

DOD medical research has also made direct contributions to the understanding and treatment of medical conditions that uniquely or acutely affect those who serve. In addition to the research on gulf war illness, servicemembers and veterans who suffer from traumatic brain injury, tinnitus, or vision problems know that they can receive the most advanced treatment possible thanks to this medical research. DOD medical research is also finding biomarkers to better treat mental illness, so individual servicemembers do not have to go through the trial and error of being prescribed psychotropic medications that may or may not be effective for them. These research programs are helping to provide a better quality of life for those who have recently served in Iraq and Afghanistan.

For a number of years now, some in Congress have made the argument that this program does not belong at the Department of Defense, suggesting that these programs are duplicative and that this funding should be spent elsewhere. In fact, the medical research done at the Department of Defense is complementary to and coordinated with the research done at NIH, and other Federal agencies including the Department of Veterans Affairs. While the medical research done at DOD and NIH may have overlapping goals, including many research grants that have been jointly funded, CDMRP has a different mandate, uses different criteria in selecting grants, and uses a unique two-tiered review process that assures high quality of research.

I simply say to those critics of the program, the outcomes speak for themselves. Any suggestion that I believe this program should have been created elsewhere or should be moved is incorrect, and I want to make sure the RECORD is clear on this point.

I thank my colleagues on the Defense Appropriations Subcommittee, Chairman DURBIN and Ranking Member COCHRAN, and the chair and ranking member of the Appropriations Committee, Senator MIKULSKI and Senator SHELBY, for providing \$1.55 billion in funding for these critical and successful medical research programs in Fiscal Year 2014. I look forward to many more years of breakthrough medical research conducted by the DOD that will directly address the needs of our military members and that will have broad application to millions of Americans.

#### MENTAL EXERCISES FOR SENIORS

Mr. NELSON. Mr. President, today I wish to call attention to the ACTIVE, or Advanced Cognitive Training for Independent and Vital Elderly, study on mental exercises for seniors. The study, conducted by researchers at the University of Florida College of Public Health and Health Professions, showed that older adults who receive cognitive training can significantly improve their reasoning and mental processing

skills. Elderly patients were coached and assessed in memory, reasoning, and processing speed at baseline. The study participants were then reassessed at intervals of 2, 3, 5, and 10 years. The result was that participants who received cognitive training reported significantly less difficulty with activities of daily living. Most patients achieved improved reasoning and mental processing speed at the end of the study, the results of which may be found in the January 13 online issue of the *Journal of the American Geriatrics Society*.

These results echo findings from Senate Special Committee on Aging in its recent work on improving quality of life for seniors who suffer from Alzheimer's and dementia. The Committee's 2012 report, entitled "Alzheimer's Disease and Dementia: A Comparison of International Approaches," stated that "individuals who are cognitively active—such as individuals who regularly read or do crossword puzzles—are at a lower risk of developing mild cognitive impairment (MCI)—an early symptom of dementia and AD, Alzheimer's disease—because they have increased cognitive reserve."

The Senate Special Committee on Aging is also committed to embracing innovative brain health care advances for seniors. During our committee's recent Healthy Aging Forum, various groups invested in senior health care shared novel ideas for better mental health care and quality of life. These included research and medical technology devices that sharpen senior memory, thinking, and cognitive processing skills. Among these were Microsoft Kinect software, which uses cognitive and mental diagnostic, rehabilitative, and routine mental game-based exercises to help improve senior brain health and fine motor skills. Loneliness, which adversely impacts brain health and increases risk for dementia in seniors, can be minimized by engaging seniors with the GeriJoy avatar—also showcased at the Healthy Aging Forum—an interactive virtual pet companion that strengthens seniors' mental capabilities by providing opportunities for meaningful interaction.

The University of Florida Institute on Aging, another invited exhibitor at the Senate Health Aging Forum, is currently conducting a LIFE, Lifestyle Interventions and Independence for Elders, study in which the effect of physical activity and/or aging health education on senior mobility and independence are being assessed. Cognitive function and impairment are also being examined as a part of the study.

The Senate Special Committee on Aging has conducted numerous hearings on Alzheimer's in recent years, coinciding with my cosponsorship of the HOPE for Alzheimer's Act, S.709/H.R.1507, which will improve diagnosis and care planning services for patients with Alzheimer's. A panel of witnesses from the government, academia, and the Alzheimer's Association discussed

recent advancements in these areas in an April 2013 hearing entitled, "The National Plan to Address Alzheimer's Disease: Are We On Track to 2025?" An updated 2013 version of the national plan also highlights anticipated milestones in prevention of the disease. Lifestyle modifications and identification of Alzheimer's and dementia risk factors are included as part of the plan.

