



# **Physics Advisory Committee**

Sandra Charles January 17, 2023

# **Inviting, Engaging & Supporting Diverse Identities**

## Roadmap:

- Maintaining the value of a diverse workforce
- Continuously assessing laboratory culture and climate
- Building internal and external networks
- Exploring innovative ways to engage diverse identities and communities
- Fostering new and nurturing existing relationships and collaborations at the local, regional, national and international levels
- Assuming an "all-hands on deck" approach to building an inclusive workplace



# **Organizational Readiness**

## **Leadership commitment to EDI:**

actively updating and right-sizing policies, procedures, and practices

#### to build a

workplace culture and climate of belonging and accountability

## that equitably

supports, develops and rewards the workforce

#### and has

 zero tolerance for discrimination, harassment, retaliation, and profiling including all forms of harassment based on race, ethnicity, color, religion, age, sex, gender identity or expression, sexual orientation, military/veteran status, country of birth, geography/postal code, disability, marital status, parental or gestational status.



# **Organizational Readiness**

All-hands action-oriented approach to address workforce and workplace equity, diversity, and inclusion gaps and opportunities to support a consistent, equitable, fair, and transparent organizational culture and climate.

Leadership Accountability
Individual Accountability

Outreach Collaboration

Pipeline Conversion

Recruitment Retention

Professional Development Career Progression

Labwide expectation and continued focus on building accountability for equity, diversity, inclusion and accessibility.

"In order to position Fermilab to meet future success and deliver on mission, FY23 must be a year of cultural and functional change." Prioritizing a culture of both physical and psychological safety.

Director Merminga, All Hands Meeting, 12.19.22



# **Laboratory Diversity & Inclusion Plan (LDIP)**

- Annual reporting of efforts:
  - to improve diversity, equity, inclusion, and accessibility (DEIA) at the laboratory, and
  - to continuously assess policies, processes, and practices for cultivating professional, respectful, equitable, inclusive, and safe work environment.

#### Areas of focus:

- Recruiting a Diverse and Talented Workforce
- Development and Retention of a Diverse and Talented Workforce
- Partnerships and Collaborations with Minority Serving Institutions
- Promoting Diversity through Subcontracting, Regional Economic Development & Technology Transfer
- Laboratory Employee DEIA Education and Training
- Cultivating a Safe, Respectful, Equitable, and Inclusive Workplace Environment
- Workforce demographics Hires / Departures / Graduate & Undergrad





# **FY23 Action Items & Reporting Expectations**

- LDIP Review & Evaluation Office of Science
  - external peer review primary mechanism for evaluating lab DEIA efforts and overall progress
  - triennial onsite peer review to evaluate DEIA efforts and progress
- Promoting Equitable and Inclusive Research (PIER) Plans

EDIA plan as appendix to all funding proposals

- strategies for enhanced recruitment of undergraduate students, graduate students, and early-stage investigators (postdoctoral researchers, and others), including individuals from diverse backgrounds and groups historically underrepresented in the research community;
- strategies for creating and sustaining a positive, inclusive, safe, and professional research and training environment that fosters a sense of belonging among all research personnel; and
- training, mentoring, and professional development opportunities
- Labwide Climate Survey
- Development of Division-level EDI plans and goals
- DEIA in goal setting and performance review processes



## **PAC EDI Recommendations - June 2021**



## ASPIRE Fellowship

Accelerator Engineering Fellowship for Underrepresented Minorities

**ASPIRE** 

Program Details >



SQMS Parker Fellowship Superconducting Quantum Materials and System Center

Carolyn B. Parker

Program Details >



Sylvester J. Gates, Jr Fellowship Theoretical Physics: Postdoctoral

ylvester James

Program Details >



The Joint Task Force Initiative Postdoctoral Fellowship

Experimental Physics Research for early-career researchers underrepresented in STEM

Program Details >

 The PAC recommends the Laboratory continue and expand its EDI effort, including the SQMS Carolyn B. Parker Fellowship.

