

Fermilab Community Advisory Board

May 28, 2020 Meeting Minutes

Members attending: Larry Brenner, Chris Faber, Carrie Garstecki, Jim Gebhardt, Leah Goodman, Gabby Hernandez, Ellen Huxtable, Ewa Jodlowska, Sydney Jordan, Denis Kania, Dean Kilburg, Britta McKenna, Crystal Porter, Mike Salazar, Alexandra Tsang, Thomas VanCleave, Camile (SciTech)

Guests: none

Fermilab/DOE personnel attending: Adam Anderson, Lauren Biron, Kate Gregory, Amber Kenney, Alison Markovitz, Kim Mazur, Martha Michaels, Becky Thompson

Welcome

Becky Thompson

News from the Lab

Lauren Biron

Presentation linked in agenda

Neutrino 2020, which is the largest neutrino conference, will be held online beginning June 22. This is the first time the conference is offered entirely online and it is spread over two weeks so more people can participate over worldwide time zones. The online capability results in more than double the usual number of attendees.

Question: Has the ventilator been used?

Answer: No; however, it does have FDA approval and is intended to be a stop gap in case supply of ventilators can't keep up with demand.

Update on the lab's response to COVID-19

Martha Michaels, Deputy Chief Operating Officer

The lab was closed to the public in March while simultaneously transitioning most of the work force to teleworking to continue the science mission. Early in May a planning group of a cross-section of the lab population was formed to work on and develop a return to site plan which is now being implemented. The plan is a phased approach allowing the lab to gradually and safely return to the site and is influenced by local, state and federal guidance, based on local conditions with decisions by the lab's leadership. The plan is implemented collaboratively with DOE which has shown concern and support. During each phase we will identify successes, lessons learned, and respond to changing conditions. The most important aspect is safety. There have been essential employees on site and we are just beginning to bring other employees on site with supportive and protective screening and equipment in place. The lab appreciates the support from and collaboration with DOE. The site is currently closed to the public.

Update on the lab's response to COVID-19

Amber Kenney, Chief Safety Officer

The lab's phased plan will slowly roll out in the next weeks and months. The ES&H (Employee Safety and Health) team looked at safety measures that need to be in place. As many levels of protection as possible are in the multi-layered approach but nothing is perfect as human behavior is involved. Self-monitoring has been emphasized with making sure people are aware of their own health and should stay at home when sick. Protective behavior expectations are for everyone.

There is a screening process at the gate for those on the access list. They are asked questions about health and their temperature taken. If passing the questions and do not have an elevated temperature, they get access to the site. If anyone is flagged in the process, they have the option to take a covid test. The screening process makes sure people coming on site don't have high risk attributes.

Once on site face coverings are required unless someone is by themselves in an office and social distancing is required indoors and outdoors when 6 foot distance cannot be maintained. The expectations are about respecting each other and it is acceptable to remind colleagues of expectations. Hand washing is required and additional hand sanitizer stations have been installed. Cleaning crews have continued to clean while staff has been teleworking. Procedures are in place to making sure people aren't sharing tools, etc. and staff is expected to wipe down common work surfaces. Signage indicates occupancy loading for elevators and conference rooms and directions of stairwells.

Required training and all hands meetings have communicated expectations and procedures. The lab wants to make sure that the lab population feels safe and confident in the workplace they are in and that all understand the importance of safety and that safety is the priority.

As the process continues we will get feedback from those on site, watch CDC and local guidance to make sure we are in step with the experts, learn as we go and revise policies and procedures.

Question: How long will the site be closed to public?

Answer from Kate Gregory, Chief Operating Officer: We, like every other federal property, are under strict guidance and need to monitor who is on site. DOE has determined that only people allowed onsite currently are for DOE approved functions. The lab has a very specific mission and works closely with DOE. We understand that people want to use the site as it is a critical part of the community. We can't put a date on it, but it will be closed to public access for the foreseeable future. We appreciate the public's desire to be here and share their desire to visit. Our Visit Fermilab page always has site access status.

Tritium update

Amber Kenney, Chief Safety Officer

Environmental monitoring program has continued to be fully implemented with all of the water samplings and monitoring the Illinois EPA requires being done. Seasonal changes are often a time when you see fluctuations so we do extra monitoring, also due to LBNF construction happening at the lab. The construction is removing water ponds near the main injector. As that is done volume of water gets relocated around the site. We are able to control the surface water through the site and as water is relocated, extra samples are done to insure we are within compliance.