I have long been a tireless advocate in the fight against Alzheimer's and dementia. As the chairman of the Senate Special Committee on Aging, I am committed to doing whatever I can to ensure the health and well-being of our seniors. Although much progress has been made, we still have a long way to go in ensuring the best possible quality of life for Americans in their later years.

#### ADDITIONAL STATEMENTS

##### TRIBUTE TO LIEUTENANT COLONEL CATHERINE M. BLACK

• Mr. KIRK. Mr. President, I rise to pay tribute to my constituent LTC Catherine M. Black for her exemplary dedication and service to the United States Army and to the United States of America. She has served for the last 2 years as a congressional budget liaison for the Secretary of the Army.

A native of Chicago, IL, Lieutenant Colonel Black enlisted in the Army in the summer of 1994. She was selected as the Soldier of the Year at Fort Gordon, GA, and was subsequently selected for the Officer Candidate School, earning a commission as a finance officer in April 1997.

Lieutenant Colonel Black has served in a broad range of duty stations and assignments over her two decades of service. As a Lieutenant, she served as a disbursing officer in a finance group at Fort Bragg, NC. This culminated in a rotation through the U.S. Army Forces Center in Doha, Qatar. Following the horrific attacks on September 11, 2001, she provided financial management services during the ground invasion in support of Operation Enduring Freedom.

As a Captain, Catherine Black served as a finance detachment commander and battalion operations officer at Fort Richardson, AK, and later as a financial management operations officer at Fort Belvoir, VA. After promotion to major, she commanded the 126th Financial Management Unit for a year and a half, while simultaneously serving as the Battalion Executive Officer for the Special Troops Battalion, 1st Sustainment Brigade at Fort Riley, KS. She trained and deployed her three financial management detachments to both Iraq and Afghanistan. She then deployed her headquarters to Kandahar, Afghanistan and stood up financial operations throughout southern Afghanistan. There she provided finance support to joint and coalition

forces and developed financial management infrastructure for the nation of Afghanistan.

Lieutenant Colonel Black was selected to serve as a congressional budget liaison officer in the Office of the Assistant Secretary of the Army for financial management and comptroller. She managed the Army's military personnel and operations and maintenance accounts, the Working Capital Fund, and activity at the depots and arsenals that support the Nation's organic industrial base, including Illinois' Rock Island Arsenal.

Lieutenant Colonel Black's leadership throughout her career has positively impacted her soldiers, peers, and superiors. As a budget liaison officer, she worked directly with the Senate and House Appropriations Committees to educate and inform Senators, Representatives, and staff for the United States Army.

Mr. President, on behalf of a grateful Nation, I thank and commend LTC Catherine Black for two decades of service to her country. I wish Catherine, her husband Geert Jacobs, and her sons Alexander, Achilles, and Elias all the best as they continue their journey of service. ●

#### VERMONT ESSAY WINNERS

● Mr. SANDERS. Mr. President, I ask to have printed in the RECORD finalist essays written by Vermont High School students as part of the Fourth Annual State of the Union Essay contest conducted by my office. These 9 finalists were selected from over 380 entries.

The essays follow:

CARLY NEELD, CHAMPLAIN VALLEY UNION HIGH SCHOOL, GRADE 11 (FINALIST)

It is a great privilege to be a citizen of the United States. As citizens, we have a responsibility to ensure that our government is used to improve lives. Although this country has achieved much, there are many aspects that can be improved. In particular, we need to work towards reducing the unemployment rate and take meaningful steps to stop climate change. Addressing these two issues now will go a long way towards helping current and future generations.

The unemployment rate is at seven percent. It is our obligation, as a nation, to lower this rate. By lowering the unemployment rate, we could see a drop in crime and a reduction in poverty as more people are earning a steady income. Because of this steady income, there will be more tax revenue which could then support safety net programs that help the impoverished. An increased employment rate will also cause an increased access to health care and other necessities to living, strengthening families and communities.

In order to decrease the unemployment rate, there are things in our country that will need improvement and our support. Affordable childcare can benefit the employment rate, as it allows parents to be free to go to work. Access to higher education is also essential in increasing the employment rate, as more people will be able to obtain higher paying jobs or start businesses that create jobs. Quality public education, especially early childhood education, will build a strong workforce as jobs are created. It is important to acknowledge the small businesses that provide countless jobs and to ensure that the government is giving these

businesses the support they need to sustain their existence.

Climate change is a pressing issue the world is now facing and, as the United States, we need to lead the world in a greener direction. Carbon dioxide emissions are growing exponentially and are hurting our environment and our people's health. We need to take meaningful steps to reduce our carbon dioxide emissions and put our energy and resources into renewable energy technologies. Not only will the environment benefit, but we will benefit economically as the prices of energy will be stable and affordable.

