

## **FACES OF AUSTERITY:**

*How Budget Cuts Have Made Us Sicker, Poorer, and Less Secure*

**NOVEMBER 2013**



**NDD  
UNITED**

*Working Together to Strengthen America*



In Washington, lawmakers and wonks think about budgets in terms of numbers, dollar signs, and decimal points. But beyond the Beltway, there are faces behind the numbers. Even seemingly “small” changes in federal spending can have a big impact on Americans who rely upon and benefit from federally funded programs.

Indeed, a 5 percent cut to a federal program—as was required in the first year of federally mandated “sequestration”—translates into a much bigger cut on the ground. Federal contractors, grantees, and program beneficiaries must also cope with the cumulative effects of the federal government’s austerity measures, the erosion of the state and local funding base, and constrained contributions by the private and philanthropic sectors. They are, in fact, doing much more with much less than is recognized or reported.

Thus far, the true impact of austerity has been masked behind the numbers. You have to talk to Americans, face-to-face, if you really want to understand the effects of budget cuts. **Faces of Austerity: How Budget Cuts Have Made Us Sicker, Poorer and Less Secure** tells the stories of those who’ve been impacted most

by Washington’s failure to preserve the programs that keep us all healthy, safe, and educated. It is the product of months of work on behalf of hundreds of organizations representing millions of Americans nationwide.

The report provides the first ever comprehensive snapshot of austerity’s impact across sectors—education, job training, public health, safety and security, housing, science, natural resources, infrastructure, and international affairs. It features more than 40 distinct stories of individuals living with federal budget cuts in 22 states, nationwide, and even overseas.

While each individual’s story is unique, there are three key lessons that emerge:

**👤👤👤 The cuts are deeper than you think.**

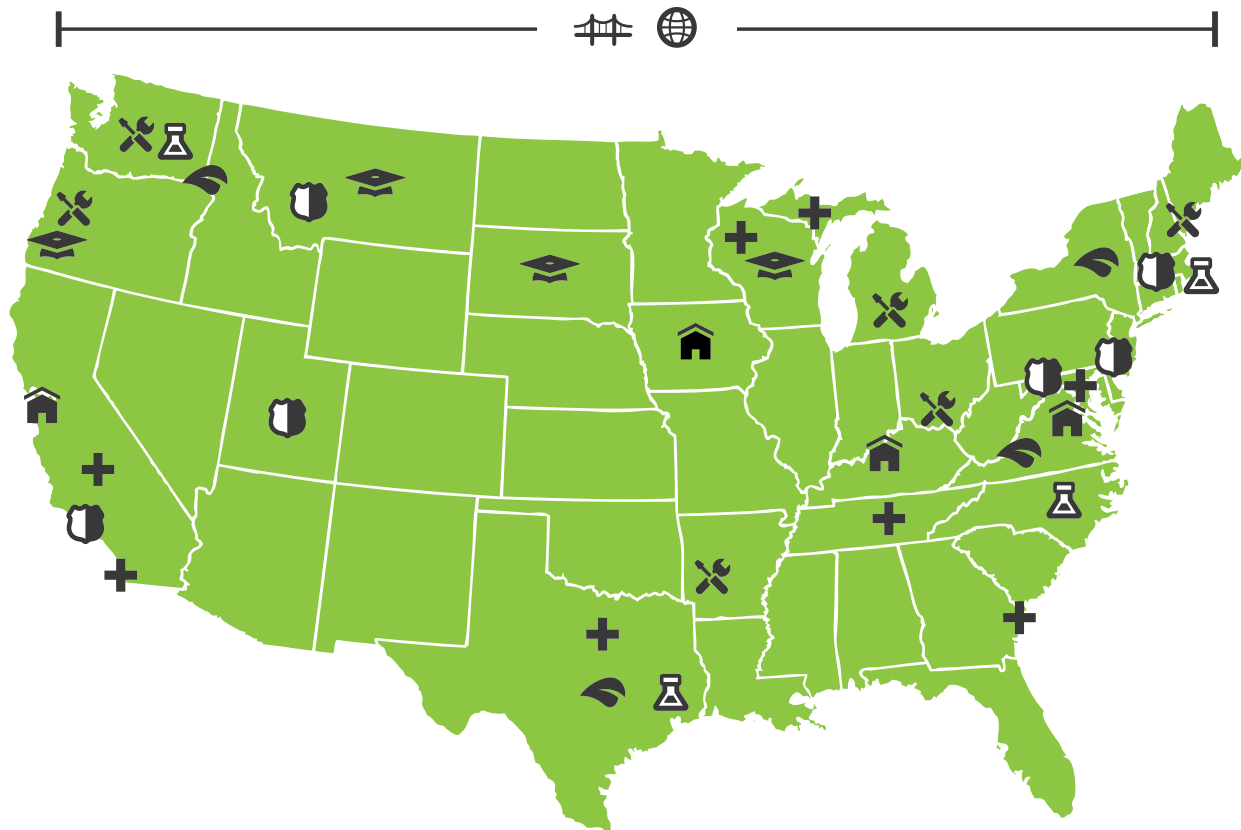
When it comes to sequestration, we’ve all heard politicians and pundits say, “Who can’t absorb a five percent cut?” As the stories in our report show, sequestration cuts much deeper—25, 50 and in some cases, even 100 percent—once the cuts ripple out into the community.

**👤👤👤 The cuts are unsustainable.** Those featured in our report say they’ve been able to hold it together so far, but if the cutting continues—as is scheduled to happen if lawmakers don’t intervene—there will be real and lasting damage, including complete elimination of programs, projects, and services.

**👤👤👤 The cuts lead to lost opportunities.**

There are real opportunity costs of federal budget cuts. The eroding disease surveillance infrastructure. The antiquated weather satellites. The student turned away from a career in science. The insolvent highway trust fund, and crumbling roads and bridges. The baby who wasn’t screened for SCID because the state can’t afford it.

This report will provide much needed context for ongoing budget discussions. We hope Congress and the White House will remember the faces from this report—and the faces of millions of Americans not featured here—as they work together to balance the federal budget in a more balanced and responsible way.





*The Congress shall have Power  
To lay and collect Taxes, Duties,  
Imposts and Excises, to pay the  
Debts and provide for the  
common Defence and general  
Welfare of the United States;*



*The United States Constitution*

ARTICLE 1, SECTION 8



Cutbacks from sequestration have cost 129 people their jobs at the Huntsville-based company that provides janitorial and grounds keeping services at Redstone Arsenal.

[ALL ALABAMA, 6/18/2013] ALABAMA

The impact of sequestration continues to hit close to home, with Aerospace Testing Alliance (ATA) announcing Monday that it will need to eliminate 128 jobs at AEDC in response to deep cuts in federal funding.

[THE TULLAHOMA NEWS, 3/26/13]

TENNESSEE

TAC Industries has laid off 17 employees due to contract cuts and the impending loss of more contract money from sequestration.

[SPRINGFIELD NEWS-SUN, 3/14/13]

OHIO

Intelligent Software Solutions Inc. laid off 40 employees after funding under an Air Force Research Laboratory contract was delayed because of automatic federal budget cuts known formally as sequestration.

[THE DENVER POST, 3/19/13]

COLORADO

Maryland lost about 21,000 jobs as a result of the automatic federal spending cuts known as the sequester, state officials say, and they expect another 4,000 federal positions to evaporate over the next two years.

[BALTIMORE SUN, 9/27/13] MARYLAND

We need to work together — as an innovation community — to battle the single biggest threat to our future success. And that is the drastic federal budget cuts known as ‘sequestration,’ —Mit President Rafael Reif

[BOSTON HERALD, 3/19/2013]

MASSACHUSETTS

The full ranges CBO uses for those parameters suggest that, in the third quarter of calendar year 2014, real GDP could be between 0.2 percent and 1.2 percent higher, and employment 0.3 million to 1.6 million higher, under the proposal (repealing the sequester) than under current law.

[CBO LETTER TO CHRIS VAN HOLLEN, 7/25/13]

Policymakers’ main challenge is to support the recovery while addressing the vulnerabilities that threaten growth, public finances, and financial stability in the medium term. In staff’s view, a desirable policy strategy to deal with this challenge includes the following ingredients: Repealing the sequester and adopting a more balanced and gradual pace of fiscal consolidation in the short term...

