

ished that there was ever a time when women could not vote. I want them to be astonished that there was ever a time when women earned less than men for doing the same work. I want them to be astonished that there was ever a time when women were vastly outnumbered in the boardroom or in Congress, that there was ever a time when a woman had never sat in the Oval Office.

Now, I don't know how long it will take to get there, but I know we're getting closer to that day, because of the work of generations of active, committed citizens. One of the interesting things, as I was just looking through some of the rooms—there was Susan B. Anthony's desk. [*Laughter*] You had Elizabeth Cady Stanton's chair. And you realize that those early suffragists had preceded Alice Paul by a generation. They had passed away by the time that the vote was finally granted to women. And it makes you realize—and I say this to young people all the time—that this is not a sprint, this is a marathon. It's not the actions of one person, one individual, but it is a collective effort, where each generation has its own duty, its own responsibility, its own role to fulfill in advancing the cause of our democracy.

That's why we're getting closer, because I know there's a whole new generation of women and men who believe so deeply that we've got to close these gaps. I have faith because what this house shows us is that the story of America is a story of progress. And it will continue to be a story of progress as long as people are willing to keep pushing and keep organizing and, yes, keep voting for people committed

to this cause and to full equality for every American.

And so I'm hoping that a young generation will come here and draw inspiration from the efforts of people who came before them. After women won the right to vote, Alice Paul, who lived most of her life in this very house, said, "It is incredible to me that any woman should consider the right for full equality won. It has just begun." And that's the thing about America: We are never finished. We are a constant work in progress. And our future belongs to every free woman and man who takes up the hard work of citizenship to win full equality and shape our own destiny.

That is the story that this house tells. It is now a national monument that young people will be inspired by for years to come. It would not have happened without the extraordinary efforts of many of the people in this room, not only their active support of this house and preserving it, but also the outstanding example that they are setting, that you are setting.

I'm very proud of you. Congratulations. Thank you very much, everybody.

NOTE: The President spoke at 11:35 a.m. In his remarks, he referred to Chitra Panjabi, vice president of membership, National Organization for Women; and former professional tennis player Billie Jean King, founder, Billie Jean King Leadership Initiative. Proclamation 9423, which established the Belmont-Paul Women's Equality National Monument, was signed on April 12 and is listed in Appendix D at the end of this volume.

Remarks at the White House Science Fair April 13, 2016

The President. Hello, hello, hello! Hey! Good to see you. All right, everybody, have a seat, have a seat.

Well, hello, everybody. Welcome to the White House. There are a lot of good things about being President. I get a chance to travel all across the country and meet people and see all the amazing things that are being done; being Commander in Chief of the greatest mili-

tary the world has ever known and seeing the incredible service of our men and women in uniform. Air Force One is very cool. [*Laughter*] I don't have to take off my shoes before I get on an airplane. [*Laughter*]

But some of the best moments that I've had as President have involved science and our annual Science Fair. I mean, I have shot a marshmallow out of a cannon directly under

Lincoln's portrait. [Laughter] I have learned about prototypes from 6-year-old Girl Scouts who built a page-turning machine out of Legos for people who might be disabled—there they are. [Laughter] Good to see you guys. [Laughter] I should add, by the way, that I took a picture with them with one of their tiaras on, which I think is still floating around the Internet. [Laughter]

Most importantly, I've just been able to see the unbelievable ingenuity and passion and curiosity and brain power of America's next generation and all the cool things that they do. I've also, by the way, had a chance to see an alarming number of robots. [Laughter] None have caused me any harm up until now. They've startled me a little bit. I understand today that we have a live chicken here, which I'm sure the White House staff is thrilled about. [Laughter] But this is fun. More importantly, it speaks to what makes America the greatest country on Earth.

I want to publicly thank some of the people who helped make today possible, also because I want you to know who to blame if something explodes. [Laughter] We've got some Members of Congress in the house who have been highly supportive of all our science and basic research efforts. We've got my science adviser, John Holdren, who is here. Give John a big round of applause. We've got my Chief Technology Officer Megan Smith in the house.

We have some guests who are really helping to lift up the importance of science, like—this is not a typical combination—supermodel and supercoder Karlie Kloss is here. We've got actress and science enthusiast Yara Shahidi. Where's—there she is. Good to see you. We've got XKCD comic creator Randall Munroe is here. Give him a big round of applause. We're joined by some of the past participants of our Science Fairs, including Elana Simon, who studied her own cancer and started coming up with some cures. I remember meeting you last year. How is Harvard going?

Harvard University student Elana Simon. It's good.

The President. So far, so good? She was a senior last year, just started.

So this is an eclectic and diverse bunch. But what they all share is this love of science and love of technology and a belief that our youngest innovators can change the world.

