

Fermilab Community Advisory Board

September 26, 2019 Meeting Minutes

Members attending: Larry Brenner, Paul Egeland, Chris Faber, Carrie Garstecki, Jim Gebhardt, Leah Goodman, Denis Kania, Dean Kilburg, Tim Klaus, Ted Mesiacos, Crystal Porter, Mike Salazar, Arnolfo Santoro, Debra Swinden, Alexandra Tsang, Thomas VanCleave

Guests: Camille Coker, SciTech Museum; Mary Klest, author

Fermilab/DOE personnel attending: Kate Gregory, Karen Kosky, Kim Mazur, Kurt Riesselmann, Georgia Schwender, Becky Thompson, Alison Markovitz

Welcome

Kurt Riesselmann

Presentation linked in agenda

- Fermilab achieves world record field strength for accelerator magnet
- DOE award Fermilab \$3.5 million for quantum science
- Scientist Jessica Esquivel selected to be AAAS ambassador for girls in STEM
- Two lab scientists share in 2020 Breakthrough Prize in Fundamental Physics
- Revolutionary method for cooling a superconducting accelerator cavity

Investing in the Future of Science

Kate Gregory, Chief Operating Officer and Karen Kosky, Head of Facilities Engineering Services Section

Presentation linked in agenda

Discussion:

- Batavia and Warrenville contacted the lab about rainwater entering sanitation lines, and it is a priority for the lab to replace those old lines in the coming years
- Congress has increased Fermilab budget over the years, but Congress also decides how the money has to be spent. Fermilab cannot use money allocated to a specific project to fund other work at the lab.
- The scope of some projects make them a Congressional line item, and DOE is working at the federal level to get them funded.
- Nigel has a unique reputation for his ability to work with international partners and have them support international projects at Fermilab with in-kind contributions. It has been a great benefit to show Congress what other countries are contributing.
- We are planning to make some areas in the new PIP-II building accessible to public tours. There are plans for visitor areas to see scientists at work. The architects are designing for science on display while complying with safety issues.

- DOE is hugely supportive of improving infrastructure of Fermilab and other national labs, and efforts are under way to provide more funding for these efforts.

Fermilab Art Gallery and Artist in Residence Program

Georgia Schwender, Art Curator

Presentation linked in agenda

A tour of the Art Gallery and the current exhibit, *Cosmic Design by Shanthi Chandrasekhar*, followed the presentation.

Remark:

- Pieces in ROC East that can be seen from the CAB meeting room are by artist Xavier Cortada, Art@CMS

Q&A with Rebecca Thompson, head, Fermilab Education and Public Outreach

Becky joined Fermilab earlier this month. She holds a PhD in physics from the University of Texas in Austin, and was previously the head of outreach for the American Physical Society, a professional organization for physicists. Her public engagement work has focused on figuring out the best ways to teach the public what physicists are doing.

She authored the Spectra series of comic books with a super hero who taught physics. While it is hard to sell a comic book as a valuable outreach tool, it was amazing to get students excited about something different. Becky mentioned that she heard from one girl who explained to her grandfather what a laser is after reading the comic book. Becky also has authored a book about the science of the Game of Thrones that will be published at the end of October.

Becky's desire is that our education and public outreach, the way we engage with the public—whether it is the local astronomy club or a kindergarten class—be positive, informative and as exciting as they can be so the community can understand how amazing Fermilab is.

Becky is currently working with her staff on a planning process focusing on the visitor experience encompassing what we are doing for the community and for students.

Becky asked that the CAB members help her understand what they and the local community want to hear from the lab, and how she can be a successful community member.

Discussion:

- Lederman Science Center is amazing and staff is wonderful
 - Make center more visible, seems hidden
 - Have a big bash, big picnic in the summer (lots of great activities outside)

- Frost Museum in Florida – CERN mentioned in exhibit on dark matter but Fermilab never mentioned
- Improve signage
- People think they can't get in the lab
 - Have something on Kirk Road noting that the public is welcome
 - on east side people always turn around because they see the security house
 - has the perception of being a government installation
 - make it more welcoming
 - spread word about cycling
 - off leash dog park – just discovered it – not sure she was in right place
 - people get scared because you have to present an ID, make it more friendly
 - promote Fermilab natural areas – participating in seed collecting days and workdays
 - consider making some land available for sports field to help the local community and bring more people to Fermilab.
- Speakers bureau
 - Lia Merminga spoke and everybody loved her
 - Make it more available and accessible to have a speaker
- SciTech would love to see more connections, especially since Fermilab played a key role in the start of SciTech
 - upper level is physics and still has some of the oldest exhibits that need to be updated or replaced
 - some exhibits created many years ago by Fermilab scientists require too much scientific knowledge
 - none of the current exhibits deal with the research that Fermilab is doing now
- Name buildings after scientists and avoid acronyms (Note: DOE does not allow for the naming of buildings after living people)