[INTERNATIONAL MONETARY FUND, 6/14/13]





## **WHEN YOU CAN'T GO IT ALONE**

The Founding Fathers granted Congress the power to collect taxes to provide for the “general welfare” of the United States. As the size, economy, and complexity of the United States expanded, so too did the federal government’s roles and responsibilities in protecting Americans—providing for societal needs when the market does not and when individuals are unable to address these needs themselves. Using taxes paid to the Treasury, the federal government built an interstate highway system, connecting Americans across the country and funded research that led to the development of the Internet, connecting us to the rest of the world. It invests in education, the foundation of economic opportunity. It protects our safety and security, in daily living and times of crisis. It invests in medical research to discover new cures that save lives. It provides training to an unemployed worker and a warm meal

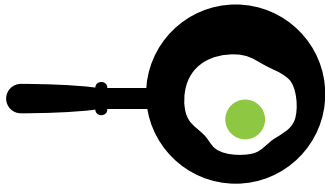
to a homebound senior. It provides a basic infrastructure that supports our modern way of living. Indeed, the taxes the federal government collects from us come back to us and our communities in many ways that make our society stronger and fairer.

The federal government does all this and more in the background every day, and thus we often take it for granted. As you prepare for work in the morning, you may not stop to realize the federal government makes sure the water you use to brush your teeth is safe. You don’t think twice about whether or not your breakfast will make you sick, because the federal government is monitoring the quality of eggs, bacon, orange juice, and coffee beans. As you commute to work, you may not notice that the bus or train you ride is funded by federal subsidies and grants. Or that the federal investment in your education and job training may have helped you qualify for your job. Once at work, you are free from

unsafe conditions because the federal government sets basic safety standards for your workplace and holds your employer accountable to them.

# A DAY IN YOUR LIFE

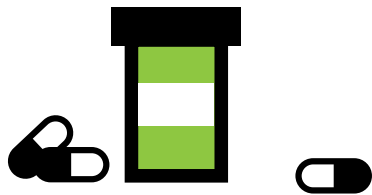
*Whether or not you realize, you and your family benefit from NDD programs every day.*



You head into the kitchen to scramble eggs for breakfast - NDD is safe food.



You turn on the tap for a glass of water - NDD is clean water.



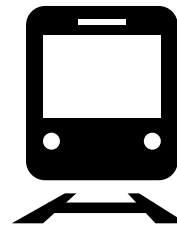
You take your medication for blood pressure - NDD is drug discovery and safety.



You check the weather report and it calls for rain, so you grab your umbrella - NDD is the National Weather Service.



One of your children attends public school and another has financial aid to pay for college - NDD is education and college access.



You ride the subway to work - NDD is public transit.



You see news reports of the FBI thwarting a domestic terrorist plot - NDD is public safety.



You use the Internet to check into your flight online - NDD is technology.



At the airport, you pass through security and board your plane, which takes off, flies, and lands safely - NDD is security screening and air traffic control.



You enjoy visiting Mount Rushmore on a family vacation - NDD is the National Park Service.

# NDD: IMPROVING EVERYDAY LIVES OF EVERYDAY AMERICANS

When lawmakers and policy wonks in Washington talk about how and on what your taxpayer dollars are spent, they generally think in terms of two types of programs—“mandatory” and “discretionary.” Mandatory programs include Social Security, Medicare, Medicaid, and Supplemental and Nutrition Assistance Program or SNAP (formerly “food stamps”). The funding for these programs generally flows automatically and is not determined by annual appropriations bills. Funding for discretionary programs is set each year through the annual budget process. That is, Congress retains complete discretion, or choice, each year on whether and at what level to fund programs in the discretionary category. But these programs are far from dispensable.

Discretionary programs are generally described as: “defense discretionary,” which includes the Pentagon’s budget and related military programs; and “nondefense discretionary” or NDD, which includes everything else. NDD programs include core functions the government provides for the benefit of all, including medical and scientific research; education and job training; infrastructure; public safety and law

enforcement; public health; weather monitoring and environmental protection; natural and cultural resources; housing and social services; and international relations. Every day these programs support economic growth and strengthen the safety and security of every American in every state and community across the nation. NDD programs support our economy, drive our global competitiveness, and provide an environment where all Americans may lead healthy, productive lives.

These programs help the federal government fulfill the Constitutional obligation to “provide for the general welfare of the United States.”

## NDD PROGRAMS COST LESS THAN YOU THINK, AND ARE SHRINKING

Despite the vast array of important services provided through NDD spending, it remains a small and shrinking share of the federal budget and our overall economy. Historically, NDD represented less than one-fifth of the entire budget, and less than 4 percent of the country’s economy (gross domestic product or GDP).

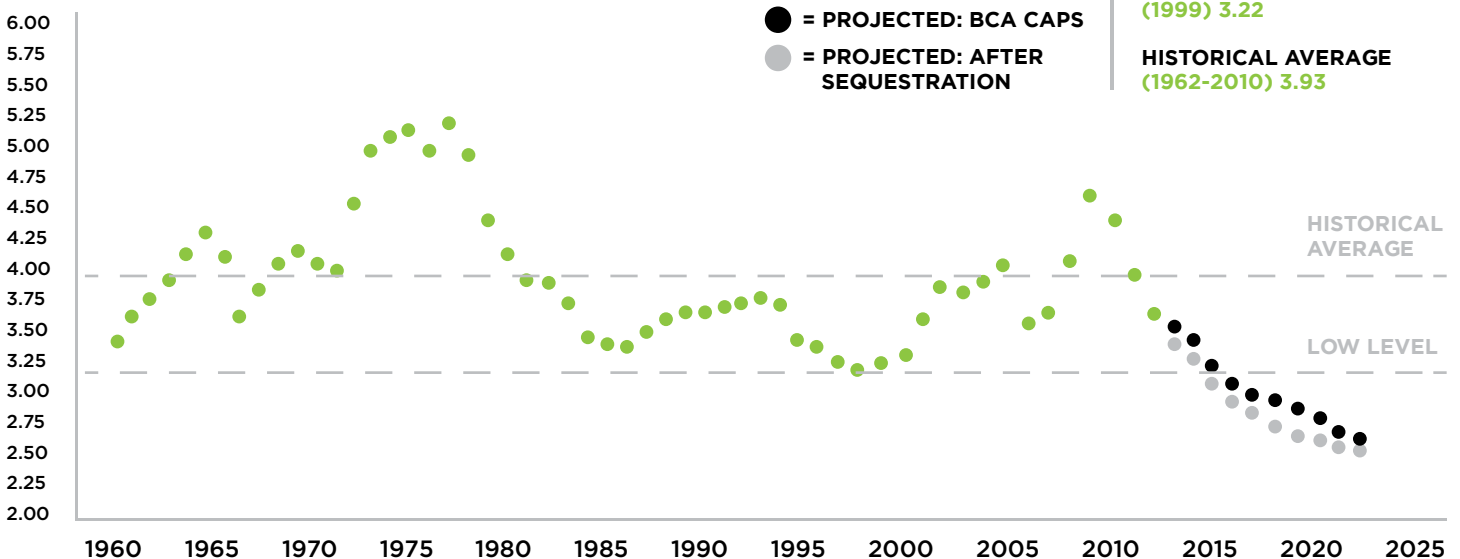
NDD has been cut dramatically and disproportionately in recent years as lawmakers work to reduce the deficit,

even though experts agree these programs—which are shrinking as a share of our economy — don’t contribute to our nation’s mid- and longer-term debt problem.

Between fiscal years 2010 and 2011, NDD programs were cut by 7 percent on average, with cuts to some programs deeper than 50 percent. Major deficit reduction legislation that was enacted in 2011, known as The Budget Control Act, established caps restricting how much funding Congress could allocate to discretionary programs each year over the next decade. As a result, by 2023 these caps will cut \$1.6 trillion from defense discretionary and NDD programs combined, relative to the inflation-adjusted 2010 funding levels. By fiscal year 2017, NDD spending will equal a smaller percentage of our economy than ever before, with data going back to 1962.

