Fiscal Cliff Avoided, Sequestration Still Looms

With bipartisan support, Congress and the White House have made a deal to avert the fiscal cliff. In the final deal, sequestration was delayed by two months, putting medical research funding at risk yet again.

The deal—crafted from negotiations between President Barack Obama and Speaker John Boehner (R-OH), and later Vice President Joe Biden and Senate Minority Leader Mitch McConnell (R-KY)—was passed first by the Senate less than two hours after 2013 began. The House took up the measure late on New Year’s Day and passed it as well. Obama signed the measure days later. In addition to delaying sequestration, the legislation extends the majority of Bush-era tax cuts and fixes other expiring tax and spending provisions.

Continued on page 4

New Poll Finds Worries About Fiscal Cliff, Impact on Medical Research

In polling conducted prior to the fiscal cliff deal, a majority of Americans did not believe Congress and the White House would reach a deal by the end of the year. Nearly 60% said they were skeptical a deal would be struck, according to new polling by Research!America in partnership with Zogby Analytics.

“Congress and the administration must make bold decisions to address our nation’s deficit, but cutting funding for research should not be one of them,” Research!America President and CEO Mary Woolley said in a statement. “We cannot afford to drain the research pipeline as other countries challenge our world leadership in science and innovation.”

Other findings in the poll reveal deep concern about the state of medical research in the U.S.

Eighty-three percent said that medical research is important to reducing health care costs, and 87% said it is important to conduct research on how our health care system is functioning. And, even in this challenging economic environment, more than half said they would be willing to pay $1 per week more in taxes if that money would go toward medical research. That finding is no surprise, given that 55% of respondents said the U.S. is not making enough progress in medical research.

The Children’s Hospital of Philadelphia was founded in 1855, but it took nearly seven decades for research to become part of the institution’s mission. Growing from a one-room laboratory in 1922, Children’s Hospital has made incredible progress since: the basis of the foundation of the Society for Pediatric Research, the country’s first pediatric research department, and numerous scientific breakthroughs and vaccine discoveries.

Johnson’s own research centers on finding a vaccine for HIV, but not in the traditional way a vaccine works. Instead, viruses are used to carry genes that code for HIV antibodies. When injected into muscle, the muscle takes over production of those antibodies which can then defeat HIV. Johnson said this concept is nearing a clinical trial in humans. The hope, then, is that such an approach might be useful in developing similar vaccines for other diseases and conditions as well.

Research!America’s efforts to educate the public and policy makers are a big reason why Children’s Hospital is a member, Johnson said. “It’s amazing the amount of misunderstanding about research that exists in the general population,” Johnson said. “... They understand it’s important, but they don’t understand the mechanics of it, the politics and the support that’s required.

“Research!America does a better job of that than anybody else, and that’s why we’re very supportive of the activities.”

For more, visit www.research.chop.edu.

The American Association for the Advancement of Science has launched an initiative, Speak Up for Science, enabling members of the public to submit a comment or a video about current threats to R&D funding. http://bit.ly/VEP1Gz


The American Public Health Association is now accepting online abstract submissions for 2013 Annual Meeting: http://bit.ly/T7KIXw
Future of Research Funding
Research!America President and CEO Mary Woolley was quoted in the Houston Business Journal about insufficient government support for research and its impact on the Houston metro area. Woolley said that current funding levels also stymie U.S. global competitiveness. “Other countries aren’t waiting around for the U.S. to get its feet back on the ground in prioritizing research and development in bio research,” she said.

Op-ed Round-Up
Research!America Board member Larry J. Shapiro, MD, executive vice chancellor for medical affairs at Washington University in St. Louis and dean of the Washington University School of Medicine in St. Louis, wrote an op-ed describing the devastating consequences of cuts to medical research in the St. Louis Post-Dispatch. An op-ed in The (Nashville) Tennessean, written by Jeff Balser, MD, PhD, vice chancellor for health affairs and dean of the School of Medicine at Vanderbilt University, focused on the impact of going over the “fiscal cliff” for biomedical research. In addition, the University of Illinois at Urbana-Champaign student newspaper, The Daily Illini, included Research!America in an article about grant writing and university research funding levels.

