

Administration of Barack Obama, 2013

Remarks at the White House Science Fair

April 22, 2013

Thank you, everybody. Please have a seat. Have a seat. Well, good afternoon, everybody. And welcome to the White House science fair, one of my favorite events during the course of the year.

And I just had a chance to see some of the outstanding exhibits that have been put forward by some of these amazing young people. And let me just start by saying, in my official capacity as President: This stuff is really cool. *[Laughter]* And I want to thank these incredible young people for explaining to me what the heck is going on. *[Laughter]*

Every one of you is enormously talented, obviously, but there's also a community of people who helped all these young people succeed: dedicated teachers who believed in them and challenged them to do even more; all of them have loving parents and mentors and family. So I want to not only give the young people a big round of applause, but all the parents and teachers and principals and everybody who was involved, give yourselves a big round of applause as well.

Of course, primarily, we're here to celebrate these young scientists and visionaries who dream and create and innovate, who ask the question, why not? Why not try something better, something that's faster, something that helps more people? And that drive, that refusal to give up, that focus on the future is part of what makes America great. And all of you are participants in this long line of inventors and creators that have made this the most dynamic economy and the most dynamic country on Earth.

And that's one of the things that I've been focused on as President, is how do we create an all-hands-on-deck approach to science, technology, engineering, and math. And I'm happy to have so many key members of my science team who are here today, including my Chief Science Adviser, John Holdren, who is here. There's John. NIH Director Francis Collins. There's Francis right there, the tall guy. We've got Acting Director of the National Science Foundation Cora Marrett, who is here. There's Cora. And we've got real-life astronaut and NASA Administrator Charles Bolden. Where's Charlie? There he is, right there.

So we need to make this a priority: to train an army of new teachers in these subject areas and to make sure that all of us as a country are lifting up these subjects for the respect that they deserve. And one of the things I'm concerned about is that, as a culture, we're great consumers of technology, but we're not always properly respecting the people who are in the labs and behind the scenes creating the stuff that we now take for granted. And we've got to give the millions of Americans who work in science and technology not only the kind of respect they deserve, but also new ways to engage young people.

So today I'm proud to announce a new AmeriCorps program that are going to——

[At this point, an audience member applauded.]

That's our Community Service Director, so—*[laughter]*—she is a little bit biased, but I like that in her. She's got that kind of get-up-and-go. A new AmeriCorps program that's going to connect more professional scientists and engineers to young students who might follow in their footsteps.

And other people are stepping up too. Some of America's biggest tech companies are encouraging their workers to mentor young students. You've got media organizations that are working with athletes, like outstanding wide receiver Victor Cruz from the New York Giants, who's here to highlight how critical math and science are to sports. And by the way, since Victor is here, I don't know, did you see the exhibit about the whole cooling shoulder pads and helmet that these young guys did? And they had a whole slogan that said you can succeed in athletics and science. They were very impressive. Had the little Gatorade coming in so you—*[laughter]*—you didn't even have to, like, reach for your Gatorade; you could just—it would automatically transmit itself into your helmet. *[Laughter]* It could work.

We've got nonprofits that are helping to organize 1,000 summer learning events this year. They all realize how important science, technology, engineering, and math are to the future. So we are doing this together.

And after all, the science fair projects of today could become the products and businesses of tomorrow. Three students—Evan Jackson, Alec Jackson, Caleb Robinson—those are the folks that I talked about. They're from Flippen Elementary School. Keep in mind, they're in third, fourth grade, and they've already got this idea for cool pads so that Victor doesn't get overheated when he's out on the field. But think about that. If you're inventing stuff in the third grade, what are you going to do by the time you get to college? *[Laughter]* And we just had the University of Alabama's national championship football team here last week, and I know they're interested in this idea because it gets really hot down in Alabama.

A lot of these students are working on the next generation of medical research. So listen to this story. When pancreatic cancer took the life of Jack Andraka's close family friend, it inspired Jack to look for new ways to improve detection. So Jack requested space from research labs to pursue his work nearly 200 times. Two hundred times he asked; 200 times he was turned down. Finally, with the help of some folks at John Hopkins, he got the research facilities that he needed, developed a pancreatic cancer test that is faster, cheaper, and more sensitive than the test that came before it, which is not bad for a guy who is just barely old enough to drive. So where's Jack? There he is. Jack, stand up, because that's pretty spectacular stuff. That's great work. I don't know what you guys were doing when you were juniors in high school. *[Laughter]* That's what Jack's doing. *[Laughter]* Better than I was doing, I promise you. *[Laughter]*

Now, today is not just the third White House science fair, it's also the 43d Earth Day. So I want to give a special shout-out to all of the young people who participated who focused their attention on how to harness cleaner forms of energy and how to create more energy efficiency. So we've got young people like Caleb Meyer. Where's Caleb? Caleb's way back there. Stand up, Caleb, so we can see you. Caleb built a wind turbine that's small and fast enough to be installed on your roof or in your front yard.

We've got Jon Kubricki and Bridget Zarych, who, together with their classmates, designed an inexpensive press that can recycle garbage like banana peels into briquettes as an alternative to using wood for fuel. They're in eighth grade. I don't know what you were doing in eighth grade. *[Laughter]* That's what they're doing, which could potentially help to reduce carbon emissions, save trees and deforestation, and reduce the amount of smoke inhalation that has an impact on people.