The Budget Control Act also directed a congressional Joint Select Committee on Deficit Reduction to identify an additional \$1.2 trillion in budgetary savings over ten years. The Budget Control Act included a provision that called for automatic cuts in both defense and non-defense programs — called sequestration — if the Congress did not reach an agreement on this level of deficit reduction. The failure of this bi-partisan “super committee” to come to an agreement on a balanced, meaningful deficit reduction plan triggered

### NDD SPENDING AS A PERCENT OF GDP

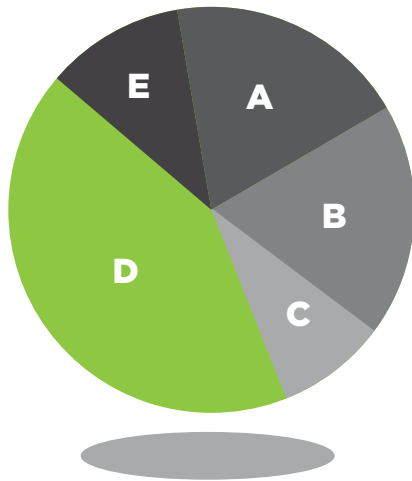


Source: Congressional Budget Office & Office of Management & Budget

## NDD OUTLAYS AS A PERCENT OF ALL FEDERAL SPENDING, FY 2013

### 2013

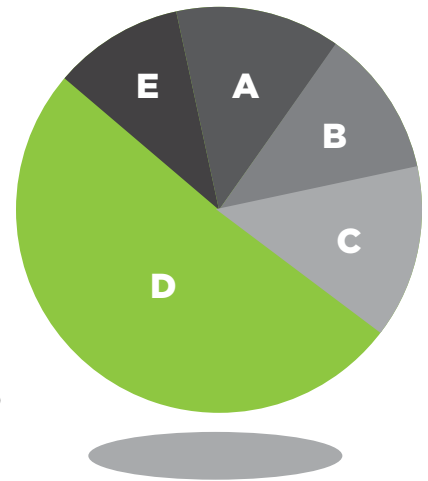
- A) TOTAL NDD  
**16.9%**
- B) DEFENSE DISCRETIONARY  
**18.2%**
- C) NET INTEREST PAYMENTS  
**6.45%**
- D) SOCIAL SECURITY, MEDICARE, MEDICAID  
**45.73%**
- E) OTHER ENTITLEMENT PROGRAMS  
**12.72%**



Source: CBO May 2013 Baseline

### 2021

- A) TOTAL NDD  
**12%**
- B) DEFENSE DISCRETIONARY  
**11.86%**
- C) NET INTEREST PAYMENTS  
**13.46%**
- D) SOCIAL SECURITY, MEDICARE, MEDICAID  
**51.18%**
- E) OTHER ENTITLEMENT PROGRAMS  
**11.5%**



Source: CBO May 2013 Baseline

sequestration for 2013 and 2014, and unless Congress changes the law, for every year through 2021.

In budgetary terms, to “sequester” means to cut certain federal programs across-the-board until a set level of spending (or cuts) has been reached. Sequestration led to even deeper cuts to both defense and non-defense discretionary programs (with some additional cuts coming from a specific set of entitlement programs, as well). These cuts are in addition to the \$1.6 trillion in cuts already sustained through the Budget Control Act’s spending caps.

At the macro level, sequestration required an additional 5 percent across-the-board cut to NDD programs in 2013, relative to the funding level set by the Budget Control Act for that year. Over the next eight years, it will mean \$109 billion a year cut from defense and nondefense programs, with most of the nondefense cuts coming from discretionary programs. By the time the Budget Control Act expires in 2021, NDD will represent just 11 percent of federal spending, and 2.6 percent of GDP—the lowest level on record back to 1962—if lawmakers do not

act to replace sequestration with a more meaningful and comprehensive deficit reduction strategy.

## CUTS HAVE CONSEQUENCES

These cuts—and sequestration particularly—have real consequences in the lives of Americans. Public services are cut, investment in research and technology is cut, and help for struggling Americans is cut. These cuts also affect the broader economy, reducing job growth and creating a drag on an economy still struggling to recover from the Great Recession. The economic impact is large enough that the International Monetary Fund (IMF) advised the United States:

*Policymakers’ main challenge is to support the recovery while addressing the vulnerabilities that threaten growth, public finances, and financial stability in the medium term. In staff’s view, a desirable policy strategy to deal with this challenge includes the following ingredients: Repealing the sequester and adopting a more balanced and gradual pace of fiscal consolidation in the short term....*





Here are examples of the ways in which sequestration in particular is negatively affecting the economy, jobs, and basic government functions.

## **IMPACT ON THE ECONOMY AND JOBS**

While the federal deficit has contracted 38 percent in the first ten months of fiscal year 2013 relative to the same period in 2012, it has come at a price.<sup>iv</sup> The Congressional Budget Office (CBO) estimates that canceling sequestration for both fiscal years 2013 and 2014 “would increase the level of real (inflation-adjusted) gross domestic product ... by 0.7 percent and increase the level of employment by 900,000 in the third quarter of calendar year 2014.”<sup>v</sup> Most of the job losses caused by sequestration are outside of government, though losses in public sector employment are significant. Goldman Sachs Research has projected that, through September 2013, there were 71,000 fewer government employees from just a year before and that assuming Congress did not cancel sequestration, that number would reach 100,000 in the coming months.<sup>vi</sup>

## **IMPACT ON STATE AND LOCAL GOVERNMENTS**

States and localities depend on federal funds to help pay for NDD public services that are fundamental to state economies and to the quality of life in communities around the country. More than one-third of NDD funding that goes to states and localities goes to help educate children, and is especially important to children in high-poverty schools. Other NDD funds directed to states help pay for water treatment facilities, law enforcement activities, infectious disease surveillance, and nutrition for newborns. Federal funding for these services already has been deeply cut through sequestration and the spending caps established by

The Budget Control Act in 2011. For example, federal funding for Title 1—the major federal assistance program for high-poverty schools—is down 12 percent since 2010, after adjusting for inflation, and funding for education for students with disabilities is down 11 percent. Further, NDD cuts hit at a time when state and local budgets are still deeply damaged by the recession, making it a particularly difficult time for them to absorb additional cost shifts from the federal government.

## **IMPACT ON PROGRAM INTEGRITY**

Sequestration cut funding for efforts the federal government undertakes to ensure that individuals and companies pay the taxes they owe, to root out Medicare fraud, and to ensure that individuals receiving disability benefits are reviewed periodically to see if they continue to meet the disability criteria. In all three cases, there is significant evidence that for every dollar spent, the federal government saves far more than \$1 by increasing tax collections, reducing fraudulent Medicare payments, and reducing disability benefits when individuals' health has improved. For example, funding for disability reviews reduces program costs by nearly \$10 for every \$1 spent, according to the Social Security Administration.<sup>vii</sup> The Internal Revenue Service (IRS) Oversight Board — charged with reviewing the IRS budget and offering recommendations to policymakers — has noted that investing in tax enforcement returns \$4 for every \$1 spent.<sup>viii</sup> Similar high rates of return have been documented for antifraud efforts in Medicare.<sup>ix</sup> For this reason, cutting funding for these program integrity activities actually increased federal spending and deficits because of unchecked waste, fraud, and abuse.

## **IMPACT ON GOVERNMENT PRODUCTIVITY**

To spare the public from some of sequestration's impact, many agencies in 2013 absorbed the cuts in their own budgets, including money to be spent on new equipment, new hires, training, and travel—activities that may sound wasteful but are essential for agencies to effectively carry out their missions. According to the New York Times, most government travel budgets have been cut by 30 percent since the implementation of sequestration.<sup>x</sup> Because of these cuts, for example, the Office of the United States Trade Representative has only enough money to send a negotiator to one of the 41 countries accused of violating American intellectual property rights.<sup>xi</sup> Travel cuts have also created government inefficiency. One Air Force officer, stationed at the Pentagon, reported that, “Twice this year, he drove to Dulles International Airport, where he picked up a rental car and drove ten hours to a Tennessee airport,” 650 miles away, in order to save travel costs. These hours spent travelling take away from the time spent carrying out missions.<sup>xii</sup>

