

**TOWN HALL MEETING WITH PRESENTATION BY
RICK PERRY, U.S. SECRETARY OF ENERGY
LAWRENCE BERKELEY NATIONAL LABORATORY
TUESDAY, MARCH 27, 2018
BLDG. 50 AUDITORIUM
1 CYCLOTRON ROAD
BERKELEY, CALIFORNIA**

1. OPENING REMARKS (0:00-4:44)

Director Mike Witherell took the stage at 3:30 p.m. In his opening remarks he welcomed Secretary Perry to the Lawrence Berkeley National Laboratory thanked him for touring the facilities and for acknowledging the talented people who are committed to its mission.

The Director discussed the history of the lab since its founding in 1931, the cyclotron invented by Ernest Lawrence and the revolutionary science pioneered by scientists such as Robert Oppenheimer, Bob Wilson of Fermilab, and Glenn Seaborg of the AEC.

Continuing in his remarks, Director Witherell stated that as the nation's needs had changed LBL evolved from a physics lab to a broad multi-program laboratory covering the full range of the Department of Energy's Office of Science. He then welcomed Paul Golan, the site office manager at LBL for the DOE, Office of Science.

The Director acknowledged success of the Lab as due in part to a close relationship to the University of California. He introduced Kim Budil, Vice President for the National Laboratories at the University of California , Office of the President and acknowledged her and her teams role in building collaborative partnerships with all of the UofC campuses.

Director Witherell continued his welcome and discussed Secretary Perry's preparation for the position of Secretary in his previous roles in the private sector, in the military and in government as Governor of Texas.

Dir. Witherell mentioned that Secretary Perry is an alumnus from Texas A&M and that Bob Webb's group at Texas A&M is collaborating on the LZ dark matter search that is being managed at LBL. It will also be installed soon at the underground Lab in South Dakota.

Concluding in his opening remarks Director Witherell said that the mission of the Energy Department was to ensure America's security and prosperity by addressing it's needs through science and technology solutions. He stated that the Secretary was keenly aware of the challenges and has been a strong and effective advocate.

The Director acknowledged Secretary Perry's exciting role over all 17 National labs and mentioned work at LBL on new discoveries in dark energy and dark matter, breaking new ground in semiconductors and quantum computing, and unlocking the secrets of the microbiome in plants for critical advances in bioenergy.

2. U.S. SECRETARY OF ENERGY PRESENTATION (4:45-16:29)

Secretary Perry begins with the statement, "Any day that you learn something new, I count that as a good day." And then states that he learned a number of things today on his tour of the Laboratory. Quoting Peter, one of the scientists at the lab he repeats that "Atoms are really, really small" amid peals of laughter from the

audience. Then Perry says the the other coolest thing he heard today was at Sandia where the Lab Director said, “We don’t know what don’t know and we don’t know why we don’t know.”

Perry states that both of those are pretty interesting statements because they’re why you’re in this room. He believes that Secretary of DOE is the coolest job he’s ever had and the reason is because of the men and women who populate the National Labs.

He talks about the Bay Area’s beauty as a side note and how blessed people are at LBL and to be working on things that will change people’s lives in a powerful way.

Secretary Perry speaks about George Mitchell, his background coming from Texas A&M in 1940, a geologist in the oil in gas business, and also in real estate. Perry mentioned that it was National Labs connection with Mitchell that made a change in the way of the world’s energy production and the geopolitics of the world as we know it today.

Perry talked about someone who had been traveling around the country 15 years ago giving a speech on peak oil that would find and produce large quantities of oil but that the oil would be incredibly expensive. But because of work performed at Sandia, National Labs a technique was pioneered which kept polycarbonate particles on the bits which helped to perfect directional drilling and keep the cost of oil production down. Perry also added that George Mitchell believed that hydraulic fracturing could hold tight shale sands open and believed this way against the opinions of naysayers. The Secretary stated “that because this country believes in pioneers, because this country believes in funding basic research and because you have a Secretary of Energy that believes that you take that technology that’s being developed in those early stages and you support it to where it can be commercialized.” Perry stated that its government’s role to “throw a lot of jello at the wall from time-to-time, and some of it sticks”, and one of the reasons America leads the world in innovation is because of that mentality.