What the Fiscal Cliff Means for Biotechnology
Eleanor “Ellie” Dehoney, Research!America’s vice president for programs and policy, was quoted in Genetic Engineering & Biotechnology News about how the biotechnology industry would fare under the fiscal cliff. “Think about biologics: They’re very expensive, they’re very expensive to produce, and they’re high risk. If reimbursement goes down, you’ll find a reduction in the availability of venture capital,” Dehoney said.

Medical Device Tax
Research!America was mentioned in POLITICO Pro and CQ Healthbeat articles related to the medical device tax. Both articles highlight Mary Woolley’s letter to congressional leadership and the president outlining concerns related to the tax, including the effect of job losses in the industry. “It would be tragic if federal policies associated with health reform inadvertently compromise the research and development necessary to move basic scientific discovery from the bench to the bedside,” she wrote.

Sustain Investments in America’s Health
The Boston Business Journal published an op-ed by John Erwin, executive director of the Conference of Boston Teaching Hospitals, a Research!America member. The piece calls attention to the impact that sequestration would have on the Boston-area economy. “If we are to meet the health challenges of an aging and increasingly diverse population, continue to foster the type of innovation that will drive our regional economy, and remain a vibrant force in the global economy, sequestration cannot happen,” Erwin wrote. “America needs to invest more, not less, in medical research.”
Fiscal Cliff Avoided
Continued from page 1

But, Nature reported, the deal also contained a provision that requires $12 billion in discretionary funding cuts over the next two years. Those cuts would be divided equally between military and civilian programs.

As that deal came together however, Congress held no vote on whether to repeal the medical device tax that took effect January 1. A 2.3% excise tax is now in place on medical devices, threatening as many as 43,000 jobs across the country, according to industry groups. Research!America expressed concern about the tax in letters to the administration and congressional leadership (see story on page 6).

Advocates have our work cut out for us. We must ensure that new and returning Members of Congress are fully informed about the impact of spending cuts and sequestration in our nation’s unrivaled biomedical research and development pipeline, as well as its impact on health research that holds the key to bending the health care cost curve and the basic public health functions that protect Americans day in and day out. We must convince them that across-the-board cuts to these and other discretionary federal programs ignore the priorities of Americans and the strategic interests of America. And we must make this case as policy makers also grapple with raising the debt ceiling and calls by many House members for additional spending cuts. Weave in efforts to produce a budget for FY13 instead of resorting to a one-year continuing resolution, and it is clear that we must redouble our advocacy efforts in order to be heard.

Please keep a close eye on Mary Woolley’s weekly letter for advocacy alerts and other tools you can use to make your voice heard. And we welcome your thoughts on advocacy strategies; please don’t hesitate to contact Max Bronstein, director of science policy, at 571-482-2717 or mbronstein@researchamerica.org.

** Excludes funding from transfers.

* CDC core budget. The House bill terminated funding for the Prevention and Public Health Fund.

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** Agency Request**

<table>
<thead>
<tr>
<th>Agency</th>
<th>FY13 President’s Request</th>
<th>FY13 House</th>
<th>FY13 Senate</th>
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<td>Agency for Healthcare Research and Quality**</td>
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Note: At the time of this writing, funding levels have not gone to a floor vote for NIH, CDC, FDA and AHRQ. NSF funding levels have been approved by the House but have not been voted on by the Senate.
United Health Foundation Releases America’s Health Rankings

United Health Foundation has released the 23rd edition of America’s Health Rankings: A Call to Action for Individuals and Their Communities.

According to America’s Health Rankings, Americans are living longer due to several medical advances, but unhealthy behavior and preventable illness threaten quality of life. This year’s edition shows that Vermont is the nation’s healthiest state for the sixth year in a row. Hawaii is second, followed by New Hampshire, Massachusetts and Minnesota. Mississippi and Louisiana are tied for the least healthy ranking, followed by Arkansas, West Virginia and South Carolina.

“As a nation, we’ve made extraordinary gains in longevity over the past decades, but as individuals we are regressing in our health,” said Reed Tuckson, MD, medical adviser for United Health Foundation and executive vice president and chief of medical affairs for UnitedHealth Group. “We owe this progress not only to medical breakthroughs, but to public health advocates who are working tirelessly to advance wellness on the community level. But our public health heroes cannot do it alone. Longer lives need not be sicker lives, so we must all come together to do more to prevent the risk factors within our personal control.”

To see the full report, go to www.americashealthrankings.org.