We are required to do sampling at three outfalls (places water leaves the lab property). A permit is required and certain conditions have to be met. This is typically done monthly after a storm water event to capture at the right moment. We also do water sampling that is not required which gives us an internal look at our system so we understand how water eventually reaches outfalls.

The Tritium Task Force will give a full report in the fall.

Extragalactic Cosmology

Adam Anderson, Wilson Fellow, Fermilab

Presentation linked in agenda

Question: Construction challenges must be challenging at the South Pole, are there any advantages, considering the temperature?

Answer: It turns out we are cooling things down so much, -273 degrees Celsius, and the coldest day in the South Pole is -80 degrees so the weather is not enough to help out.

Question: Is this an international group, is all funding coming from US?

Answer: It is primarily US funded, there are some European groups in the process of joining.

Virtual Offerings

Becky Thompson, Head of Education and Public Outreach

Presentation linked in agenda

As the lab went to restricted access, things like field trips and tours went on hold and we developed virtual offerings. Our team looked at who are our traditional audiences to give them what they need now as well as bringing new audiences we haven't been able to reach. We wanted to replicate as many offerings and add new and exciting offerings.

There was a huge issue of parents suddenly becoming teachers and we added resources on how to teach science, how to create a learning environment, the 5E model of education, ramped up interaction with the Lederman Science Center and recreated exhibits at home with giving hands on experience in living rooms. Neutrino Land, which offers 60 second videos on neutrinos, was developed and there is a new Fermilab Jeopardy game every week that encompasses not just physics but art, history and interesting facts about Fermilab.

Saturday Morning Physics (SMP), one of our anchor programs, held the last several lectures for the winter session virtually. An extension of the program, which was well attended, was offered. The sessions are recorded and archived on the SMP site. The virtual SMP will be continued. We found people are interested in continuing over the summer and trying to launch a summer science series which will be geared more broadly, not just high school students. The summer science series will be a hybrid of Saturday Morning Physics and Ask a Scientist and open to all.

We pivoted to make another anchor program, the STEM Career Expo virtual. While it is a different experience it continues to provide a way for students to access panelists for questions.

The fall offerings of our Arts & Lecture Series in the Ramsey Auditorium are canceled and, combined with Art Gallery offerings, we are launching an At Home edition of the series.

In July Becky will speak on Harry Potter's birthday about Hollywood Physics. The physics of Game of Thrones, Wonder Woman and more will be presented. In August Dan Hooper, head of the lab's Theoretical Astrophysics Group, will discuss exploring the mysteries of the universe's first seconds. Virtual attendance is free to these two lectures. We are also working on hosting the winners of the Fischhoff competition virtually. The rest of the series is being filled out.

Our Artists-in-Residence and Guest Composer have pivoted to do virtual work and we are working with them to do a gallery series. David Ibbett, the Guest Composer, already has his work on the website and we are looking at ways to host a virtual concert. David is looking for ways to work with music students and has paved the way with some pilot programs

Artists that would have exhibited in our Art Gallery will now exhibit virtually with tours and lectures.

The Physics Slam will be virtual.

We are rebuilding the experience of the Get to Know tours using our 360 tours.

Teacher workshops over the summer will be held with materials kits being sent out and graduate credit and professional development hours available. The virtual nature of this program is already attracting people from out of state.

We are excited to expand our reach nationally and internationally.

Discussion: Leah Goodman noted she shared David Ibbett's neutrino music and found him very enthusiastic and the music fun. She can't wait to see more of what he does.

Discussion of ways to virtually interact with the lab and New
Becky Thompson, Head of Education and Public Outreach

SciTech has talked to art commission in Aurora about trying to do some collaborative summer programming and there were ideas about tying into lab lectures, etc.

SciTech has had severe staffing shortages from massive loss of income but working on that so the lab should be hearing from them.

TikTok was raised as a possible platform for outreach. Becky explained we didn't want to go in all directions at once with social media and not be effective with any of them. The Twitter focus is going well and will consider TikTok in the future.

The DuPage Birding Club meetings have been canceled and they have released 9 videos on their YouTube education channel with more to come. One will focus on the return of the Osprey to DuPage county and that will be pushed out through social media. There will be a video on birding

hotspots released July 1. The lab is considered a birding hotspot and it is understood the site is restricted and info on how to check on site access will be included.

It was suggested we develop a marketing plan based on who we want to reach and develop partnerships with some other science-related organizations if you are intending to launch more nationally and internationally with virtual offerings.

Leah emphasized the importance of getting the census in.

Virtual meetings with fuller agendas like tonight's meeting will continue. Sorry, no brownies!