We've got Sara Volz, who is breeding new types of algae. Where's Sara? There's Sara. Sara is breeding new types of algae. She stores this in a lab in her bedroom. *[Laughter]* So, Sara, you have very supportive parents. *[Laughter]* One reporter asked her, "Exactly what is growing

under your bed that's going to save the planet?" [Laughter] And Sara's answer was algae that can produce more oil for cheaper biofuels. So by the way, Jon Kubricki and Bridget Zarych, I didn't have them stand up. I want to acknowledge them. I saw them. Maybe they're still cleaning their hands off from—[laughter]. But there they are. There they are.

So I've got to say, young people like these, every one of them have these kinds of incredible innovations. Some of them are already fully operational. Some of them are getting fine tuned. But young people like these have to make you hopeful about the future of our country. And it's also a reminder for us, the adults, we've got to do our part. We've got to do everything we can to make sure that we are giving these young people opportunity to pursue their studies and discover new ways of doing things. And we've got to make sure that we're also leaving behind a world that is safer and cleaner and healthier than the one we find—found it. That's our obligation.

And that's why, over the last 4 years, we've made historic investments in the clean energy future that we need. And today, we import less oil than we have in 20 years. Thanks to new fuel economy standards, by the middle of the next decade, cars will go twice as far on a gallon of gas. We've doubled the amount of renewable energy that we're generating from sources like wind and solar, and by the way, creating tens of thousands of good, American jobs in the process. We're emitting less carbon pollution into the environment than we have in nearly 20 years.

But we understand this is not enough. We've got to do better. And that's why we've got to pursue an all-of-the-above energy strategy that includes investing in more biofuels and more fuel-efficient vehicles and more solar power and more wind power and more people going back to work building cars and homes and businesses that are more energy efficient than the ones that we've got right now.

That's why I've proposed new job-creating investments in science and innovation. And all these young people, as young as they are, they're all going to be going to college, and a lot of them are going to want to continue to pursue their research and to pursue their dreams. And if there is not the research grant pipeline in place, many of them will not have the resources to invent and discover the things that will make us healthier and make us more energy efficient and improve the quality of our lives.

So this is not the time to gut investments that keep our businesses on the cutting edge, that keep our economy humming, that improve the quality of our lives. This is the time to reach a level of research and development that we haven't seen since the height of the space race. That's what we should be doing. That's what we should be focused on.

And that should not be a partisan idea. America has always been about discovery and invention and engineering and science and evidence. That's who we are. That's in our DNA. That's how this country became the greatest economic power in the history of the world. That's how we were able to provide so many contributions to people all around the world with our scientific and medical and technological discoveries.

And that's what these young people are—here are all about. And if extraordinary young people like all of you can use your talents to shape the future for our families and our communities and our countries, we've got a responsibility to make sure that they've got the tools to do it.

So I want to thank all the science fair winners, not only for the work that you guys are doing, but also the example that you're setting for your peers and also for your adults, the

adults that are in your lives. We could not be prouder of you. And I want you to keep up your incredible work.

And part of the reason that we're doing this here, we celebrate our great football players like Victor, and we celebrate outstanding musicians, and that's all appropriate. But we've got to make sure that we're also celebrating every single day in our schools, in our classrooms, and in our country the outstanding contributions that scientists and engineers and mathematicians and engineers are providing to us every single day. And we want you to know that you've got a whole country behind you as you pursue your dreams. And your success is going to be our success as well. So way to go.

Thank you. Appreciate it, everybody. Thank you very much.

NOTE: The President spoke at 2:21 p.m. in the East Room at the White House. In his remarks, he referred to Wendy Spencer, Chief Executive Officer, Corporation for National and Community Service; White House science fair participants Evan Jackson, Alec Jackson, and Caleb Robinson of McDonough, GA, Jack Andraka of Crownsville, MD, Caleb Meyer of Hope, ND, Jon Kubricki and Bridget Zarych of Little Egg Harbor, NJ, and Sara Volz of Colorado Springs, CO, and her parents David and Pattye Volz; and John Roach, contributing writer, NBC News Digital.

Categories: Addresses and Remarks : White House science fair.

Locations: Washington, DC.

Names: Andraka, Jack; Bolden, Charles F., Jr.; Collins, Francis S.; Cruz, Victor; Holdren, John P.; Jackson, Alec; Jackson, Evan; Kubricki, Jon; Marrett, Cora B.; Meyer, Caleb; Roach, John; Robinson, Caleb; Spencer, Wendy; Volz, David; Volz, Pattye; Volz, Sara; Zarych, Bridget.

Subjects: Community Service, Corporation for National and; Education : Science and math programs; Education : Teachers; Energy : Alternative and renewable sources and technologies :: Promotion efforts; Energy : Biofuels and ethanol; Energy : Fuel efficiency standards, strengthening efforts; Health and Human Services, Department of : National Institutes of Health; Health and medical care : Research and development; Science and technology : Research and development; Science and Technology Policy, Office of; Science Foundation, National; Space program : Aeronautics and Space Administration, National; White House science fair.

DCPD Number: DCPD201300263.