ITIF Unveils 2012 State New Economy Index

The Information Technology & Innovation Foundation has updated its State New Economy Index for 2012. The report ranks each of the 50 states based on 26 measurements that are indicative of the so-called “New Economy,” which relies on knowledge and innovation for growth.

Written by ITIF President Robert D. Atkinson, PhD, and economic analyst Luke Stewart, the 2012 State New Economy Index ranks Massachusetts as the furthest along to the New Economy. Delaware, Washington, California and Maryland round out the top five. Massachusetts has ranked first since the reports began in 1999 and in the five updates since then.

To download the full report, visit http://itif.org/publications/2012-state-new-economy-index.

Senate Appropriations Chair Daniel Inouye Dies

Sen. Daniel Inouye (D-HI), chair of the Senate Appropriations Committee and the highest-ranking Asian-American government official in U.S. history, died December 17. He was 88.

Inouye had chaired the appropriations committee since 2009, and he played a vital role in boosting funding for research. He was particularly focused on nursing and nursing research, as well as research for veterans and active service members. Inouye himself was a decorated combat veteran and lost his right arm during World War II.

In 1985, he played a key role in the opening of the National Center for Nursing Research; his advocacy was equally important eight years later when the center was elevated to a full institute at the National Institutes of Health. He was also instrumental in establishing nursing programs at the Uniformed Services University of the Health Sciences. Inouye received the Congressional Appreciation Award from the American Association of Colleges of Nursing in 2007.

After Inouye’s death, Sen. Barbara Mikulski (D-MD) was named chair of the Senate Appropriations Committee. Mikulski is the 2012 winner of Research!America’s Edwin C. Whitehead Award for Medical Research Advocacy.

Report Examines Return on Investment for Publicly Funded Research

The Center for American Progress has released a report on the rate of return from research at government agencies. The report goes beyond life science research but notes that several innovations to improve health have come from unexpected places.

According to the report, laboratories within the Department of Energy developed water purification techniques and better cancer therapies, and the National Science Foundation has had a hand in a number of biotechnology discoveries. The Human Genome Project figures prominently in the report; the biotechnology industry, which accounts for 5.4% of GDP relies heavily on advances in genetics.

To download the full report, visit http://bit.ly/TY4t4l.

SPECIAL THANKS TO RENEWING RESEARCH!AMERICA ALLIANCE MEMBERS

NEW MEMBERS

American Brain Coalition
University of Buffalo School of Medicine and Biomedical Sciences

RENEWING MEMBERS

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The Research Advocate 5
Gary J. Nabel, MD, PhD, of the National Institute of Allergy and Infectious Diseases, has been named Sanofi’s senior vice president, chief scientific officer and deputy to the president for global R&D.

The National Institutes of Health plans to launch a program of undergraduate scholarships and research experiences called Building Infrastructure Leading to Diversity (BUILD) to encourage more minority scientists to pursue research as a career and to bolster their chances of winning a grant.

A new UNAIDS report showed a 50% reduction in new HIV infections across 25 countries. AIDS deaths dropped by more than half a million from 2005 to 2011.

Research!America sends letter to White House, Congress on Medical Device Tax

Research!America President and CEO Mary Woolley wrote letters to the administration and congressional leaders in December asking them to consider the possible effects of a 2.3% medical device tax that went into effect January 1.

“Over the last year, more than 6,000 job cuts were announced by 12 large medical device companies,” Woolley wrote. “Data collection is in process for other reported job losses in this industry, most of them affecting employees in small medical device firms. Small companies comprise 98% of the medical device industry, and further cuts are anticipated.”

The letter was sent to President Barack Obama and congressional leadership, including Speaker John Boehner (R-OH), Senate minority leader Mitch McConnell (R-KY), House minority leader Nancy Pelosi (D-CA) and Senate majority leader Harry Reid (D-NV).

Portrait of Louis Stokes for NIH Building Unveiled

Former Rep. Louis Stokes (D-OH), a Research!America emeritus director, was honored with a portrait that will hang at the Louis Stokes Laboratories building on the campus of the National Institutes of Health. The portrait was unveiled at the recent NIH-sponsored 2012 Summit on the Science of Health Disparities, held in suburban Washington, DC.