Lastly, Secretary Perry mentioned Ambika Bumb and Raymond Weitekamp. Weitekamp a 30-year old Ph.D in advanced manufacturing who Perry said ‘truly has the opportunity to affect millions of people’. Perry noted that Weitekamp was an organic chemist, and jokingly said that organic chemistry changed his life because, “after 16 hours of organic chemistry, they explained that I really wasn’t going to be a veterinarian at Texas A&M.” “And so organic chemistry made a pilot out of me.” Then to Ambika (Bumb) said that her technology to save lives in breast cancer but also the power of the work to affect lives will go beyond those affected by the technology itself.

Secretary concluded with, “One of the things that I enjoy as much as anything is going and telling the uninitiated about what’s happening at National Labs in the country. Your engagement in the future of the sciences, in innovation, in technology is invaluable. I respect that. I’m proud to just be a small cog in the great machinery of the National Labs of this country. When you think about the history of just this lab, the people who work here, the people who walk before you, it’s a special place and one that I’m proud to be associated with.”

3. AUDIENCE QUESTIONS & ANSWERS (16:30-29:19)

Q: What is your vision of how the DOE is going to work with the Dept of Veteran Affairs? (16:30-23:25)

A: Secretary Perry quips that he is not going to the VA. He tells a story of going to Del Coronado in San Diego in 2006 for vacation with his wife and while there was asked if he would like to visit the Naval Special Warfare Center. While visiting the Center a Lt. Commander asked Perry if an enlisted man nearby, Marcus Lutrell (*Lone Survivor*), had told him where he had been last week. The Lt. then told him that Lutrell had been at the White

House receiving the Navy Cross. Perry said, as those are prone to do in Texas, that he told Lutrell to stop by the Governor's mansion if he were ever in Texas. Lutrell in fact, stopped by and stayed to live with them for two years. This was after he had been deployed and had been involved in action that left him with PTSD and traumatic brain injuries. Perry talks about his wife, a nurse, and Lutrell's PTSD and used the story to illustrate the inadequate health care that was being administered to returning vets.

This, he says is what got him involved in a personal way, and also in his role as Governor he had been driven to find ways to help our veterans. Perry says when he got to the DOE what he found at the National Labs was an amazing amount of health care through the supercomputing arena. He mentioned Lutrell's twin brother, who was working on a Ph.D in 'brain science' and that he asked him to put it on hold to help establish a program to deal with PTSD and TBI.

Working in collaboration with Lawrence Livermore Lab and UCSF, Perry quoted Dr. Geoff Manley, Neurosurgeon saying, "that they had seen more results working with the DOE in three weeks then he had ever seen in any agency of government in his life."

Secretary Perry concluded by saying that's why the value of what they do is so important and affects so many young people's lives and that are currently in dark places. "That it's not just about veterans, it's about every child that's had a TBI or concussion or soccer mom whose little girl has been concussed multiple times, it's the NFL player it's the NHL it's the high school athlete it's a citizen who's been concussed." That's what the DOE has the potential to do and why he is excited to get to work with amazing men and women.

Q: For young scientists at National Lab it is a much more uncertain place than big companies however I prefer to be here because we have the access to the National computer facilities and the way scientists at Post Docs are making career decisions. (23:26-29:19)

A: Secretary Perry states that the question raises an interesting conundrum. At a young age you ask yourself how can I make a difference, what am I going to do, how can I make a living? When you commit to being at a National Lab you commit to being with the best of the best and that also can require making sacrifices. Perry compares the work commitment made to the National Lab to that of Google and Amazon. His comparison favors the National Lab based on the high level of collaboration found LBL over that at other places and he states that they cannot compete when it comes to the collaboration they offer. He states that that's why the Labs and the DOE are so important. In government, his background, has given him expertise of managing big things and how to be competitive. He makes this point stating that we are in a competition against countries and that what is being done by individuals in the Labs is shaping what the world will look like. He makes the pitch to young scientists, "Come work at a National Lab, you'll never work at a place more exciting, you'll never work at a place where there's more of a collaborative spirit and you'll never work at a place that has the potential to change the world. That matters."

4. SECRETARY PERRY'S WRAP UP & THANK YOU (29:20-29:50)

Final thank you remarks to audience.

5. DIRECTOR WITHERELL'S PRESENTATION OF PLAQUE TO SECRETARY (30:00-30:50)

Presentation of Quantum Computing Cubit plaque.

6. DIRECTOR WITHERELL'S WRAP UP & THANK YOU (31:05-31:45)

Final thank you remarks to LBL leadership.