Fermilab Community Advisory Board September 27, 2018 Meeting Minutes

Members attending: Joe Aguilar, Larry Brenner, Paul Egeland, Chris Faber, Jim Gebhardt, Leah Goodman, Gaby Hernandez, Tony Inglese, Ewa Jodlowska, Denis Kania, Tim Klaus, Ted Mesiacos, Mike Salazar, Arnolfo Santoro, Debra Swinden, Alexandra Tsang, Jenn Wilson

Fermilab/DOE personnel attending: Kurt Riesselmann, Peter Sipbach, Sandra Charles, Mario Lucero, Spencer Pasero, Connie Walters, Nigel Lockyear

Welcome and lab news

Kurt Riesselmann

- Fermilab is hosting Metro West Council of 25 mayors at the lab
- Connie Walters attending meeting, Communications Director from South Dakota, considering starting a CAB in South Dakota
- DUNE Collaboration meeting this week at Fermilab
- First tracks seen in DUNE prototype detector at CERN, final detectors will be 20 times bigger, all components will be shipped to South Dakota and built there
- National Science Foundation awards \$6 million grant to four US universities to work on DUNE
- ICARUS neutrino detector installed in its new home at Fermilab tour following meeting
- Fermilab partnering with Google on quantum science
- US government concerned that US is falling behind in research, applications in cybersecurity, government making major investments, \$10 million funding for 8 projects at Fermilab
- New accelerator research program at Fermilab sees new beam
- Upcoming annual tritium report by the DOE Site Office to report the low levels of tritium measured in Fermilab sewage water; members of the CAB will receive email

Fermilab Talent Acquisition, Diversity and Inclusion

Sandra Charles, Manager, Laboratory Talent Acquisition, Diversity & Inclusion Mario Lucero, Diversity & Inclusion Specialist

- diversity.fnal.gov redesigned by an intern
- Pipeline programs are key to diversify the workforce
- VetTech program 3 years old, internships for military veterans, proud of this, extended interview for both sides to determine fit, 12 interns this year, resulted in full time positions for 8 of the 12; growing program, opened up to any sites that have resources for veterans; this year sourced from 10 difference resource areas
- Saturday Morning Physics pipeline to reach out to high school students, free program, 4 hours on a Saturday for 11 weeks, engage with scientist/engineer for lecture and Q&A, visit sites, non-punitive way to engage with physics, not working for a grade
- Internships most internship applications open up in December, raising awareness now
- TARGET program geared towards high school, minorities and women, open to all, intention is to have intercultural students for hands-on experience, 20 hours a week, paid internship, open for sophomore/juniors

- Open to Illinois high school students, can be homeschooled
- This year 24 were from 21 different high schools, very competitive program, 500 applications, interview at Fermilab and UIC, transportation provided
- Applauded on diversity shown in photo of TARGET group
- Q: How do you source?
- A: send letters to about 400 high schools, math, science and guidance counselors, personal outreach, coordinate with community members, teachers, counselors, visit high school, we take physicist or engineer so they see real people just like them, attend conferences
- SIST and GEM
 - SIST Summer Internship in Science and Technology, longest DOE program, for undergraduate students
 - o GEM Graduate Fellowships in Engineering and Science, for graduate students
 - Committee evaluates applications.
 - We have competition with other employers, physics, computer science, engineering,
 - Buyer's market, result of good economy.
- Resource Groups
 - Chapters associated with National Orgs
 - fSWE, Fermilab Society of Women Engineers, first national lab to have chapter
 - fSHPE, Society of Hispanic Professional Engineers
 - o Laboratory Resources Groups
 - Fermilab Asian/Pacific American, African-American/Black Alliance, Hispanic/Latino Forum, Inclusivity Journal Club, Spectrum (LGBTQ+), Veterans Group, Women's Initiative, Young Professionals
 - Need to build community at such a large laboratory
 - Inclusivity Journal Club those interested in reading STEM articles about diversity, very academic conversation
 - Spectrum modeled after Argonne group
 - Veterans Group helps with VetTech program
- How CAB members can help: individual and collective strengths and resources of our Fermilab community can help us accelerate diversity and inclusion efforts

Questions and Answers

- Q: Do you see TARGET expanding?
- A: It would be awesome, would require increase in staff, pretty good stretch for us as is, do something small and do it well
- Q: Curious about transportation
- A: We use small school buses, meet halfway and we bring them the rest of the way
- Q: What about housing?
- A: Graduate students are housed close to the lab, they do 40 hour weeks and are supported with mentoring, social events, lectures

Q&A with Fermilab Director Nigel Lockyer

• Fermilab has a budget for FY2019, passed by Congress. \$980 million, up about 30%, tremendous support from Washington.

- Discussed quantum science investment by DOE, Fermilab got more awards than another other laboratory, we were well positioned for this administration's interest in quantum computing
- Quantum science is a rapidly growing exciting field.
- Quantum computers are good in certain type of calculations. Industry and White House realize this is a very important field and needs more basic science, requires collaboration.
- Governments around the world are investing in this and DOE is no exception.

Tour of ICARUS and NOvA experiments

Adjournment

Next meeting: Thursday, November 29, 2018