shifting his focus from patient care to research.

"I thought I could have a bigger impact through research," he said.

Steidl said the recent breakthrough in the fight against acute myeloid leukemia wouldn't have been possible without good teamwork and his family's support. More important, he said, it wouldn't have been possible without the support of Gabrielle's Angel Foundation.

"Unfortunately, it is hard to get funding due to tight state and federal budgets," he said. "It is important to have funding through private foundations. Right now, [they are] the lifelines for researchers."

According to Christa Justus, director of grants and operations at Gabrielle's Angel's Foundation, the organization's mission is to fund "junior investigators" who are searching for the cure to various blood cancers.

"Eighty-three cents of every dollar we raise directly funds research," Justus said. "In 2011, we raised $3.5 million through the Angel Ball [our main fundraising activity] and funded $3 million in new grants."

Since its inception in 1996, the foundation has provided $20 million in funding to the nation's "most promising young investigators," Justus said.

In Steidl's case, the investment seems to have paid off.

"It means the world to us to be able to support a young investigator at such a crucial time in his lab work," Justus said.

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