



NIH Receives \$2 Billion Increase in 2016

Federal Spending Bill Includes \$5.2 Billion for NCI

After a decade of static or shrinking budget appropriations, the NIH will see a substantial funding increase in 2016. In December the president signed Congress's \$1.1 trillion spending bill which included \$32.1 billion for NIH. The NCI will receive \$5.2 billion of that, an increase of nearly 6% over NCI's 2015 budget of \$4.9 billion.

Between 2005 and 2015, the NCI budget grew by an average of only 0.2% annually. The budget declined by more than 5% from 2012 to 2013 as a result of automatic spending cuts, commonly referred to as the federal sequester, associated with the Budget Control Act of 2011. Some of these cuts were later restored, but the NCI budget rose by only 1% on average in the next two years. Thus, the 6% increase for the institute's 2016 budget represents a notable and welcome departure from recent trends.

The \$5.2 billion appropriated for NCI in 2016 falls short of the institute's Professional Judgment Budget, or Bypass Budget, which reflects NCI priorities and identifies areas of potential investment in cancer research. For 2016, NCI requested \$5.75 billion. However, the approved NCI budget exceeds by \$100 million the President's Budget request of \$5.1 billion for NCI.

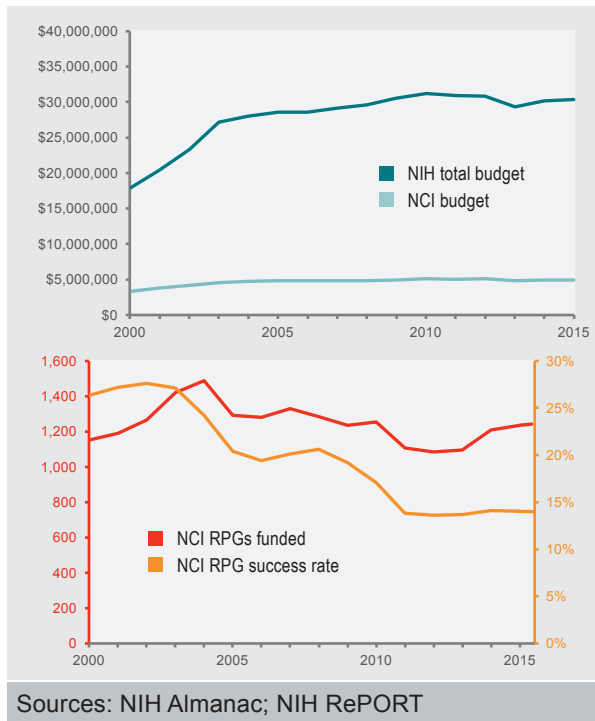
It is not clear whether or how the \$284 million increase in NCI funding will affect extramural awards. The President's Budget request specified an increase of more than \$89 million for Research Project Grants, or RPGs, for a total of more than \$2 billion devoted to these awards. The RPG success rate has remained flat at 14% in the past five years, but the number of applications funded increased over that time, from 1,106 in 2011 to 1,236 in 2015. In 2014, RPGs, which

include competing R01, R21, R03, P01 and other mechanisms, accounted for 41% of the NCI budget, down from 43% in 2011.

However the NCI extramural research budget is allocated across funding mechanisms, additional support is likely to go to the institute's Precision Medicine Initiative. In addition to increased funding of RPGs in this area, the NCI's Clinical Trials Cooperative Group Program is expected to receive funding to expand genetically-based trials. Other priority areas highlighted in the President's Budget request include research on obesity and cancer risk, adverse effects of therapeutic radiation exposure, associations between inflammation and cancer, pancreatic cancer risk in patients with diabetes, and cloud computing for the analysis and sharing of very large biological datasets. The President's Budget also requested increased funding for the Cancer Intervention and Surveillance Modeling Network, or CISNET.

SOAR investigator **Ann Zauber** (Epidemiology) applauded the budget increase, in particular expanded funding for precision medicine studies. **Colin Begg** (Biostatistics) noted that while encouraging, the NCI budget increase is modest relative to the declining purchasing power of research dollars. "This is a respite from attrition, not a cure,"

he said. Begg also raised concerns about the reduced proportion of NCI funds devoted to unsolicited grants. "The strength of the system," he said, "has always been its commitment to peer review and to the implicit belief that the best way to advance scientific inquiry is to promote the ideas that emerge from the broad community of scientists."



MSK Hosts Survivorship Research Symposium

Experts Discuss Advances in Care and Science

The 5th annual Survivorship Research Symposium was held at MSK on November 23, 2015. Psychologist Paul Jacobsen, Associate Center Director for the Division of Population Science at Moffitt Cancer Center, gave the key-

note address. SOAR investigator **Shrujal Baxi** (Medicine) presented research on the management of head and neck cancer survivors, and **Darren Feldman** (Medicine) discussed cardiovascular risks in testicular cancer survivors.



Clockwise from above:
Darren Feldman, Kevin Oeffinger, Chris Nelson with keynote speaker Paul Jacobsen; Shrujal Baxi; Danielle Friedman

SOAR Grants

Jack Burkhalter (Psychiatry & Behavioral Sciences) received a grant from the MSKCC-CCNY Partnership for Cancer Research, Training, and Community Outreach for “Implementing Health-Related Quality of Life Assessment in ANCHOR Trial.”

Jennifer Hay (Psychiatry & Behavioral Sciences) received an R01 from NCI for “Don’t Know Responses to Risk Perception Questions: Identifying Mechanisms and Solutions.”