And there's nothing that makes me more hopeful about the future than seeing young people like the ones who are here. And they come from all over the country; they come in all shapes and sizes. All of you are showing the rest of us that it's never too early in life to make a difference. You teach us about the power of reason and logic and trying things and figuring out whether they work and, if they don't, learning from that and trying something new. And you remind us that, together, through science, we can tackle some of the biggest challenges that we face.

Whether you're fighting cancer or combating climate change, feeding the world, writing code that leads to social change, you are sharing in this essential spirit of discovery that America is built on.

John Holdren helpfully reminded me that today happens to be the 273d birthday of Thomas Jefferson. [Laughter] And Thomas Jefferson was obviously a pretty good writer; the Declaration of Independence turned out pretty well. [Laughter] He was a great political thinker and a great President. But he was also a scientist. And that was true of most of our Founders. They were children of the Enlightenment. They had come of age when all the old dogmas were being challenged. And they had this incredible faith, this belief in the human mind and our ability to figure stuff out.

And whether it was Benjamin Franklin or Thomas Jefferson or all the others who were involved in the founding of our country, one of the essential elements that is embedded in our Constitution and the design of this democracy is this belief that the power of the human brain when applied to the world around us can do amazing, remarkable things.

And it also requires, as we're seeing from these outstanding teams, not just constant inquiry, but also strong teamwork and dogged perseverance. And by following the trail of your curiosity wherever it takes you, you are continually adding to this body of knowledge

that helps make us a more secure, more prosperous, and more hopeful society. Science has always been the hallmark of American progress. It's the key to our economic success. I can't think of a more exciting time for American science than right now, because we are busy reigniting that spirit of innovation to meet so many challenges.

Just to give you a couple examples, we're on the cusp of a new era of medicine that accounts for people's individual genes. And I've been doing a lot of work with Francis Collins, the head of NIH, around how we take the human genome that we've mapped, in part thanks to the good work of Francis and others, so that we are able to not just cure diseases generally, but figure out what exactly do you in your particular body need in order to keep it running well.

We're harnessing technology to develop cleaner sources of energy and save our planet in the process. We're unraveling the mysteries of the human brain, unlocking secrets of the universe. In fact, just last month, Commander Scott Kelly returned from an almost a year-long stay on the International Space Station. Some of you may have read about that. He conducted countless experiments, and he also served as an experiment himself. His identical twin brother Mark, who is an astronaut as well—Mark stayed home during this entire time that Scott was up in the air, and that meant that NASA could study the two of them side by side to gain insights into how a long-term occupation in space changes your body and your operating systems.

It turned out, initially, it makes you 2 inches taller. [Laughter] But I saw Mark just 2 weeks ago; apparently, you shrink back really quickly. [Laughter] It makes your head bigger too, which—[laughter]—but I don't know how big.

America has also got a selfie-taking rover that's Instagramming from Mars. The International Space Station just got its first inflatable habitat for astronauts. SpaceX, on the commercial, private venture side of space, just landed a returning rocket on a drone ship in the middle of the ocean. And that's opening up the possi-

bility of reusing our rockets instead of just throwing them away once they have launched.

So the progress we're seeing across the board is extraordinary, and it's just the beginning. The rest is going to be up to you, the next generation. Somewhere in your generation, maybe in this room, are pioneers who are going to be the first to set their foot on Mars—the first humans, anyway. I don't know about other life forms. [Laughter]

And I know what you're capable of because I just had a chance to see some of the exhibits, and we had some of the press pool follow. If you were not blown away from some of the young people that we just had a chance to meet, then you had too big of a lunch and you were falling asleep, because if you were paying attention, it was unbelievable.

We've got Maya Varma, who is a senior from San Jose, California. Where is Maya? Yay, there's Maya. Maya is using a low-cost microcontroller, software freely available on the Internet, and a smartphone, and she designed a tool that allows people with asthma and other lung diseases to diagnose and monitor their own symptoms. So her goal was to use smartphone technology to make diagnostic tests for all kinds of diseases a lot cheaper. "My aspiration is not only to create the next big thing in my field one day," Maya says, "but also to make it accessible to more than a privileged few in the world." So give Maya a big round of applause.

I do have to say—this is just an aside—the only problem with the Science Fair is it makes me feel a little inadequate. [Laughter] Because I think back to my high school, and first of all, I didn't have a field. Maya talked about her "field." My field—I don't know exactly what my field of study was at that time, but it wasn't that. [Laughter]

We also have 9-year-old Jacob Leggette from Baltimore. Where is Jacob? There you go, in the bowtie. So Jacob loved programming ever since the age of 2, when he nearly wiped clean his grandma's computer—[laughter]—which I'm sure she was thrilled with. But don't worry, Jacob fixed it. Last summer, this young maker wrote to a company that manufactures

3-D printers, asked them if he could have one of the 3-D printers in exchange for feedback on whether their printers are kid friendly. So, clearly, he's a good negotiator and businessperson. [Laughter] And today, Jacob is churning out toys and games for himself and his little sister, and he dreams one day of making artificial organs for people.