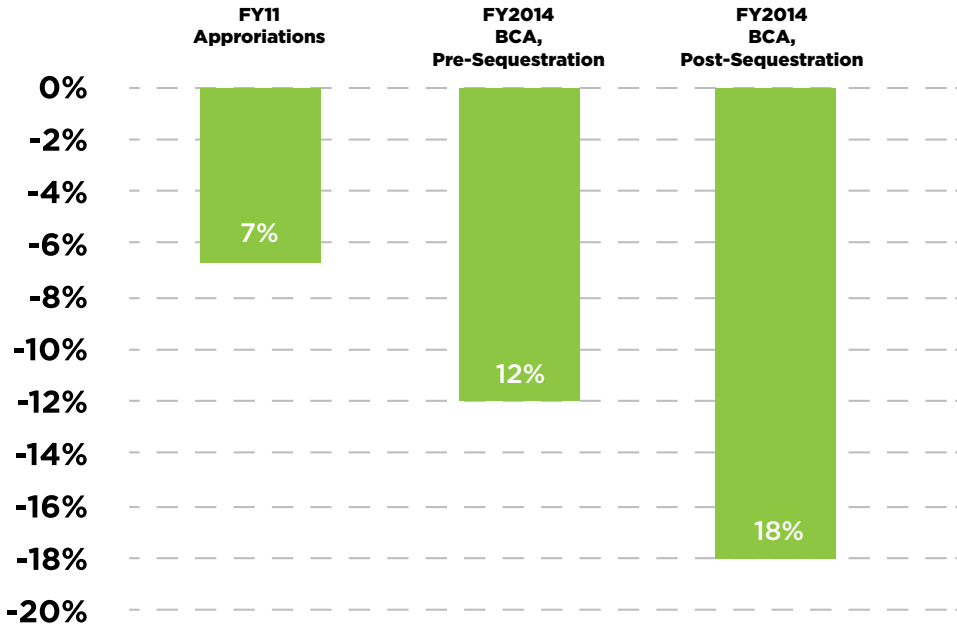
## **IMPACT ON LOCAL BUSINESSES**

Cuts to the federal government have a profound effect on local businesses. The O'Callaghan Annapolis Hotel reported that it has reduced its rates by 40 percent to remain competitive as fewer people visit the region. The Annapolis & Anne Arundel County Convention & Visitors Bureau did a study on the decreased traffic and found that the recent sequestration cuts were to blame. The Smith Travel Research study found hotel occupancies in the region were down 3 percent between May and July, and that June occupancy was off 4.5 percent, coinciding with the implementation of the cuts.<sup>xiii</sup>

Other effects on small business include cuts to grants from the Small Business Administration (SBA). The Mi Casa Resource Center in Colorado recently saw a 10 percent cut to its SBA grant. Last year, the Business Center helped

# PERCENT CUT IN NDD PROGRAMS RELATIVE TO 2010 APPROPRIATIONS, ADJUSTED FOR INFLATION

Source: CBO



650 small businesses that generated \$10.1 million in revenue, accessed \$1.2 million in capital, and created 129 new jobs. This year it will be forced to cut the number of training sessions for entrepreneurs by half, limiting the number of people who can get the training they need to start successful businesses.<sup>xiv</sup>

***No NDD program—from education and job training, to public health and safety, to research and natural resources—is immune from these cuts, nor is any American. Whether or not we realize it, these cuts hurt us all. The stories in the pages that follow provide a snapshot of the breadth of austerity’s impact in communities across the nation, hitting everyday Americans from all walks of life. These personal accounts demonstrate the value of NDD programs, and why austerity is simply unsustainable.***

## SOURCES

i There are a few discretionary programs that were exempt from sequestration cuts in 2013 (the first year of sequestration), such as Pell grants in the Department of Education and programs within the Veterans Administration. While most of the sequestration cuts come from discretionary programs, some entitlement programs — including Medicare — also were subject to sequestration. Social Security and most low-income entitlements, such as SNAP (formerly food stamps) and Medicaid, are exempt from sequestration. In 2014 and beyond, the sequestration cuts imposed on discretionary programs are implemented by lowering the Budget Control Act caps on defense and NDD funding discussed above. In these years, Congress could choose to cut Pell Grants or veterans’ programs in order to comply with the reduced funding available because of sequestration.

ii Concluding Statement of the 2013 Article IV Mission to The United States of America, the International Monetary Fund, available at <http://www.imf.org/external/np/ms/2013/061413.htm> (accessed September 16, 2013)

iii How Eliminating the Automatic Spending Reductions Specified by the Budget Control Act Would Affect the U.S. Economy in 2014, the Congressional Budget Office available at <http://www.cbo.gov/publication/44445> (accessed September 16, 2013).

iv Federal Deficit Slides \$366 Billion Through July, Treasury Says, CQ Roll Call, available at <http://www.cq.com/alertmatch/194742569?uid=news-4332202> (accessed September 17, 2013).

v Congressional Budget Office, “How Eliminating the Automatic Spending Reductions Specified by the Budget Control Act Would Affect the U.S. Economy in 2014,” July 25, 2013, <http://www.cbo.gov/publication/44445>.

vi US Daily: Sequester Effects Are Showing Up More Clearly (Phillips) (CORRECTED), Goldman Sachs, available at <https://360.gs.com/research/portal/research/econcommentary/action=viewpage&st=1&d=15593750&portal.page.printable=true&isRouted=true> (accessed September 17, 2013).

vii <http://www.socialsecurity.gov/legislation/FY%202010%20CDR%20Report.pdf>

viii <http://www.treasury.gov/irsob/reports/2013/IRSOB-FY14%20IRS%20Budget%20Report-052413.pdf>

ix Binder C. Medicare Program Integrity: Activity to Protect Medicare from Payment Errors, Fraud & Abuse. Congressional Research Service June 23, 2011.

x U.S. Workers Are Grounded by Deep Cuts, The New York Times, available at <http://www.nytimes.com/2013/08/19/us/us-workers-are-grounded-by-deep-cuts.html?pagewanted=2&r=0&ref=todayspaper> (accessed September 19, 2013).

xi Ibid.

xii Ibid.

xiii Anne Arundel Hotels Feel Sequester Effects, Capital Gazette, available at [http://www.capitalgazette.com/news/business/anne-arundel-hotels-feel-sequester-effects/article\\_581fe03b-26c9-5c3f-b9b3-9f5e17c706d8.html](http://www.capitalgazette.com/news/business/anne-arundel-hotels-feel-sequester-effects/article_581fe03b-26c9-5c3f-b9b3-9f5e17c706d8.html) (accessed September 19, 2013).

xiv Sequestration Dampens Hopes for Future Small Business Leaders, Huffington Post Colorado, available at [http://www.huffingtonpost.com/national-council-of-la-raza-/sequestration-dampens-hop\\_b\\_3901771.html](http://www.huffingtonpost.com/national-council-of-la-raza-/sequestration-dampens-hop_b_3901771.html) (accessed September 19, 2013).





**NDD  
UNITED**

SCIENCE & DATA



But according to the most recent study by the Bureau of Business Research at the university, a \$40 million reduction will lead to an estimated 256 jobs lost at the university, and 656 jobs lost outside of the university.

**UNIVERSITY OF UTAH [EXPLORE UTAH SCIENCE, 6/25/13] UTAH**

When I think about not being a scientist anymore my heart hurts. But sadly, due to continued budget cuts to biomedical research, within the next few years that is most likely exactly what I will be — no longer a scientist, no longer a researcher searching for cures for disease.

**ABIGAIL SCHINDLER, POSTDOCTORAL FELLOW AT UNIVERSITY OF WASHINGTON [THE SEATTLE TIMES, 7/23/13] WASHINGTON**

As an aging population raises the cost of treating diseases like diabetes, heart disease and Alzheimer's, slowing the pace of research will delay the discovery of cures and treatments that might slow the rise in health care costs.

**[NBC NEWS, 5/28/13]**

You would think that because science and medical research are vital in untold ways to America's health and wealth and general well-being, members of Congress would be wise enough to stop automatic cuts in these fields before the new fiscal year begins Oct. 1.

**[TAMPA BAY TIMES, 9/13/13] FLORIDA**

However, today, federal budget priorities for research are dwindling and the effects of sequestration are creating an 'innovation deficit' in our economy. And, because our ability to grow our way to recovery is contingent upon new discoveries, we are setting ourselves up to fail. — Eli Capilouto, President Of The University Of Kentucky **[HUFFINGTON POST, 9/26/13] KENTUCKY**

'If I'm not funded in the next six months, I will be forced to abandon most of my research project,' [Yuntao Wu of George Mason University] said. 'Some of these projects have been invested in for years.' Recently, he's begun thinking about leaving the country for greener pastures. 'I am starting to set up collaboration with Chinese researchers because the funding here dried up. This will permit me to at least keep some of my project alive,' he said. 'It has been very frustrating for me. I am in the middle of my career and the most productive time of my life.'

