

I'm pleased that the Department's budget request prioritizes supercomputing, and includes approximately \$809 million to deploy exascale systems in the early 2020's.

Unfortunately, the budget request this year again proposes to decrease spending on federally funded research and development, terminates ARPA-E and the loan guarantee programs, and cuts other funding, specifically:

The Office of Science by \$1 billion;
Energy Efficiency and Renewable Energy by \$2 billion;

Nuclear Energy by \$502 million; and
Fossil Energy by \$178 million.

And that is why we are holding this hearing: to give Secretary Perry an opportunity to discuss the Department's priorities, so Senator Feinstein and I can make informed decisions as we begin to write the fiscal year 2020 Energy and Water Development Appropriations bill over the next few weeks. Governing is about setting priorities, and we always have to make some hard decisions to ensure the highest priorities are funded.

Today, I'd like to focus my questions on five main areas, all with an eye toward setting priorities: Prioritizing federal support for science and energy research; Maintaining a safe and effective nuclear weapons stockpile; Demonstrating that we can build safe, affordable advanced reactors; Keeping America first in supercomputing; and Solving the nuclear waste stalemate. The Department of Energy's research programs have made the United States a world leader in science and technology, and these programs will help the United States maintain its brainpower advantage to remain competitive at a time when other countries are investing heavily in research.

DEMONSTRATING THAT WE CAN BUILD SAFE, AFFORDABLE ADVANCED REACTORS

Today, nuclear power accounts for 60% of our carbon-free electricity and, if we are going to slow the effects of climate change, nuclear power will be necessary into the future. However, the cost to build and operate today's large nuclear reactors is too high. If we don't do something soon, nuclear power will not have a future in the United States. Advanced reactors have the potential to be smaller, cheaper, less wasteful, and safer than today's reactors.

To demonstrate their potential, we need to build some of these advanced reactors, enable them to get licensed, and make sure they are available to replace the existing reactors when they come offline. Secretary Perry, I'd like to hear your views on this, including whether you think it would be helpful for the Department of Energy, working with the private sector and the National Laboratories, to manage a program that would build and demonstrate current advanced reactor technologies.

MAINTAINING A SAFE AND EFFECTIVE NUCLEAR WEAPONS STOCKPILE

A key pillar of our national defense is a strong nuclear deterrent. Last February, the administration issued an updated nuclear policy, called the Nuclear Posture Review. The updated Nuclear Posture Review recommends continuing many of the things Congress has been working on for the last several years—things that I support, including: continuing Life Extension Programs to make sure our current nuclear weapons remain safe and effective; and continuing to invest in the facilities we need to maintain our nuclear weapons stockpile. This includes the Uranium Processing Facility, the Plutonium Facility, and the facilities to process lithium and tritium.

I'm pleased to know the Department continues to make progress on construction of the nuclear buildings for the Uranium Proc-

essing Facility, and I'll be asking some questions about that project today. The Nuclear Posture Review also calls for two low yield warheads to be added to the stockpile, largely in response to capabilities being developed by Russia and other countries, and I know the Department is working on this important issue.

I'd like to hear more about that today, and look forward to hearing about the progress being made on the Uranium Processing Facility.

China, Japan, the U.S. and the European Union all want to be first in supercomputing. The stakes are high because the winner has an advantage in advanced manufacturing, simulating advanced reactors and weapons before they are built, finding terrorists and saving billions of Medicaid waste, and simulating the electric grid in a natural disaster, and other progress.

The U.S. regained the number one spot last year, thanks to sustained funding by Congress during both the Obama and Trump administrations. I am pleased that this budget request proposes to continue development of exascale supercomputers—the next generation of supercomputers that will develop a system a thousand times faster than the first supercomputer the U.S. built in 2008.

To ensure that nuclear power has a strong future in this country, we must solve the decades' long stalemate over what to do with used fuel from our nuclear reactors. Senator Feinstein and I have been working on this problem for years, and I'd like to take the opportunity to compliment Senator Feinstein on her leadership and her insistence that we find a solution to this problem. To solve the stalemate, we need to find places to build geologic repositories and temporary storage facilities so the federal government can finally meet its legal obligation to dispose of nuclear waste safely and permanently.

This year's budget request for the Department of Energy includes \$110 million to restart work for Yucca Mountain repository and \$6.5 million to study ways to open an interim storage site or use a private interim storage site. I strongly believe that Yucca Mountain can and should be part of the solution to the nuclear waste stalemate. Federal law designates Yucca Mountain as the nation's repository for used nuclear fuel, and the Commission's own scientists have told us that we can safely store nuclear waste there for up to one million years.