I should add, by the way, Jacob, John, had a very good idea, which is that we should have—in addition to our PCAST, which is my science advisory group, all these scientists and leaders in various fields, we should have a kid's advisory group that starts explaining to us what's interesting to them and what's working and could help us shape advances in STEM education. Anyway, that was Jacob's idea. [Laughter] So way to go, Jacob. We're going to follow up on that. Give Jacob a round of applause.

We have 16-year-old Anarudh Ganesan. Where is Anarudh? There he is, right there. So when Anarudh was little, his grandparents walked him 10 miles to a remote clinic in his native India for vaccinations, only to find out that the vaccines had spoiled in the heat. Though he eventually got the shots that he needed, he thought, well, this is a problem, and wanted to prevent other children from facing the same risk. So he developed what he calls the VAXXWAGON, and it's a refrigerator on wheels that transports vaccines to remote destinations. That's the kind of innovation and compassion that we're seeing from so many of these young people. So give Anarudh a big round of applause.

And we have Olivia Hallisey, a high school senior from Greenwich, Connecticut. Where is Olivia? There she is. Hi, Olivia. And, now, think about this. So Olivia swept the Google Science Fair. She read about the Ebola epidemic in the news. She decides, I want to make a faster, less expensive test for the disease, as opposed to a lot of adults who were just thinking, how do I avoid getting Ebola? [Laughter] She decides, well, I'm going to fix this. So she wants a faster, less expensive test. An old test cost \$1,000, took up to 12 hours to conduct. Using silk as a base instead, Olivia made the test cost \$5, without requiring refrigeration,

with results that are available in under 30 minutes. How about, what were you doing in high school? [Laughter] Give Olivia a big round of applause.

So this is just a small sample of the incredible talent that is on display at this Science Fair. And we couldn't be prouder. To all the students, to all the young people: We could not be prouder of you. I want to thank the parents and the teachers and mentors who stood behind these young people, encouraged them to pursue their dreams. I asked all the young people who I had a chance to meet, how did you get interested in this? And there were a couple whose parents were in the sciences, but for the majority of them, there was a teacher, a mentor, a program, something that just got them hooked. And it's a reminder that science is not something that is out of reach, it's not just for the few, it's for the many, as long as it's something that we're weaving into our curriculum and it's something that we're valuing as a society.

And so I hope that every company and every college and every community and every parent and every teacher joins us in encouraging this next generation of students to actively engage and pursue science and push the boundaries of what's possible. We've got to give all of our young people the tools that they need to explore and discover and to dig their hands in stuff and experiment and invent and uncover something new and try things and see hypotheses or experiments fail and then learn how to extract some knowledge from things that didn't work as well as things that worked. That's another theme that came out of a lot of the conversations I had with young people.

And that's why we're building on our efforts to bring hands-on computer science learning, for example, to all students. As I've said before, in the new economy, computer science isn't optional, it's a basic skill, along with the three R's. So we're issuing new guidance to school districts for how they can better support computer science education. Oracle will invest in getting 125,000 more students into computer science classes. Give Oracle a big round of applause for that. We appreciate that.

We've got more than 500 schools that are committing to expand access to computer science. And this is just a sample of the things that we've been putting together over the last several years to try to expand opportunity for the kind of brilliant work that's being done by these students. And we're seeing entire States take action. For example, last month, Rhode Island got on a path to bring computer science to every school within 2 years.

So we're going to build on this progress. We want to make sure every single one of our students—no matter where they're from, what income their parents bring in, regardless of their backgrounds—we want to make sure that they've got access to hands-on science, technology, engineering, and math education, that it's going to set them up for success and keep our Nation competitive in the 21st century.

That includes, by the way, working through some of the structural biases that exist in science. Some of them, they're—a lot of them are unconscious. But the fact is, is that we've got to get more of our young women and minorities into science and technology, engineering and math, and computer science. I've been really pleased to see the number of young women who have gotten more and more involved in our Science Fairs over the course of these last several years.

And as I said to a group that I had a chance to meet with outside, we're not going to succeed if we've got half the team on the bench, especially when it's the smarter half of the team. *[Laughter]* Our diversity is a strength. And we've got to leverage all of our talent in order to make ourselves as creative and solve as many problems as we can be.

And one of the things I find so inspiring about these young thinkers and makers is that they look at all these seemingly intractable problems as something that we can solve. There is a confidence when you are pursuing science. They don't consider age a barrier. They don't think, well, that's just the way things are. They're not afraid to try things and ask tough questions. And above all, what we've seen today is that they feel an obligation to use

their gifts to do something not just for themselves, but for other people as well.