Several dignitaries participated in the unveiling ceremony, including Del. Donna Christensen, MD (D-VI); NIH Director Francis Collins, MD, PhD; former acting Surgeon General Audrey Manley, MD; and John Ruffin, PhD, director of the National Institute on Minority Health and Health Disparities.

Stokes, who served in Congress for three decades, is the first African-American to have an NIH facility dedicated in his name.

Research!America extends special thanks to our principal partners

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Visit www.researchamerica.org/partnership_opportunities for ways to support Research!America.

Americans Feel Government Should Encourage STEM Careers

Do you believe the federal government should increase support for programs and policies that would increase the number of young Americans who pursue careers in science, technology, engineering and mathematics?

Yes 70%
No 17%
Don’t know 13%

Source: A Research!America poll of U.S. adults conducted in partnership with Zogby Analytics in December 2012.
Research!America releases Fact Sheet on TBIs
Traumatic brain injury (TBI) poses a critical health threat to both civilians and our troops. Research!America’s latest fact sheet (see this month’s insert) shows that TBI can afflict anyone, from youth football players to our most decorated veterans, and annually there are about 1.7 million Americans who sustain TBIs. Not only are there increasingly high costs associated with brain damage, from skyrocketing medical bills to the heightened risk of depression, chronic pain and suicide, but these injuries are also difficult to detect and can frequently go unreported and untreated. Millions of Americans suffer from the lifelong damage of TBI.

However, there is hope for the future. The National Institutes of Health and the Department of Defense are working in coordination to release the first interagency TBI database which will allow for greater investigation in search of trends across large sets of data. The fact sheet explains how public-health research, particularly by the Centers for Disease Control and Prevention, helps to ensure that TBI interventions incorporate the best available practices and information.

PCAST Releases Report on the Future of the U.S. Research Enterprise
The President’s Council of Advisors on Science and Technology (PCAST) released a report on the future of the U.S. research enterprise. The report specifically addresses two priorities: the enhancement of long-range U.S. investment in basic and early-stage applied research and the reduction of barriers enabling transformation of that research into new products, industries and jobs.

As U.S. industry has shifted its focus toward applied R&D, the support for basic and early-stage applied research has shrunk, which endangers American innovation. According to the report, this area is the driving force behind the new industries and jobs that have propelled the U.S. economy over the past century. The report goes on to describe a series of specific opportunities for the federal government, academia and industry to strengthen the U.S. research enterprise. This research and innovation, particularly in the biomedical field, is crucial for both our economic prosperity and the well-being of American citizens.

“Just as the United States has lost a large portion of its manufacturing to other countries,” the report warns, “it is now in danger of losing its advantage in invention and discovery, potentially an even greater calamity.”

Important for the U.S. to Support Global Health Research

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<td>10%</td>
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<tr>
<td>Not at all important</td>
<td>4%</td>
</tr>
<tr>
<td>Not sure</td>
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SOURCE: A RESEARCH!AMERICA POLL OF U.S. ADULTS CONDUCTED IN PARTNERSHIP WITH ZOGBY ANALYTICS IN DECEMBER 2012. (TOTALS DO NOT ADD TO 100% DUE TO ROUNDING.)
Congress is considering major changes in federal policy in order to reduce the deficit, including “sequestration,” which means arbitrary, across-the-board budget cuts to defense and non-defense spending. Sequestration or similar sweeping cuts to “discretionary” federal funding would dramatically reduce funding for medical research and critical public health functions.

We can’t let that happen. Deficit reduction is important, but there are ways to achieve it that do not compromise American lives and American progress. Arbitrary budget cuts that abandon medical research are wrong. Join dozens of organizations and tell Congress: WE NEED CURES, NOT CUTS!

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Visit our blog: www.researchamerica.org/blog
Today:

- Annually, 1.7 million Americans sustain traumatic brain injuries (TBI). Often, TBIs are not visible so they frequently go untreated and unreported. Even mild injuries can have lifelong effects.*
- Over 5.3 million Americans have lifelong disabilities due to TBI. TBI is a risk factor for conditions such as stroke, epilepsy, mood disorders, Alzheimer’s disease (AD) and substance abuse.**
- Compared to all injury-related hospitalizations, TBI-related stays are longer, more expensive and patients are more likely to die. TBI contributes to a third of injury-related deaths.***
- From 2000-2012, 244,000 service members were affected by TBI. From 2004-2009, more than 75% of returning vets treated for TBI by the Veterans Health Administration (VA) were also treated for post-traumatic stress disorder (PTSD).****
- Less than 50% of surveyed high school football players who sustained a concussion reported it. More than 33% of student athletes sustain multiple concussions.*****