**[HUFFINGTON POST, 8/14/13] VIRGINIA**

Children's Hospital in Los Angeles lost \$1 million from its NIH grant as part of sequestration this fiscal year. 'That means figuring out how to keep the discoveries in children's cancer research moving forward and still close that million dollar gap in funding,' said Brent Polk, the hospital's Physician in Chief.

**[SOUTHERN CALIFORNIA PUBLIC RADIO, 5/30/13] CALIFORNIA**

Innovation-focused pools of capital need to be available at the federal level for regions to leverage existing resources, spur collaboration, and support job creation in high growth industries.

**[FORBES, 12/3/12]**

PhD candidate Meredith Chabrier is worried that the reduction in research dollars may push her out of the field she loves: brain science. Some of her professors UC Irvine have told her that after she finishes nearly a decade of education and training, there may not be enough work for her when she graduates. 'That's really hard to grasp,' Chabrier said.

**[SOUTHERN CALIFORNIA PUBLIC RADIO, 5/30/13] CALIFORNIA**

Jeremy B. Tuttle, Ph.D., Professor of Neuroscience at the University of Virginia School of Medicine: 'My work has been supported continuously by NIH, NSF, various foundations and other sources, but primarily NIH. I have decided to shut my lab down by the end of this year and resign... That is the result of sequestration combined with stagnant support for some time - a hole in the time line of scientific progress.'

**[HUFFINGTON POST, 8/16/13] VIRGINIA**

[Giuseppina Nucifora, Professor of Hematology/Oncology in the University of Illinois at Chicago College of Medicine]:

'My lab has unfortunately lost the 20-years continuous NIH support for research on a disease that affects the blood cells of mostly older patients.'

**[HUFFINGTON POST, 8/16/13] ILLINOIS**

'It is like a slowly growing cancer,' said Steven Warren, vice chancellor for research at University of Kansas. 'It is going to do a lot of destruction over time. You are going to see people's careers end early on -- assistant professors, associate professors. They will never get that grant at that critical time and they're gone. You are going to see promising graduate students not be promising graduate students, and just leave. And it will play out over a period of many years.'

**[HUFFINGTON POST, 7/10/13] KANSAS**

Pat O'Shea, University of Maryland vice president and chief research officer, said universities were already witnessing an across-the-board brain drain, with top researchers fleeing to more accommodating pastures 'It is not just junior faculty, it is senior faculty,' O'Shea said. 'It is something that we never saw before.'

**[HUFFINGTON POST, 7/10/13] MARYLAND**

'Even senior researchers are finding it more difficult,' said Gerald Stacy, administrative director of Hopkins' Institute for Clinical and Translational Research, which manages the translational grant funds and programs there. 'As our budget gets smaller, more people are saying, 'Can you help me?'

**[BALTIMORE SUN, 8/16/13] MARYLAND**

'[Dorothy M. Supp, Ph.D., Associate Investigator at the Shriners Hospitals for Children at Cincinnati Burns Hospital]' My research has been greatly impacted by NIH budget cuts...New rules at NIH only permit you to submit a grant application two times: one original submission, and if not funded, one revised submission... My last application was scored 19th percentile... I was told the cut-off was 15% this year due to sequestration and the continuing resolution. This was a revised application so this project can no longer be submitted to NIH for funding...it's dead in the water. I have submitted over a dozen grant applications in the last two years alone, with no success. I got my PhD in 1994 and should be at the peak of my career. Instead I am constantly writing grant after grant, trying to keep myself and my two research assistants employed. Discouraging doesn't begin to describe the current climate.'

**[HUFFINGTON POST, 8/16/13] OHIO**

'If Congress continues to allow the sequestration to take place every year for the next three or four years and the discretionary funding for R & D gets dramatically cut 10 percent every year now for another four, five years, then it's gonna be a tougher world for us,' [University of Tennessee Vice Chancellor for Research and Engagement Taylor Eighmy] said.

**[THE DAILY BEACON, 4/1/13] TENNESSEE**



# INNOVATION AND ECONOMIC GROWTH COMES FROM UNDERSTANDING OUR WORLD

Federal investment in scientific discovery has propelled Americans to the moon, launched the Internet, and sequenced the human genome. The vibrant culture of freedom and curiosity that abounds in the United States has produced astounding breakthroughs in every field of science, from astrophysics to zoology. A strong, sustained federal investment in scientists and the groundbreaking research they conduct has been the backbone of this enterprise.

Smartphones, global positioning systems, satellite television, and magnetic resonance imaging are but a few examples of how the U.S. federal investment in scientific research shapes the world around us. The technological innovations underlying these inventions were not derived in the labs of corporations. Rather, research funded by the federal government through the National Science Foundation (NSF), the National Aeronautics and Space Administration (NASA), the Department of Energy, and others gave scientists and engineers working in the U.S. the necessary tools and freedom to explore

the important scientific questions that made these technologies possible. Furthermore, federal investments in biomedical research through the National Institutes of Health (NIH) have resulted in a steadily increasing life expectancy for Americans. From the invention of vaccines that prevent disease to the most recent advances in molecular medicine, federally funded biomedical research saves lives.

NIH and NSF support of behavioral and social science research including demography, economics, psychology, and sociology has also improved the health and well-being of the American people, developing approaches for limiting the spread of infectious diseases, reducing health care costs, improving long-term health and achievement outcomes of children, and implementing disease and disability prevention strategies.

Research labs are to the national scientific enterprise what small businesses are to the American economy. Individual labs, funded by federal grants for research, employ young scientists and make the discoveries that tech companies capitalize on. Corporations such as Apple, Pfizer, and Boeing, have built their success on pioneering discoveries made by federally funded scientists working at American universities. This pipeline of discovery and commercialization pays real dividends for the American taxpayer—research

in American labs and commercialized by American companies leading to a 1 percent drop in the yearly cancer mortality rate saves the U.S. \$500 billion per year in health care costs. The information technology sector, building on foundational discoveries made by federally funded scientists, contributes nearly \$1 trillion per year to the U.S. gross domestic product. The federal investment in scientific research pays significant dividends.

## AUSTERITY THREATENS AMERICAN INNOVATION

Once considered the global leader in innovation, America is falling behind as the federal investment in research and development has declined over the past decade. Federal investments in scientific research have stagnated and failed to keep pace with inflation. Furthermore, sequestration and other budget cuts to federal scientific agencies have eroded our ability to invest in the next generation of scientists to continue groundbreaking research. These trends must be reversed for American scientists to continue making critical scientific discoveries. An enduring federal investment in scientific research is essential to preserving and improving the lives of Americans.

### Federal Role: Principal Nondefense Scientific Agencies

**DEPARTMENT OF ENERGY** is the lead federal agency supporting fundamental scientific research for energy and the nation's largest supporter of basic research in the physical sciences.

**NATIONAL AERONAUTICS AND SPACE ADMINISTRATION** is responsible for the nation's civilian space program and for aeronautics and aerospace research.

**NATIONAL INSTITUTES OF HEALTH** is the primary agency of the United States government responsible for biomedical, behavioral, and social science research designed to enhance health, lengthen life, and reduce illness, and disability.

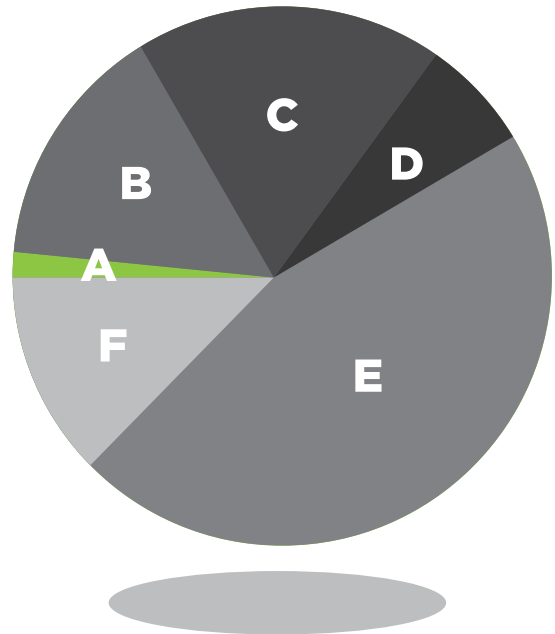
**NATIONAL SCIENCE FOUNDATION** supports fundamental research and education in all the non-medical fields of science and engineering.

