

SUMMER 2018 Volume 21 | Issue 3

Impact

Dana-Farber.org and JimmyFund.org THANKING THOSE WHO MAKE A DIFFERENCE



Smith Family Foundation and Nancy Lurie Marks advance living biobank

Mrs. Susan F. Smith was a Dana-Farber Trustee, a founding member of the Friends of Dana-Farber Cancer Institute, and the driving force behind the creation of the Susan F. Smith Center for Women's Cancers. In honor of Mrs. Smith's indelible legacy as a philanthropist and advocate for women's cancers, the Richard and Susan Smith Family Foundation has awarded more than \$2.5 million in support of Alan D'Andrea, MD, director of the Susan F. Smith Center, to establish the Susan F. Smith Center Living Biobank. This gift is bolstered by an additional generous gift from Nancy Lurie Marks, who is a member of Mrs. Smith's family.

The living biobank consists of three-dimensional cell cultures called "organoids." Each organoid is derived from a patient's tumor and anatomically and functionally reflects that tumor. Organoids are created by obtaining a biopsy, separating the cells into a single-cell suspension, and growing the cells to produce microtumors that are biologically identical to the primary tumor.

"Sue Smith believed Dana-Farber could work miracles for women's cancers. Her many efforts championing Dana-Farber's vital work were among her proudest accomplishments," said Richard A. Smith, chair of the Smith Family Foundation and a Dana-Farber Trustee. "She'd be very pleased to know this exciting research venture had been established in her honor,

and our family is hopeful that the biobank yields lifesaving solutions for women everywhere."

Organoids make it possible to streamline testing of novel therapies and quickly evaluate whether experimental drugs or combinations of therapies reach their genetic target, while serving as an engine for basic science and discovery. While clinical trials are an essential step on the path to new drug development, the deliberate nature of clinical trials requires enrolling hundreds of patients—whose tumors possess various genetic characteristics—and testing drugs for months or even years to see if they are effective. Organoids help accelerate research into how specific tumors respond to different treatments, providing information about efficacy and resistance that can be used to guide ongoing clinical trials, while also informing the next generation of studies. Ovarian cancer is often diagnosed at a late stage and women treated for ovarian cancer may be at an increased risk of developing resistance to therapy or having their disease recur, underscoring the need for organoids that reflect these tumors.

"By supporting our work to expand a living biobank at the Susan F. Smith Center, the Smith Family Foundation and Nancy Lurie Marks are carving a path toward a future where potential therapies are rapidly tested and brought to patients who need them most," said D'Andrea, who is also director of the Center for DNA Damage and



The Smith Family Foundation and Nancy Lurie Marks are honoring the legacy of Mrs. Susan F. Smith (above) through gifts to expand the ovarian cancer living biobank at the Susan F. Smith Center for Women's Cancers.

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— **RICHARD A. SMITH**, chair, Richard and Susan Smith Family Foundation and an Institute Trustee

Repair at Dana-Farber. "We are extremely grateful for the opportunity to create a resource that will have a ripple effect on ovarian cancer research for years to come." ■