The Cost:

- TBI’s annual cost is estimated to be $76.5 billion.◊
- Average lifetime health care costs for TBI are roughly $85,000 but can exceed $3 million.◊◊
- Treating veterans with TBI and/or PTSD is 3-5 times more costly to VA clinics than veterans with neither condition.◊◊◊
- Suicide, depression and chronic pain can be exacerbated by a TBI. Roughly 25% of individuals who sustain a TBI will report suicidal ideations or attempt suicide.◊◊◊◊

Survivor:

SFC(Ret) Victor Medina began active military service in 2002 and served with great distinction, completing two tours in Iraq and a tour in Afghanistan. But in June 2009, while serving his second tour in Iraq, Victor was injured when an explosive-formed projectile detonated near his convoy. In the weeks following the blast, he felt his cognitive abilities slipping away; he also suffered from impaired vision, hearing, speech and motor skills and incessant migraine headaches. Before the injury, Victor would spend time with his wife skiing, doing sudoku puzzles and riding motorcycles on mountain roads – activities that became impossible after the blast.

Victor has since been medically retired from military service and has received ongoing care and rehabilitation at the National Intrepid Center of Excellence (NICoE) in Bethesda, MD – a state-of-the-art treatment facility for soldiers impacted by brain-related injuries. These treatments have allowed Victor to progress remarkably, greatly improving his speech, motor skills and cognition. He is now completing a master’s in rehabilitation counseling at the University of Texas at El Paso.

When asked about TBI, Victor speaks about the importance of increasing awareness about this growing threat to soldiers and civilians. In addition, he feels that TBI often goes unrecognized or untreated, which is why educating medical providers and the public is crucial for preventing and treating TBI. “But without research, there is no progress,” he said. Research – and increased awareness of TBI – provide a wealth of resources that weren't available to the military or the public a decade ago. We really have come a long way in a short time, yet there’s so much more to be done. Clearly, our nation needs to boost our investments in TBI and brain-related research for the sake of our soldiers and all Americans.
Hope for the Future:

- Clazosentan may minimize structural damage and cognitive impairment following a TBI by stabilizing blood pressure in the brain. It is being studied by researchers funded through the American Academy of Neurology, NIH, and the VA.  

- NIH-funded experiments are exploring the role of hormones post-TBI, and the findings have the potential for both therapeutic and diagnostic applications.  

- Current imaging may miss TBI damage up to 70% of the time. New techniques are being developed in federal labs and with NIH funding to improve our understanding of brain damage. This may lead to personalized treatments and enhanced detection of brain injuries.  

- NIH and the Department of Defense are preparing to launch the first interagency TBI database enabling comparisons across studies and investigation of trends in large data sets.  

The Bottom Line:

Traumatic brain injury poses a massive health threat to civilians and our troops. The toll of TBI is growing, and we have already seen the heavy societal and cost burden that it has imposed on our nation. Sadly, very little is known about how to diagnose and treat TBI, which is why new investments are desperately needed for the sake of our servicemen and servicewomen and for all Americans. TBI awareness and preventative measures are on the rise, but with no standard of care or approved treatment, more research is needed to properly address this pervasive health threat.

Sources:

- Today  
  * Sources: Centers for Disease Control and Prevention (www.cdc.gov)  
  * Brain Trauma Foundation (www.braintrauma.org)  
  * Brain Injury Association of America (www.biausa.org)  
  ** Sources: Brain Trauma Foundation (www.braintrauma.org)  
  *** Sources: Agency for Healthcare Research and Quality (www.ahrq.gov)  
  ** Centers for Disease Control and Prevention (www.cdc.gov)  
  *** Centers for Brainline Military (www.brainline.org)  
  **** Congressional Budget Office (www.cbo.gov)  

- The Cost  
  * Source: Centers for Disease Control and Prevention (www.cdc.gov)  
  ** Source: Congressional Budget Office (www.cbo.gov)  

Americans: More Investment Needed for Military Veterans

Would you say government investment in health research for the benefit of military veterans and service members is ...