\*\*\*\*\*

There are several other nondefense discretionary research programs within the Departments of Agriculture, Commerce, Health and Human Services, Homeland Security, and Labor. Included in defense discretionary spending, the Department of Defense is the largest contributor to research and development in the federal government, funding weapons systems, research on health of military personnel, and basic science and engineering.

# RESEARCH OUTLAYS AS A PERCENT OF ALL FEDERAL SPENDING, FY 2013

CATEGORY	2013
A) SCIENCE	1.59%
B) TOTAL NDD	15.31%
C) DEFENSE DISCRETIONARY	18.20%
D) NET INTEREST PAYMENTS	6.45%
E) SOCIAL SECURITY, MEDICARE, MEDICAID	45.73%
F) OTHER ENTITLEMENT PROGRAMS	12.72%

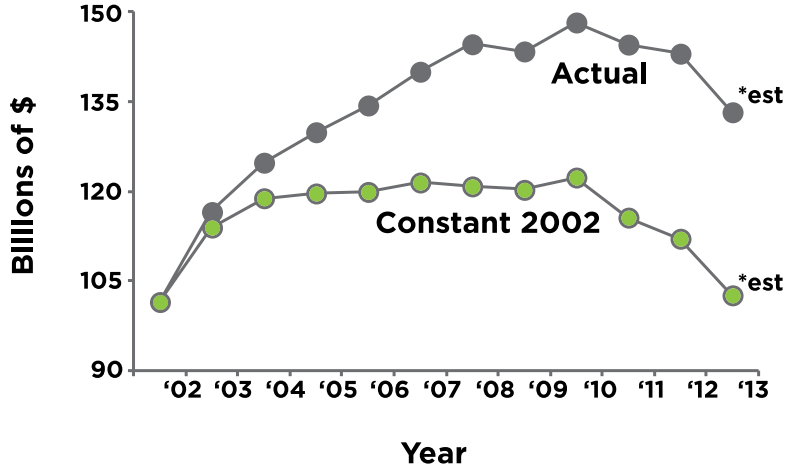


Source: CBO May 2013 Baseline

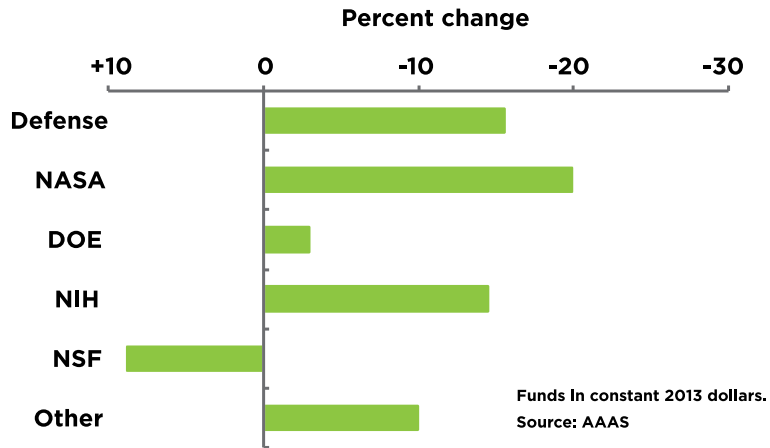


# 120

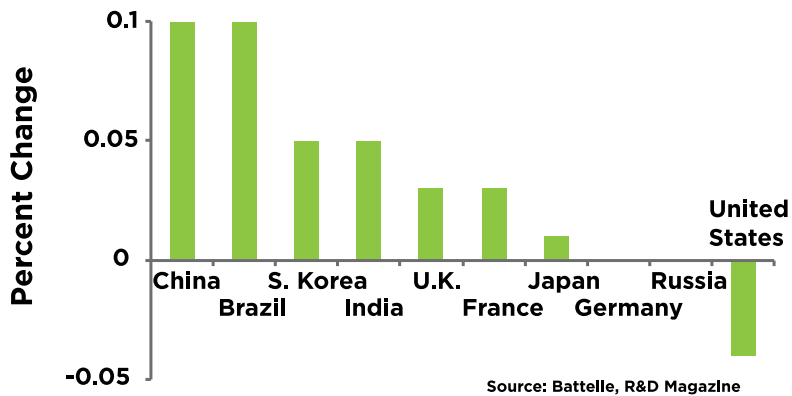
### FEDERAL R&D INVESTMENTS SINCE 2002



### REDUCTION IN AGENCY FUNDING SINCE 2004



### CHANGE IN PERCENTAGE OF GDP INVESTED IN RESEARCH SINCE 2011







From fiscal year 2002 to 2010, federal funding for scientific research increased steadily. However, when adjusted for inflation, core federal funding for science has remained relatively flat. Since fiscal 2010, the federal investment in science has fallen, in nominal and inflation-adjusted dollars, with total funding suffering a nearly 20 percent reduction in purchasing power in only three years.<sup>ii</sup>


## DATA INFRASTRUCTURE UNDERMINED

The U.S. statistical system is a decentralized network of federal agencies that collect, publish, and analyze data about the nation's population, economy, and infrastructure. In fiscal year 2013, the Administration requested almost \$7 billion to support statistical activities conducted by the 13 primary federal statistical agencies and to support related work conducted in another 85 federal agencies "... that carry out statistical activities in conjunction with other program missions, such as providing services or enforcing regulations."<sup>iii</sup> Scientists use federal statistics to analyze the implications of our nation's changing socioeconomic and demographic characteristics and to develop accurate, objective, policy-relevant recommendations.

Sequestration is having an immediate and adverse affect on the ability of federal statistical agencies to meet current and future data needs. According to the Association of Public Data Users, sequestration—combined with the impact of recent budget cuts—has led to a number of statistical program reductions and eliminations, such as:

-  Elimination of the Mass Layoff Statistics Program at the Bureau of Labor Statistics;
-  Suspension of the Milk Production Reports from the National Agricultural Statistics Service;
-  Delayed delivery of more than 1,600 Economic Census products at the Census Bureau;

 Suspension of the Annual Energy Review and Energy Perspectives at the Energy Information Administration;

 Discontinuation of the RIMS II at the Bureau of Economic Analysis.

The stories featured in this chapter will provide a snapshot of the impact budget austerity is having on the nation's scientific enterprise, but represent exactly that, a snapshot. There are hundreds more stories like these, covering a cross section of basic, applied, and translational scientific research, programs that improve the quality of life of Americans.

## SOURCES

i Unlimited Potential, Vanishing Opportunities, American Society for Biochemistry and Molecular Biology. Sept. 2013. Available at <http://www.asbmb.org/Advocacy/advocacy.aspx?id=22422>

ii "Total R&D by Agency, 1976-2014." American Association for the Advancement of Science. Available at: <http://www.aaas.org/spp/rd/guihist.shtml>

iii Statistical Programs of the United States Government: Fiscal Year 2013 Report. Office of Management and Budget. Available at [http://www.whitehouse.gov/sites/default/files/omb/assets/information\\_and\\_regulatory\\_affairs/13statprog.pdf](http://www.whitehouse.gov/sites/default/files/omb/assets/information_and_regulatory_affairs/13statprog.pdf)





# CUTS TO RESEARCH PREVENT YOUNG PEOPLE FROM PURSUING SCIENCE CAREERS

FEATURING: Michael Jackson, Vice President of Research, Central Washington University

## CUTTING THE CAREER LIFE LINE

A college education and research experience as an undergraduate are essential for forming a solid foundation from which to launch a scientific career. Students with undergraduate research experience are more likely to pursue advanced science degrees than students without research experience.<sup>i</sup> However, affording a college education has become increasingly difficult, and, as a result, two-thirds of students now receive some form of federal financial aid.<sup>ii,iii</sup> Sequestration has cut financial aid, thereby reducing the opportunities of undergraduates to take part in scientific research and hindering their scientific careers.