But even if we had Yucca Mountain open today, we would still need to look for another permanent repository. We have more than enough used fuel to fill Yucca Mountain to its legal capacity. So Senator Feinstein and I, working with the leaders of the Committee on Energy and Natural Resources, Senator Murkowski and then Senators Bingaman, Wyden, Cantwell, and now Senator Manchin, have a bill to implement the recommendations of the President's Blue Ribbon Commission on America's Nuclear Future, which we're working to reintroduce this year.

The legislation complements Yucca Mountain, and would create a new federal agency to find additional permanent repositories and temporary facilities for used nuclear fuel. But the quickest, and probably the least expensive, way for the federal government to start to meet its used nuclear fuel obligations is for the Department of Energy to contract with a private storage facility for used nuclear fuel.

Two years ago, you told this subcommittee that the Department of Energy has the authority to take title to used nuclear fuel, but you were hesitant to agree that it has the authority to store the used fuel at a private facility without more direction from Con-

gress. I understand that two private companies have submitted license applications to the NRC for private consolidated storage facilities, one in Texas and one in New Mexico, and that the NRC's review is well underway.

I look forward to working with Secretary Perry as we begin putting together our Energy and Water Development Appropriations bill for fiscal year 2020 and hearing what Secretary Perry's priorities are. I also expect that the Department will continue to fund projects consistent with Congressional intent in the fiscal year 2019 Consolidated Appropriations Act.

I will now recognize Senator Feinstein for her opening statement.

TRIBUTE TO DR. SCOTT GOTTLIEB

Mr. ALEXANDER. Madam President, nearly two years ago, just before the Senate voted to confirm Dr. Gottlieb to lead the Food and Drug Administration, FDA, I said that he was "the right person to lead the FDA in [its] vital mission and move the agency forward so that America's patients can benefit from the remarkable discoveries . . . that our nation's researchers are working on."

Since then, Dr. Gottlieb's leadership at FDA has proved that prediction correct.

Dr. Gottlieb has been one of the President's best appointments.

Two years ago, I also said that "there's never been a more important time to capitalize on the significant funding Congress has given to medical research."

Congress has given the National Institutes of Health, NIH, a \$9 billion increase from 2015–2019, almost \$40 billion dollars in 2019, and FDA plays a key role in bringing new treatments and cures to American patients.

In 2016, Congress passed what Leader MCCONNELL called the most important legislation of the Congress, the 21st Century Cures Act, to help speed the development of new drugs and devices.

This exciting time in medicine also brings great promise to patients to lower the cost of medicine, as more promising treatments come to market, we see increased competition, which helps to drive down how much patients pay for medicines they need.

Dr. Gottlieb's successful tenure at the agency includes helping to bring more competition to the market. In 2018, FDA approved or tentatively approved over 1,000 generic drugs, approved 34 novel orphan drugs, which are drugs to treat rare diseases, and designated 18 regenerative medicines as regenerative medicine advanced therapies, so they can be reviewed faster.

Here are just a few other important things Dr. Gottlieb has accomplished:

When Dr. Gottlieb took over at FDA, Congress was working to reauthorize the four medical product user fee agreements that make up about a third of FDA's funding.

In addition to reauthorizing the four user fee agreements, Congress worked with Dr. Gottlieb and authorized an expedited approval process for generic

drugs where there is little or no market competition, called the Competitive Generic Therapies pathway, as part of the FDA Reauthorization Act of 2017.

Since August 2018, FDA has approved five new generic drugs under this pathway and has designated over 140 generic drug applications as qualifying for this pathway.

Dr. Gottlieb also announced a new plan, called the Biosimilar Action Plan, to bring generic versions of biologic drugs, called biosimilars, to help improve competition for biologics by increasing market entry of biosimilars and providing more treatment options for patients.

FDA has approved a total of 18 biosimilar products since 2010, when the biosimilar pathway was created, 13 of which were approved under Dr. Gottlieb's watch.

At his confirmation hearing, Dr. Gottlieb described the opioid crisis as "having staggering human consequences. I think it's the biggest crisis facing the agency. . . . I think it's going to require an all-of-the-above approach. . . ."

Last year, 72 senators worked on legislation to combat the opioid crisis.

Dr. Gottlieb provided us with crucial advice as we worked on this legislation and has begun to take advantage of the new law.

He has taken steps to help prevent illicit fentanyl, which is 100 times more powerful than heroin, from coming across the border.

He worked with Congress to clarify his authority to require opioids to be packaged in blister packs, such as a 3 or 7-day supply, to encourage doctors to prescribe responsibly; and clarified FDA's authority to require safe disposal options to accompany opioid packaging.

Dr. Collins, who leads the NIH, has predicted a nonaddictive opioid in the next decade, which really is the Holy Grail for fighting the opioid crisis and for helping the 50-100 million Americans living with pain.

I believe Dr. Gottlieb has laid groundwork to encourage the development of nonaddictive and nonopioid medicines and therapies to treat pain.