These goals may be difficult to achieve; however, the result will benefit the country immensely and place us as a world leader in many aspects. These issues must be addressed, as they will improve the lives of every citizen and will allow us to strengthen our union.

REBECCA PAIGE, SOUTH ROYALTON SCHOOL, GRADE 12 (FINALIST)

The rising cost of a college education is becoming a chronic problem for everyone. We want everyone to become a well-educated, informed citizen, but are doing so at a steep price. We are paying an exorbitant amount of money and are being left with large amounts of debt.

For many families, having a high school senior in the household brings mixed feelings towards college. There is the excitement towards experiencing new things, but also the concern for how they will be able to afford a college education. The worries start right at the beginning, before the senior is even accepted. Having just finished my college application, I estimate that I paid about \$600 for application and testing fees. What do these fees do to help with post-secondary education? Nothing. These fees are being used as a gamble for the right to a college education. There is nothing saying that the applicant will be guaranteed admittance to college, only the chance of it. There should be a movement passed that will eliminate all application, testing, and other miscellaneous fees associated with the application process, so students have a chance to apply to the college they want without money to limit them in the pursuit of a higher education.

Even once students have been accepted to a college or university, the tuition should be lowered or subsidized by the government. Pursuing education beyond high school serves to help better society and, in turn, will help us out of the unstable state in which we find ourselves. There are many positive aspects about pursuing education beyond high school, but they are being outweighed by the financial repercussions of the decision to do so. This is not how the system should be run. We should not have to cringe at the word college; we should embrace it because of the plethora of opportunities that it will provide us.

There seems to be a double standard in this country. We want our citizens to pursue a higher education because the country will reap the benefits, yet we still limit the post-secondary education to those that can afford it and not let everyone have the opportunity to a higher education. There needs to be a change, if anything is going to move forward. Therefore, let all fees be eliminated, let there be lower tuition costs, and allow all people a chance for a college education without having to sign over their life in order to get one.

KENDALL SPAULDING, MISSISQUOI VALLEY UNION MIDDLE, HIGH SCHOOL, GRADE 11 (FINALIST)

"Success is not final, failure is not fatal: it is the courage to continue that counts," said Winston Churchill. Churchill's quote links two controversial issues that our country is now facing, education and unemployment.

We have to think about the people in our state and their futures. How will they continue to succeed? If people want to continue seeking jobs, they must go through a schooling process in order for them to feel satisfied. We want to grow strong and protect our views, so, taking control of our future will make it stronger and brighter as a country. We have to start to address these topics first, so they won't become a failure, but a success for our country.

I believe education should be the government's biggest concern because of what it can push our nation to accomplish. We have to make the common core strong, so that students know what to expect. We cannot just give up after a failure, we have to be determined and think more about of our future. Marion Brady, who is a classroom teacher, asked, "What knowledge is absolutely essential for every learner?" His question is what we think the curriculum should be to everyone. I believe if any student is strong in a core of truly essential skills, they can succeed in anything they want in their future. I believe enforcing the common core will help achieve our goals and lead to courageous decisions.

Building a successful education program will begin to strengthen the unemployment rate in our country. I think benefits being extended isn't the right solution because there are so many opportunities to go towards to be successful. If the government chooses to extend the benefits, we would be spending billions of dollars in a short amount of time, which would not help our economy. We have to think about what's best for the individual, as well as the whole country. It's best if we continue to persevere by going to a job training facility to be more successful. Making no extensions would lead people to create a successful life on their own, gain confidence, and rely on only themselves. Leading people to search for a job is in their own hands and they need to have courage in order to succeed in life.

To conclude, our country has to continue to grow as a whole in order to solve the controversial issues. Making successful decisions can permanently change the way the country grows. Also, creating a confident country leads to less room for failure in the long run. Let's believe we can create a strong common core plan for education and a non-extendable unemployment plan. I believe it can be done, it just takes time and hard work to get them. Let these two topics not be an issue anymore and finally resolve them, so we all can grow to our best.

ERIC TUCKER, SPAULDING HIGH SCHOOL, GRADE 11 (FINALIST)

The year 2013 was a period of progress and setback. The government was shut down for sixteen days, the unemployment rate decreased to seven percent, the lowest unemployment rate in five years, The Affordable Care Act (ObamaCare) was passed with mixed initial success, and many other influential achievements and failures occurred. A new year is here, and now is the time to further develop 2013's successes and solve its problems. The best way to turn 2014 into a year of achievement is to unite Americans and Congress by offering multiple solutions to common disagreements and by discovering a series of common goals with the support of the entire nation.

One of the catastrophically unsolved problems in 2013 was the gap between Republicans and Democrats in America. The government was shut down from October 1st to October 16th, and it nearly defaulted on its bills during this harsh debt-ceiling debate.