Jennifer Leng (Immigrant Health & Cancer Disparities) received a grant from the MSKCC-CCNY Partnership for Cancer Research, Training, and Community Outreach for, “Taxi Particulate Matter Study.”

Kenneth Offit (Medicine) received an award from the Breast Cancer Research Foundation for “Genomic Risk Stratification for Breast Cancer.”

Mark Robson (Medicine) received an award from the Breast Cancer Research Foundation for “Genomic Susceptibility to Breast and Ovarian Cancer.”

SOAR Seminars



Peter Ubel, Fuqua School of Business at Duke University, presented *Money Talk in the Doctor’s Office* on November 10th.



Deborah Schrag, Dana-Farber Cancer Institute, presented *Cancer Care for Enrollees in the Medicaid Program Before and After the ACA* on December 8th.

Mark your calendar

January 13
4:00PM
RRL-101

SOAR Seminar
Andrew T. Chan, MD
Massachusetts General Hospital

February 26

**New York City
Epidemiology Forum**
CUNY Graduate Center

SOARNEWS EDITORIALSTAFF
Elena Elkin, PhD / Epidemiology & Biostatistics
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Saidah Henderson, MA / Psychiatry & Behavioral Sciences
Claudia Ayash, MPH / Immigrant Health & Cancer Disparities

Michael Walsh is an Assistant Attending Physician in the Pediatrics Service.

What brought you to MSK?

The opportunity to work with Dr. Offit and his clinical genetics team as well as the opportunity to practice pediatric oncology. Dr. Offit’s clinic is a first in its focus on taking care of people who are predisposed to cancer. Previously I worked at St. Jude Children’s Research Hospital.

When you study cancer patients and their genes, do you test the whole family?

It depends. The focus of the clinic here has been on breast, ovarian, and colon cancers, and with adults, we often see just the individual patient. But depending on the mutations we find, we might push to test or counsel family members if there is a medical decision or an action that can be taken to help someone. It’s different for every case. The clinic sees children as well, but that hasn’t been the main focus. I’m trained in pediatrics, so there’s an opportunity to do some work that goes a little bit in a different direction. When we see kids, we usually meet them with their parents.

Is genetic research in pediatric populations different than in adults?

Pediatric cancer is rare. In the US only 15,000 kids are diagnosed with cancer each year. Drawing conclusions in studies in pediatrics requires collaboration. Because the total volume is low, in germline studies of pediatric cancer predisposition we often need to think about all the cancers in the population, as opposed to specific types of cancer. But in a study I published recently with colleagues from St. Jude and Washington University in St. Louis, we found germline mutations in cancer-predisposing genes in more than 8% of children and adolescents with cancer. And in most of those cases, there was no family history of an underlying cancer predisposition syndrome.

What kinds of studies are you working on now?

I recently completed an analysis of 115 pediatric cancer cases that had MSK-IMPACT test results. In 11 cases we found pathogenic mutations. Most importantly, some of those mutations were relevant to immunotherapy or PARP inhibitors. We plan to expand the use of MSK-IMPACT sequencing in pediatrics under Part C of institutional research protocol 12-245 once it is fully up and running smoothly on the adult side. The goal is to collect information prospectively about germline mutations and cancer risk and outcomes.

Are parents wary about genetic testing of their children?

Usually parents are open to it. They want to do whatever they can or gain any possibly relevant information to help their kids. The hard part is knowing which information is helpful - there are so many mutations of uncertain significance. But that has not seemed to be a deterrent to testing in the pediatric population.

Are there ethnic differences in genetic predisposition to cancer?

Every ethnic group has their mutations, and we’re not necessarily as well-studied on all of them. MSK has a long history of working with the Ashkenazi Jewish population, so we know a lot about them and their genetic predispositions to certain cancers. Within the Brazilian population there is an increase in a very specific mutation that predisposes that population to adrenal cortical tumors. In the non-cancer world, there is a lot of evidence of specific mutations in Native Americans. For example, in a tribe in Tuba City, Arizona, there is a mutation in the mitochondrial gene that predisposes kids to liver and brain problems. And many in the Eskimo population have a specific mutation that predisposes them to congenital adrenal hyperplasia, an endocrine disorder.

How do you like New York City?

It was a big move from Memphis. There was a lot of space to move around in Memphis. But there’s a wealth of culture here, and everything is very accessible. My wife, who’s also a pediatric oncologist, has already been to many of the museums with my son who also loves them.

Museums aren’t for you?

I swim and bike and run. The park is amazingly friendly to bikers, but I’m thinking of giving it up because cycling is pretty dangerous. I ran the New York City marathon this year, and that was really great. At one point in the race I heard a familiar voice near me – someone talking about cancer survivorship. It was Kevin Oeffinger!



Q&A
Michael Walsh

SOAR Honors

- ★ **Francesca Gany** (Immigrant Health & Cancer Disparities)
Gany was appointed to Partners for Cancer Diagnostics and Treatment, a public-private partnership convened by the White House to improve health care access in sub-Saharan Africa.

NCI Discontinues Omnibus R21

Mechanism Retained for Specific Funding Opportunities

The National Cancer Institute will no longer participate in the NIH’s Exploratory/Developmental research grant program, or parent R21. The NCI’s omnibus investigator-initiated R21 announcement expired in September and was reissued with a single application deadline in November. The agency has no plans to reissue or extend the announcement. NCI will continue to use the R21 mechanism for specific program announcements and requests for applications.