## DOE Internships

Minority Education Institutions Student Partnership Program (MEISPP)

Community College Internship (CCI)

DOE Omni Technology Alliance Internship Program

Summer Undergraduate Laboratory Internship (SULI)

Visiting Faculty Program (VFP)

## Fermilab Programs & Initiatives

Legacy Programs

Graduate Fellowships in Engineering and Science (GEM)

Summer Internships in Science and Technology (SIST)

TARGET Program

Fermilab Computational Science Internship (FCSI)

Alaska Native Science and Engineering Program (ANSEP) Louis Stokes Alliance for Minority Participation In STEM Fermilab Co-Op Program



#### **PAC EDI Recommendations - June 2021**

 The PAC encourages/recommends the Laboratory to explore the possibility of different recruitment and hiring approaches, such as cohort or cluster recruitment, as tools to more effectively strengthen an inclusive culture.



# VALOR Program: Right-sizing VetTech Program

#### **Investment (DOE Office of Science)**

\$4M over 5 years (2022 – 2026)

## Multiple entry points for learning and training

- Short-term learning opportunities
- Long-term employment security
- Visibility to post-high-school pathways (may or may not include college)

#### Goal

 Build a rich workforce pipeline of trained technicians, and computing and procurement professionals, to fill critical roles as incumbents retire.

#### Collaborator

The University of Chicago
Office for Military-Affiliated Communities

**Conversion** - 2 participants to full-time hire

#### **JROTC Summer Internship**

- JROTC local high schools
- 6 weeks
- Summer 2022 12 interns T=48

#### **VetTech Summer Internship**

- Military veterans
- 10 weeks
- Summer 2022 7 interns T=83

#### **Apprenticeship**

- Military vets / JROTC students
- 6-months, FT, (held 2x per year)
- FY22 4 participants **T=**36

**Veterans** @ **Fermilab**: Supervisors\_Mentors\_Buddy Program \_Supervisor Training\_Professional Development\_Social / Emotional Support\_Program Oversight (identify gaps / opportunities)\_Focus Groups Program Evaluation Supervisor Evaluation Participant Evaluation Outreach Recruitment



## Fermilab and Brookhaven Summer School Exchange Program

## **RENEW Funding (DOE Office of Science - WDTS)**

- \$596K Fermilab and Brookhaven \$298K each
- Fermilab is the Lead
- 6-week paid program for college freshmen
- 2 cohorts of 20 students spend 3 weeks at both Fermilab and Brookhaven
- Areas of Focus:
  - Neutrinos
  - Artificial Intelligence
  - Quantum Science
- Program concluding event to take place at Fermilab (~ August 11, 2023)



# Fermilab Alumni Network (FAN)



#### **FAN Demos**:

Feb 1st 10:00am CST - Wednesday

Feb 6<sup>th</sup> 2:00pm CST - Monday

Feb 16th 11:00am CST - Thursday

Feb 21st 2:00pm CST - Tuesday

Feb 24th 4:00pm CST - Friday

#### Scope:

- 24 internships & 18 Fellowships
- 2008-2022 profiles; ~300 profiles for legacy programs
- FY23 → Interns complete own profiles
- Connecting to LinkedIn

## **Legacy Pipeline Program Impact:**

1970 SIST Undergraduate

1978 GEM Masters & PhD

1979 TARGET High School

#### **Answer Questions:**

- Did alumni have multiple internship experiences at Fermilab and/or across the DOE complex?
- Have alumni earned STEM degrees? Advanced STEM degrees?
- "Where Are They Now"?

#### **Labwide Benefit:**

- Centralized resource to identify candidates with Fermi work experience
- Tool to track conversion rates and career paths of Fermilab interns
- Platform for maintaining connection with past interns





# How to be an Effective **Mentor for Underrepresented STEM Trainees**

The Office of Equity, Diversity and Inclusion will honor National Mentoring Month by hosting a virtual presentation by Dr. Antentor Hinton, Jr., and Dr. Haysetta D. Shuler. The workshop will focus on what good mentoring looks like, including learning how to motivate and support individuals. The presentation will also cover emotional intelligence and cultural competency.

**January 18, 2023 · 11am – 12:15pm** 

**Presenters** 





Dr. Shuler **Shuler Consulting LLC** 