An eyewitness to the effects of sequestration is Dr. Michael Jackson, professor of physics at Central Washington University. CWU is a four-year, public university located in rural Washington, which graduates about 2,500 students per year.<sup>iv</sup> CWU receives sizable grants for research from the National Science Foundation (NSF) and the National Institutes of Health (NIH), but sequestration prevents CWU students from engaging in research. Said Michael:

*Sequestration has had or will have negative impacts on the next generation of researchers from CWU. Many CWU students were unsuccessful in securing summer research positions in 2013 due to a lack of funding. In fact, the research of one of the few students accepted into a summer research program was delayed because of the funding uncertainty caused by sequestration.*

## NO LUCK FOR MINORITY AND LOW-INCOME STUDENTS

NIH and NSF have made significant efforts recently to attract, recruit and retain minority scientists.<sup>v</sup> However, sequestration of financial aid programs that target minorities and low-income students, such as TRIO and the College Assistance Migrant Program, reduces the likelihood that these students will take part in research. Michael explains:

*These cuts impact the basic financial support students can obtain, which can be a deciding factor in their participation in undergraduate research. Without sufficient aid, low-income students often need to find part-time employment, which eliminates any time for extracurricular or elective curricular activities such as undergraduate research.*

## UNPREDICTABLE FUNDING DERAILS RESEARCH

Scientific research and education are multi-year commitments that often rely on federal funding. However, lurching from one manufactured federal budget crisis to the next make the continued funding for scientific research far from certain. Even brief lapses in funding can ruin long-term projects, make data sets unusable, and keep students from continuing scientific careers. As Michael explains, budget unpredictability is detrimental for education and scientific research:

*In the student-funding world, it is often said that predictability is nearly as important as affordability. One cannot plan or know what to save or borrow in the uncertain world created by federal*

*budget stalemates. This also adversely impacts research since someone may be less likely to launch research initiatives if continued support is uncertain.*

“

*It is disheartening to be at the start of what I hope will be a strong and successful scientific career and have to wonder if I will even get a job, be able to fund my research and have hope of being a competitive scientist.*

- STUDENT FROM CALIFORNIA STATE UNIVERSITY, FULLERTON

”

## SOURCES

i Students Benefit from Undergraduate Research Opportunities. National Science Foundation. Available at: [http://www.nsf.gov/news/news\\_summ.jsp?cntn\\_id=108939](http://www.nsf.gov/news/news_summ.jsp?cntn_id=108939)

ii National Center for Education Statistics in the Institute of Education Sciences. U.S. Department of Education. Available at: <http://nces.ed.gov/fastfacts/display.asp?id=76>

iii Publication Center. U.S. Department of Education. Available at: <http://www.edpubs.gov/>

iv Central Washington University Quick Facts. Available at: <http://www.cwu.edu/welcome/quick-facts>

v Working Group on Diversity in the Biomedical Research Workforce. National Institutes of Health. Available at: <http://acd.od.nih.gov/dbr.htm> and "Broadening Participation for Greater Diversity." National Science Foundation. Available at: <http://www.nsf.gov/mps/dmr/diversity.jsp>

## AUTHORS

American Society for Biochemistry and Molecular Biology and Central Washington University



# NIH CUTS IMPACT HEALTH, ECONOMY OF AMERICANS

FEATURING: Jian Liu, Ph.D., Professor of Chemical Biology and Medicinal Chemistry, University of North Carolina Chapel Hill, North Carolina

## GLOBAL CROWN JEWEL OF BIOMEDICAL RESEARCH

The National Institutes of Health (NIH) is the nation's medical research agency—making important medical discoveries that improve health and save lives. Composed of 27 Institutes and Centers, NIH provides leadership and financial support to researchers, including more than 130 Nobel Prize winners. NIH directs 83 percent of its nearly \$31 billion budget to 300,000 research personnel at more than 3,000 universities, medical schools, and other research institutions in every state and throughout the world. In addition, intramural research conducted on its own campus in Bethesda, Maryland—and a few other locations—is world renowned and has contributed to countless medical advances. The NIH Clinical Center is the largest hospital in the world totally dedicated to clinical research.<sup>i</sup>

## RESEARCH ENSURES SAFETY – AND GROWS ECONOMY – IN AMERICA

Heparin is one of the oldest drugs in clinical use today. Originally derived from tissues of pig intestines, heparin is used to today in surgical suites across the planet as an anticoagulant. Heparin is used to prevent or treat certain blood vessel, heart, and lung conditions. Heparin is also used to prevent blood clotting during open-heart surgery, bypass surgery, kidney dialysis, and blood transfusions. It is used in low doses to prevent the formation of blood clots in certain patients, especially those who must have certain types of surgery or who must remain in bed for a long time. Heparin may also be used to diagnose and treat a serious blood condition called




disseminated intravascular coagulation.<sup>ii</sup>

In 2008, a contaminated batch of heparin developed in China resulted in one of the largest drug recalls in recent history. The Food and Drug Administration attributed 81 deaths and 785 reports of serious injuries associated with the use of the contaminated drug, and tracked the source of contamination to a Chinese manufacturer who cut up to 60 percent of the drug in question with counterfeit materials in order to make drug production more cost effective for the manufacturer.<sup>iii</sup> Use of heparin was slowed, and confidence dropped as doctors worried about whether or not they could trust the next dose they prescribed.

Enter Jian Liu, Ph.D., a biochemist at the University of North Carolina at Chapel Hill. Jian and his research group have developed what they believe to be a major break through in the production of heparin. Thanks to \$4 million in grants from the NIH since 2006, Jian has developed a first-of-its-kind synthetic heparin, created chemically, and not from pigs as in the past. This breakthrough has the potential to end America's reliance on heparin manufactured outside of the United States, where standards and oversight may be lax. Said Jian:

*We are very close to a breakthrough on heparin. I believe this version could be produced here and even stop imports from China. Considering the frequency with which heparin is used (300,000 doses daily), and its \$4 billion in annual worldwide sales, a domestically manufactured synthetic heparin would not only improve the safety of the drug, but strengthen the economy.*

### SEQUESTRATION IMPACT ON NIH

-  Cut \$1.7 Billion
-  Cut 1,300 research grants (700 competing grants)
-  Cut more than 460 training grants

Jian's grant was delayed as Congress delayed and ultimately allowed sequestration to happen. As a result, Jian was forced to slow the pace of his research and cancel plans to increase the number of researchers in his laboratory. Not only has Jian's research funding been cut, the availability of funding for his future grants remains very much in doubt. A proven innovator with ideas which may not only help save American lives, but strengthen the American economy, is currently anticipating the need to delay or cancel future plans.

*It is getting more and more difficult for me to plan out into the future what my next steps in research will be. As funding gets more difficult, and less reliable, I feel the pressures to do more with less. I have seen colleagues take their research to other countries, greener pastures.*

“

*It is getting more and more difficult for me to plan out into the future what my next steps in research will be.*

- DR. JIAN LIU

”

## SOURCES

i NIH ... Turning Discovery into Health, National Institutes of Health. Available online at [http://nih.gov/about/discovery/viewbook\\_2011.pdf](http://nih.gov/about/discovery/viewbook_2011.pdf)

ii Mayo Clinic <http://www.mayoclinic.com/health/drug-information/DR601931>

iii U.S. Identifies Tainted Heparin in 11 Countries, New York Times, 6/12/2008

## AUTHORS

American Society for Biochemistry and Molecular Biology



# HARMFUL ALGAL BLOOMS: CUTS TO RESEARCH AFFECT OUR NATIONAL WATERWAYS, HEALTH, AND ECONOMY

**FEATURING:** Dr. Donald Anderson, Director of the U.S. National Office: Harmful Algal Blooms, National Oceanic and Atmospheric Administration and Senior Scientist, Department of Biology, Woods Hole Oceanographic Institution

## A THREAT TO OUR NATIONAL HEALTH AND ECONOMY

Preserving the health of our national waterways, lakes, and ocean areas is necessary for our nation's health and economic vitality. The commercial and recreational U.S. fishing industries supported more than 1.3 million jobs and generated more than \$130 billion in economic activity in 2009.<sup>i</sup> However, harmful algal blooms (HAB), or red tides caused by a rapid population growth of algae can contaminate these waterways and release toxins that are lethal to fish, mammals, birds, and humans.<sup>ii</sup> Scientific research is necessary to understand and predict HABs to protect these watery habitats.

