Curing Cancer Through Collaboration
What MED’s $10.5 million anonymous gift could mean

What does a $10.5 million donation to Boston University’s School of Medicine mean for breast cancer patients? One answer could be found in the tea leaves.

In 2001, researchers at the BU Women’s Health Interdisciplinary Research Center (WHIRC) published findings on green tea’s effects on tumors and cancer cells. In animals, drinking green tea yielded a 70 percent decrease in tumor weight, as well as less malignant phenotype in the tumors overall — proven results, says one BU collaborator, that can empower cancer patients as they undergo treatment.

“One of the outcomes of this study is that green tea really does work — it provides hard scientific evidence,” says David Sherr, a School of Public Health professor of environmental health, who worked with the study’s lead author, Gail Sonenshein, a MED professor of biochemistry and director of the research center. “It gives people a small element of control, which is the thing they lose when they get cancer.”

Sonenshein’s green tea research, with its direct link between laboratory science and clinical practice, is the kind of work BU doctors hope to expand with a recent anonymous gift, which pledges $9.5 million for breast cancer research and $1 million for a residence for first-year medical students.

The donation, MED’s largest individual gift, means a physical home for a new breast cancer center, an endowment for a junior faculty member, a visiting scholar position, and funds to cover operational costs. More broadly, researchers say, it will allow Boston University to continue collaborative scientific endeavors, pooling resources to accomplish better results.

“Sometimes, in our own areas, we don’t see the broader picture, so the connections widen our scope and help us understand the full nature of the problem,” says Sonenshein. “If you give me a question, I can design an experiment, but a clinician needs to tell us what the most important question is.”

The collaborations also span the Medical Campus: the breast cancer working group within WHIRC includes faculty from biochemistry, otolaryngology, and pathology, as well as from the School of Public Health and the School of Dental Medicine. Sherr and Sonenshein are working with David Seldin, a MED professor of hematology and oncology, to look at environmental pollutants and their effect on breast cancer — a partnership that Sherr says is a huge advantage.

“Technology is moving so fast that no one lab can keep up with it. When you put a bunch of smart people together, you can do much more than as an individual. That’s why a gift like this one is so important — when you get people together in one environment, you get a lot of good things happening.”

Those “good things” often include promising but unproven ideas, a source of frustration for researchers: they can’t get federal funding without strong preliminary data, but often don’t have the time, money, or staff to cultivate that data. Kathrin Kirsch, a MED assistant professor of biochemistry, who studies the role of adapter proteins in tumor development, says that in an era of relatively flat funding from the National Institutes of Health, new ways to investigate leads are increasingly important.

“We have exciting preliminary findings we believe are worth pursuing, but some of the ideas aren’t yet at the stage for NIH funding,” she says. “I think this will help with start-up projects, new ideas, and new initiatives.”

Education is a priority, too, Sonenshein says. She hopes to hire more graduate students and hold symposia that draw on faculty experts from around the Medical Campus and beyond. The $10.5 million gift, she says, will go a long way toward helping her prove a prediction: “The next generation,” she says, “will be even smarter than we are.”