



Beth Russell and Geoffrey Greene, PhD, co-director of the Ludwig Center at the University of Chicago in Illinois, discuss an experiment.

effort to address,” says Ed McDermott, Ludwig Cancer Research trustee and president and CEO of the Ludwig Institute for Cancer Research, also based in New York.

Inspired by President Richard Nixon’s “War on Cancer,” Ludwig founded the Ludwig Institute for Cancer Research in 1971. His will established the six U.S. centers in 2006 with an initial \$120 million endowment, followed by donations of an additional \$240 million for endowed professorships and operating expenses.

“We’ve had a good return on the investment,” says McDermott. “The Centers have already generated the first comprehensive maps of the genomic landscape, paved the way for ‘smart drugs’ and immunotherapy, and laid the foundation to treat certain rare and fast-spreading types of cancers.”

The latest gift, which completes Ludwig’s original endowment plan for the centers, is designed to offer funding in perpetuity by allowing each center to invest \$90 million and draw an estimated \$4 to \$5 million in interest annually.

“Now that these Ludwig Centers have been securely established, the objective is to extend and strengthen the collaboration between them and the various branches of the Institute,” says McDermott.

The centers combined with the Institute make up Ludwig Cancer Research, a nonprofit, international, collaborative network of acclaimed scientists with an endowment of \$1.2 billion. To date, Ludwig Cancer Research has dedicated more than \$2.5 billion to cancer research worldwide.

“The donation provides us an incredible opportunity,” says Geoffrey Greene, PhD, codirector of the Ludwig Center at the University of Chicago in Illinois. “We’re not restricted in how

we use it, so we can be creative, innovative, and use as much ‘out-of-the-box’ thinking as we want to.”

Greene and his colleagues plan to use the funds to recruit senior investigators and fund new initiatives to bolster their effort to better understand the genesis, progression, and management of cancer metastasis. Other centers are focused on areas ranging from immunotherapy and stem cell research to cancer prevention and early detection. ■

Budgets Up at NIH, NCI, and FDA

After a fiscally challenging year, scientific and medical research will feel some budgetary relief with the new federal spending bill signed into law in mid-January by President Obama, totaling \$1.1 trillion for fiscal year 2014. Under the new budget, the U.S. Food and Drug Administration (FDA) will receive \$2.552 billion, \$166 million more than its post-sequestration 2013 budget, a 7% increase. Funding for the NIH will increase by \$1 billion to \$29.9 billion, a 3.5% increase, and funding for the National Cancer Institute (NCI) will increase by \$140 million to \$4.923 billion, a 2.9% increase.

Sequestration, which amounted to a 5% reduction of the NIH FY2013 budget applied evenly across all programs, projects, and activities, had wide-ranging effects. According to NIH Director Francis Collins, MD, PhD, the cuts not only increased competition for new grants, making it harder for new investigators and new ideas to be funded, but also slashed funds from existing grants that were already operating on tight budgets.

For the FDA, the bill goes beyond restoring the budget losses due to sequestration, although a large portion of the increase will cover food-safety activities mandated by a 2011 law. However, other agencies weren’t as lucky. The NIH budget falls \$714 million short of pre-sequestration funding levels. The NCI budget increase makes up only about half of sequestration losses. In fact, in real dollars, NCI’s FY2014 budget falls short of its FY2009 budget of \$4.968 billion.

“We should clearly express our appreciation to the Congress for being able to do that much in an incredibly

difficult environment,” says Edward J. Benz Jr., MD, president of Dana-Farber Cancer Institute in Boston, MA. “On the other hand, it’s a partial make-up. It is not a solution to the fundamental weakening of the research enterprise that has resulted from a long history of dwindling funding that was exacerbated by sequestration.”

At Dana-Farber, sequestration delayed recruitment and indefinitely postponed development of various research centers. “Money that that might have been used for new projects, new ideas, or for recruiting new investigators had to be diverted toward making up for the losses to existing labs,” says Benz.

The sequestration cuts of FY2013 came on top of budget cuts for the NIH and NCI that began in FY2011. Even without taking into account outright budget cuts, the NIH budget had not kept pace with biomedical inflation, an estimated increase in the prices of research equipment and supplies, in a decade. In January 2013, the NIH projected biomedical inflation levels of 2.7% for FY2014 and 2.9% for FY2015.

“Resources are constrained, but there is still a lot of federal and non-federal money being spent on cancer research,” says Benz. “It’s incumbent on us to find the best way to use existing funding to make the biggest impact on patients.” ■

Report Links Smoking to Poor Cancer Outcomes

Fifty years ago, the landmark 1964 report *Smoking and Health*, issued by U.S. Surgeon General Luther Terry, MD, first linked smoking to lung cancer. The latest report, issued in January by Acting Surgeon General Boris Lushniak, MD, MPH, and available at www.surgeongeneral.gov, highlights successes of the resulting anti-tobacco movement and expands the long list of smoking-related health problems to include colorectal and liver cancers, diabetes, and rheumatoid arthritis, among others.

The comprehensive new report—the 32nd such document—is also the first to offer evidence documenting the harms of continued smoking for people with cancer. It notes that smoking increases all-cause mortality by at least 50% and cancer-specific mortality by 61% in cancer patients. Cancer survivors who