Budget cuts have severely hindered scientists' efforts to track and predict HABs. Since 2010, the budget of the National Ocean Service at the National Oceanic and Atmospheric Administration (NOAA), which is tasked with funding research into HABs, has been cut by 40 percent. Dr. Donald Anderson, director of the U.S. National Office: Harmful Algal Blooms at NOAA has seen firsthand how HABs affect our national health and food supply. Says Donald:

*In 2011, an HAB in Lake Erie covered a record 2,000 square miles, and the algae responsible produced liver and nerve toxins that could sicken and kill exposed people, pets, and wildlife. In 2013, severe and persistent HABs in Florida killed 241 endangered manatees and resulted in respiratory distress for residents and tourists. Others became ill after eating toxic shellfish from bloom areas.*

HABs can occur in nearly any body of water, on either coast and in salt and fresh water.<sup>iii</sup> Furthermore, HABs cause more than \$80 million in economic losses

every year and threaten economically valuable fisheries that are crucial for the American food supply.<sup>iii</sup> Thus, research into predicting and preventing HABs will yield economic benefits for coastal states and health benefits for communities across the country that depend on these waterways for food. Donald explains that such research has already proved beneficial:

*Development of HAB and hypoxia sensors that accurately and quickly detect algal species, biotoxins, and low oxygen levels have provided early warning of outbreaks. These forecasts have allowed managers to make informed decisions to better protect human and ecosystem health and reduce economic impacts. For example, monitoring systems allowed fisheries on Georges Bank to reopen after HABs caused the area to close for over two decades. This reopening alone is anticipated to generate \$30 million annually.*

## SEQUESTRATION PUTS COASTAL AREAS AT RISK

Should sequestration and budget cuts continue to reduce the research capabilities of the National Ocean Service, exciting advances in the prediction and detection of HABs would be put on hold. Donald explains:

*National HAB research over the past 15 years has resulted in a powerful example of productive collaboration among federal, private, and industry sectors. Unfortunately, recent reductions in support of HAB research and forecasting are occurring during the critical research-to-operations stage. This significantly reduces*

*the return on investment and jeopardizes the economic and human health benefits at a time when the frequency and intensity of HABs are increasing.*

Budget cuts threaten not only research into how and when HABs occur, but also in preserving the health of some of our nation's busiest and economically important water areas. According to Donald:

*The health of our coastal cities are at risk, specifically, forecasting toxin risks in the Gulf of Maine and Lake Erie, monitoring algal reduction in the Gulf of Mexico and Lake Erie, and similar essential activities in the Chesapeake Bay and other great waters.*

## SOURCES

i Fisheries Economics of the U.S. National Oceanic and Atmospheric Administration. Available at: [http://www.st.nmfs.noaa.gov/st5/publication/econ/2009/US\\_ALL\\_Econ.pdf](http://www.st.nmfs.noaa.gov/st5/publication/econ/2009/US_ALL_Econ.pdf)

ii Harmful Algal Blooms: Simple Plants With Toxic Implications. National Ocean Service at the National Oceanic and Atmospheric Administration. Available at: <http://oceanservice.noaa.gov/hazards/hab/>

iii Economic Impacts of Harmful Algal Blooms (HABs). National Centers for Coastal Ocean Science at the NOAA NOS. Available at: [http://www.cop.noaa.gov/stressors/extremeevents/hab/current/hab\\_econ.aspx](http://www.cop.noaa.gov/stressors/extremeevents/hab/current/hab_econ.aspx)

## AUTHORS

Consortium for Ocean Leadership



# DATA CUTS IMPEDE SOUND BUSINESS DECISION MAKING

FEATURING: Patrick Jankowski, Vice President for Research, Greater Houston Partnership, Texas

## COMPANY'S RELOCATION TOOL

On July 9, the Bureau of Economic Analysis (BEA) released a typically dry-sounding statement: "The impact of sequestration and reduced FY 2013 funding levels...necessitate that the Bureau's RIMS II program be discontinued."

Yet the seemingly unremarkable announcement sent shockwaves through economic development communities, which rely on the program to determine the impact of a business coming to or leaving a region—and the ripple effects of that move. Explains Patrick Jankowski, Vice President for Research at the Greater Houston Partnership:

*The RIMS multipliers are key to understanding the impact a company will have on Houston should it decide to relocate here. It is the first tool we use when trying to determine the value of a corporation or company coming to or, for that matter, leaving Houston.*

Patrick and his staff used RIMS data to assess how the potential construction of a 50-floor office building by Chevron, which would have created 1,750 jobs in the region, would have induced job growth throughout the Houston region. Likewise, he used RIMS data to analyze how the loss of a large corporation's Houston-based headquarters was going to affect the area.

The Bureau updates the data continually, yet they operate about two or three years behind—that is, the 2010 data are currently available for purchase. Patrick had planned to purchase the 2011 data as soon as the Bureau released it in 2013—the release that will no longer occur.

## ACCURACY MATTERS IN EVALUATING INDUSTRIES AND JOBS

The 2010 RIMS data reflect the state of Houston's economy during the recession. However, in 2011 and 2012 Houston experienced significant growth. Patrick was eager to purchase the 2011 data so he could accurately report to policymakers and the local business community how the creation of new jobs in those years has affected the larger Houston economy. He also needs the 2011 numbers in order to have updated figures that more closely resemble the region's current economic status.

Without 2011 RIMS data, Patrick said he "cannot accurately evaluate the relationship between industries and jobs," continuing:

*Without regularly updated RIMS multipliers we'll be asking our business community and elected officials to base their decisions on how Houston performed during the recession, not how it performs in the current robust environment.*

## SHIFTING THE BURDEN

Patrick knows of private companies that could potentially provide him with data similar to RIMS; however, they will charge him as much as ten times more than the BEA. Moreover, the RIMS II data are more comprehensive, objective and comparable and are accepted as the industry standard in the economic development sector.

By eliminating RIMS, Patrick says the government is "shifting the burden to the economic development community." He and his staff will have to do original

analysis that, again, won't have the same degree of credibility or provide the "big picture" that the RIMS data does.

At a time when many companies seek to relocate to the United States, data are critical in helping state and local governments and companies make sound business decisions – thus benefitting the entire national economy. If Patrick could say one thing to policymakers in Washington right now about the implications of the budget cuts on statistical agencies, in particular, he would say:

*They are cutting off their noses to spite their faces. These cuts are affecting data collection, making government more inefficient and that is something nobody wants:*

“

*Without RIMS, we will have to  
reinvent the wheel.*

- PATRICK JANKOWSKI

”

## AUTHORS

Population Association of America



130



# THANK YOU TO OUR SPONSORS

---



COALITION *for*  
HEALTH FUNDING



# THANK YOU TO OUR SPONSORS

---

**AcademyHealth**

**American Cancer Society Cancer Action Network**

**American Heart Association**

**American Mathematical Society**

**American Society of Hematology**

**Association of American Universities**

**Commissioned Officers Association of the U.S. Public Health Service**

---

**American Association of Colleges of Pharmacy**

**American Psychiatric Association**

**American Psychological Association**

**Association of American Veterinary Medical Colleges**

**Goodwill Industries International**

**National Association of Community Health Centers**

**National Family Planning & Reproductive Health Association**

---

**Academy of Nutrition and Dietetics**

**AIDS United**

**Alliance for Aging Research**

**Alliance for Eye and Vision Research**

**Alzheimer's Foundation of America**

**American Association for Dental Research**

**American Association of Immunologists**

**American Geriatrics Society**

**American Institute of Biological Sciences**

**American Organization of Nurse Executives**

**American Physiological Society**

**American Public Health Association**

**American Society of Nephrology**

**American Sociological Association**

**amfAR - The Foundation for AIDS Research**

**Arthritis Foundation**

**Association of Academic Health Centers**

**Association of Maternal & Child Health Programs**

**Association of Public and Land-grant Universities (APLU)**

**Community Action Partnership**

**Council on Undergraduate Research**

**Directors of Health Promotion and Education**

**Easter Seals**

**Local Initiatives Support Corporation**

**National Alliance on Mental Illness**

**National Association for College Admission Counseling**

**National Council of La Raza**

**National Health Care for the Homeless Council**

**Society for Women's Health Research**

**The Advocacy Institute**

**UNCF**

**USAgainstAlzheimer's Network**

**Voices for National Service**

**WomenHeart: The National Coalition for Women with Heart Disease**

# NDD UNITED

NDD United is an alliance of more than 3,200 national, state, and local organizations working to protect investments in core government functions that benefit all Americans.

For more information, please visit [WWW.NDDUNITED.ORG](http://WWW.NDDUNITED.ORG)