Olivia said after she was working on this Ebola diagnostic tool: "My generation has been raised with an awareness that we're part of a global community. It's everybody's responsibility to take a proactive approach and think of solutions." She is right. I want you to call up Congress and tell them your thinking on that. *[Laughter]* That was just a joke. *[Laughter]* Maybe not. *[Laughter]* But it's all up to us to work together with the—our youngest talent leading the way.

A century ago, Albert Einstein predicted the existence of gravitational waves. This year, a team of scientists finally proved him right. This was very cool, by the way. I don't know if—those of you guys who had a chance to read about this—the way they measured it was the building got a little longer. *[Laughter]* The building that—from which they were measuring this gravitational wave grew, like, a little bit. *[Laughter]* And then, it kind of shrank back, which is really weird and really interesting. *[Laughter]*

And that's the thing about science: You don't always cross the finish line yourself. You may have a hypothesis, a theory, and then people build off of it, and it's like you're running a race and you're passing a baton. Everything that we're working with today is based on some young person like you 10 years ago, 50 years ago, 100 or 300 years ago, who were asking themselves the same question. And while even Einstein didn't see all the fruits of his labor, because he went as far as his curiosity and hard work would take him, generations of scientists continue to build on his progress.

So that's what we're going to need from all of you. We are counting on all of you to help build a brighter future and for you to use your talents to help your communities and your country and the world. We will be with you every step of the way. And I will be keenly following your progress so that when you invent some cancer cure or find some new source of cheap, clean energy, I will take some of the credit. *[Laughter]* I'll say, if it hadn't been for the White House Science Fair, who knows

what might have happened? Even though it won't really be my credit to take. So I'm just teasing, guys.

Thank you very much, everybody. Proud of you. Good job.

NOTE: The President spoke at 3:04 p.m. in the East Room at the White House. In his remarks, he referred to Emily Bergenroth, Alicia

Cutter, Karissa Cheng, Addy Oneal, and Emery Dodson, members, Daisy Girl Scout Troop 411 in Tulsa, OK; Maya Varma, student, Presentation High School in San Jose, CA; Jacob Leggette, student, Digital Harbor Foundation's Mini Makers program; Anarudh Ganesan, student, Clarksburg High School in Clarksburg, MD; and Olivia Hallisey, student, Greenwich High School in Greenwich, CT.

Remarks on United States Strategy To Counter the Islamic State of Iraq and the Levant (ISIL) Terrorist Organization at the Central Intelligence Agency in Langley, Virginia *April 13, 2016*

Good evening, everybody. As President and Commander in Chief, my top priority, above all else, is the security of the United States and the safety of the American people. And that means preventing terrorist attacks, and at the moment, it is focused on making sure that we are dismantling and destroying the ISIL network. I just met with my National Security Council as part of our regular effort to review and constantly intensify our campaign against ISIL. And I want to thank Director Brennan and everybody here at the Central Intelligence Agency for hosting us and for their critical contributions to this fight.

In late February, at our meeting at the State Department, I directed my team to continue accelerating this campaign on all fronts. And we have. This remains a difficult fight and a complex one, involving many countries and different communities in Syria and in Iraq. It is a military campaign, but it—and a counterterrorism effort, but it also depends on a whole range of political issues that face these two countries.

As we've seen so tragically—from Brussels to Istanbul to Iraq, where ISIL slaughtered children watching soccer—these depraved terrorists still have the ability to inflict horrific violence on the innocent, to the revulsion of the entire world. With attacks like these, ISIL hopes to weaken our collective resolve. And once again, they have failed. Their barbarism only stiffens our unity and determination to

wipe this vile terrorist organization off the face of the Earth.

Today, on the ground in Syria and in Iraq, ISIL is on the defensive. Our 66-member coalition, including Arab partners, is on the offensive. We have momentum, and we intend to keep that momentum.

Our air campaign—more than 1,100—11,500 strikes so far—continues to pound ISIL targets. It's harder than ever for them to move and for their masses to—or for them to mass forces. When they try, we take them out. ISIL still has managed to advance in some areas of Syria and Iraq, but it has not had a single successful major offensive operation on the ground there since last summer. So it's been nearly a year since they were able to mount a major successful offensive operation.

We continue to take out their leaders, their commanders, and those plotting terrorist attacks. For ISIL's leadership, it has been a bad few months. Coalition forces captured Abu Dawud, a leader of its chemical weapons program, giving us critical information that's allowed us to unleash more strikes against those sites. We have removed Abu Sarah, ISIL financier in Iraq; Haji Iman, their finance chief; Ezat al-Jabouri, an ISIL figure in northern Iraq; not to mention a number of top foreign terrorist fighters. They are off the field. And in the days and weeks ahead, we intend to take out more. Every day, ISIL leaders wake up and understand that it could be their last.