Dr. Gottlieb was integral to Congress's ability to reauthorize the animal drug user fees, which authorize the FDA to collect user fees to speed the review and approval of new drugs that farmers, families, and veterinarians rely on to keep their animals healthy and the food supply safe.

The 21st Century Cures Act created the Regenerative Medicine Advanced Therapy Designation, which is similar to the very successful breakthrough drug pathway that safely shortened the development and review time for certain drugs, to get them to patients who need them more quickly.

While we worked on that law, I heard the story of Nashville resident Doug Oliver.

In 2007, Doug began to have trouble seeing and, after a near accident, had

his driver's license taken away and was declared legally blind.

The culprit was a rare form of macular degeneration.

His doctor at the Vanderbilt Eye Institute told him that while there were no cures, Doug could search online for a clinical trial.

Doug found a regenerative medicine clinical trial in Florida, where doctors took cells out of the bone marrow in his hip, spun them in a centrifuge, and then injected those into his eye.

Three days later, he began to see.

His eyesight eventually improved enough to get his driver's license back, and he became an effective advocate for more support for regenerative medicine, which we included in the 21st Century Cures Act.

So, with his improved vision, he began writing letters and visiting me to advocate for more support for regenerative medicine, which we did in the 21st Century Cures Act.

Two years ago, Doug gave me the cane he had used while he was blind. He said: "I don't need it anymore."

In Cures, we included a pathway to bring new regenerative medicine treatments, similar to the treatment Doug received, to patients more quickly.

Dr. Gottlieb has worked to implement that new pathway to help develop safe treatments to ensure more patients are able to take advantage of this cutting-edge, personalized medical technology.

Additionally, Dr. Gottlieb has helped the agency develop and advance guidances for gene therapies that will help new innovative companies developing these promising therapies, some of which may be for specific diseases and conditions that provide roadmaps for biotechnology companies who are leading the way in precision medicine.

During this exciting time in biomedical research, we are fortunate that Dr. Gottlieb was willing to serve.

The FDA and the biomedical community is in better shape today to advance medical innovation and develop the treatments and cures of the future because of his leadership.

CELEBRATING ROMANI AMERICAN HERITAGE

Mr. CARDIN. Madam President, today I rise to celebrate International Roma Day, which occurred yesterday, April 8, 2019. Last week, Senator WICKER, the Helsinki Commission's Senate cochairman, and I introduced a resolution that celebrates Romani American heritage.

As a member of the U.S. Helsinki Commission and the Organization for Security and Cooperation in Europe (OSCE) Parliamentary Assembly Special Representative on Anti-Semitism, Racism & Intolerance, I have long worked to improve the situation of Roma throughout the OSCE region.

The resolution we introduced on April 4 does four things.

First, it recognizes and celebrates Romani American heritage. Roma have

come to the United States with every wave of European migration since the colonial period. In the United States, there may be as many as 1 million Americans with some Romani ancestry, whether distant or more recent. Romani people have made distinct and important contributions in many fields, including agriculture, art, crafts, literature, medicine, military service, music, sports, and science.

Second, it supports International Roma Day and the Department of State's robust engagement in activities to honor that occasion. On April 8, 1971, the First World Romani Congress met in London, bringing together Roma from across Europe and the United States with the goal of promoting transnational cooperation among Roma, combating social marginalization, and building a positive future for Roma everywhere. April 8 is now celebrated as International Roma Day around the world. U.S. Ambassadors and our Embassies across Europe are frequently asked to participate in April 8 celebrations across the region. I commend the important work they are doing as they demonstrate U.S. commitment to inclusive societies not only on April 8 but throughout the entire year.

Third, this resolution commemorates the 75th anniversary of the destruction of the so-called Gypsy Family Camp at Auschwitz. Experts estimate that 200,000 to 500,000 Romani people were killed in death camps and elsewhere throughout Europe. On August 2 to 3, 1944, Nazis murdered between 4,200 and 4,300 Romani men, women, and children in gas chambers when the Nazis decided to liquidate this camp. A number of governments have taken important steps in recent years to commemorate the genocide of Roma, to remember the victims, and educate future generations. Germany took an important step when it opened a memorial in Berlin for Sinti and Roma victims of national socialism. I also commend the Czech Government for its decision to remove the pig farm at the site of the Lety concentration camp and address remaining issues regarding the proper memorialization of that sensitive site.

Finally, this resolution commends the U.S. Holocaust Memorial Museum for its critically important role in promoting remembrance of the Holocaust and educating audiences about the genocide of Roma. The U.S. Holocaust Memorial Museum is the preeminent Federal institution dedicated to serving as a living memorial to the Holocaust. I am honored to serve as a member of the U.S. Holocaust Memorial Museum Council and I welcome the initiatives of the museum to ensure that Romani victims are remembered and support related scholarship.

I am pleased that Senator WICKER has joined me in introducing this resolution and urge other colleagues to join us in celebrating Romani-American heritage.