Snowmass2021 - Letter of Interest

Culture change is necessary, and it requires strategic planning

Topical Group(s):

☑ (CommF1) Diversity & Inclusion

☑ (Other) This item is relevant to all frontiers.

Contact Information:

Name (Institution) [email]: Brian Nord (Fermilab/UChicago) [nord@fnal.gov]

Authors:

Brian Nord (Fermilab/UChicago), Jessica Esquivel (Fermilab), Bo Jayatilaka (Fermilab), Michael Kirby (Fermilab), Erica Snider (Fermilab), Jason St. John (Fermilab), Bryan Ramson (Fermilab), Tammy Walton (Fermilab), Daniel Bowring (Fermilab), Alex Drlica-Wagner (Fermilab)

Abstract:

Racism and other forms of bigotry oppress, disenfranchise, and marginalize scientists of color in high-energy physics (HEP). These elements are systemic, deeply embedded within scientific culture and communities. Creating and implementing solutions without appropriate information and expertise poses dangers for the purported beneficiaries of the insufficiently planned actions. To achieve a new culture and community through real and sustained change, we therefore recommend 1) long-term strategic planning, 2) new modes of community organizing and decision-making, and 3) partnership with experts and professionals in anti-racism and other areas.

Critical aspects of a path to long-term change

Racism, misogyny, and other fundamentally oppressive, violent, and exclusionary ideas and practices are systemic and permeate society. Scientific research environments --- e.g., academic departments, national laboratories, and collaborations --- are no exception in this regard: actions and patterns of behavior by individuals and groups, as well as policies and procedures are among the vectors of oppression. The evidence includes the underrepresentation of Black scientists and other scientists of color, regular acts of harassment against scientists of color (including women and people of minoritized genders), and systematic disenfranchisement of marginalized and minoritized people throughout pathways and systems of education¹.

Occasionally, the realities of (violence and oppression experienced every day by) minoritized people have punctured the relatively quiescent spheres of research culture and communities. These communities have traditionally responded in a variety of ways --- diversity and inclusion programming,

¹ https://www.aip.org/diversity-initiatives/team-up-task-force

short and intense efforts to brainstorm solutions, and long-running discussions. Unfortunately, modern concepts and practices performed under the banner of 'equity', 'diversity', and 'inclusion' often fall far short of directly addressing injustice, and cannot be entrusted with driving the process for change². Additionally, traditional decision-making practices that emphasize hierarchy and one-way information flow, have further embedded white supremacy within scientific communities. Creating plans for culture change and implementing solutions without deeply understanding the problems and without engaging experts in racism and related systems of oppression is likely to lead to more harm to researchers who are already marginalized and minoritized in science. We will need to reform or remove these structures to enable lasting change.

However, lasting change will require fundamental organizational and cultural change that is undergirded by research and application of expertise, along with sustained, multi-generational effort within the scientific community. Moreover, these changes should be constructed and organized directly under the goal of justice. Recently, several groups have undertaken efforts based on research, scholarship, and other modes of long-developed experience and expertise in anti-racism, justice, and theories of change. For example, the recent Academic Strike For Black Lives³ and Shutdown of STEM and Academia⁴ used community organizing practices to draw attention to the problem and to call for real action. More institution-oriented efforts, such as APS-IDEA⁵, are engaging theories of change⁶ and other organizational tools to envision and implement second-order culture changes in scientific research environments. Many groups of early-career researchers across the United States also responded to the oppressive systems in their communities with calls for action within their academic environments⁷. Change-Now, another example, established a vision and a mission for an anti-racist workplace at Fermi National Accelerator Laboratory (FNAL)⁸. Within that context, Change-Now called for specific actions --- including organizational restructuring and policy implementations. These calls for action are supported by research and writing from scholars who bridge the physical sciences, science and technology studies, critical race theory, women's studies, and other areas 10 11 12. This letter recommends the following:

- 1. the use of robust strategic planning procedures, including a full re-envisioning of science workplace norms and culture;
- 2. new modes of community organizing and decision-making that promote agency and leadership from all stakeholders within the scientific community;
- 3. partnership with scholars, professionals, and other experts in several disciplines, including but not limited to anti-racism, critical race theory, and social science.

While some systemic elements may require more time than others to fully change, we can begin to address every issue now --- establish goals and priorities, and initiate the sustained action and habits that will be required to make our research environments just. This process should also prioritize the inclusion, leadership, and decision-making of stakeholders who are most directly affected by the oppressive systems. Finally, energy, creativity, and well-understood protocols are used for planning and executing long-term programs and experiments to make new discoveries. We call on the community to engage

⁵ https://www.aps.org/programs/innovation/fund/idea.cfm

² https://medium.com/space-anthropology/diversity-is-a-dangerous-set-up-8cee942e7f22

³ http://strike4blacklives.com/

⁴ shutdownstem.com

⁶ e.g., http://www.theoryofchange.org/wp-content/uploads/toco_library/pdf/ToCBasics.pdf

⁷ e.g., <u>https://ideajustice.github.io/</u>

⁸ https://changenowphysics.com/

⁹ e.g., https://www.journals.uchicago.edu/doi/pdfplus/10.1086/704991

¹⁰ e.g., https://lss.fnal.gov/archive/2011/conf/fermilab-conf-11-837.pdf

¹¹ e.g., https://agupubs.onlinelibrary.wiley.com/doi/full/10.1002/2017JE005256

¹² e.g., https://www.nytimes.com/2015/12/17/opinion/the-benefits-of-black-physics-students.html

inculture change with similar imagination and discipline.