

How Senate Bill 17 and Banning Diversity, Equity and Inclusion (DEI) Jeopardizes University Research Funding: A STEM Perspective

April 15, 2023

SB 17 bans DEI offices, officers, programs, and practices, and penalties include termination of employees and loss of state funding. SB 17's anti-DEI provisions will have unintended consequences on competitiveness and rankings of Texas public colleges and universities. [1][2]

SB 17 will not just affect those disciplines that initially seem most directly related to DEI (e.g., the social sciences) but also STEM disciplines such as biomedical sciences, engineering, and medicine in which Texas colleges and universities excel. All will be undermined by SB 17. This will happen through a loss of funding from federal agencies that bring in the majority of research grants to our higher education institutions. It will also happen through a loss of the most talented research faculty and students connected to that research and supported by those grants.

- First, the money.
 - In FY 2020, Texas public universities and health-related institutions had \$5.44B in external research expenditures, with \$4.1B from non-state sources. [3]
 - In 2020-21, Texas A&M had \$1.13B in external research expenditures. [4]
 - In 2020-21, UT Austin's budget was \$3.37B [5].
 - Of that, 22% (\$740M) is money from research awards. A disproportionate amount of this is from the STEM fields. [5]
 - Only 10% of UT Austin's budget (\$337M) is from state general revenue.
- Second, DEI requirements are now built into nearly all federal grant mechanisms in STEM. The breakage of this connection will hurt the ability to obtain research funding.
 - National Institutes of Health (NIH), which funds biomedical research, requires that clinical research include a racially and ethnic diverse population base. NIH grant proposal reviews include discussion of how well the grant's principal investigator addresses these points and the university infrastructure supports these goals. NIH awarded \$26B in competitive grants to higher ed in 2022. [6]
 - National Science Foundation (NSF), which awarded \$481M in competitive grants to Texas higher ed institutions in FY 2022 [7], has clear requirements for grant proposals to describe how the research will benefit the community. This includes improving outcomes related to DEI. NSF awarded \$6.8B in competitive grants to higher ed in FY 2022. [8]
 - For all grants starting FY 2023, the Dept. of Energy Office of Science (\$8B in annual budget) "will require applicants to submit a Promoting Inclusive and Equitable Research (PIER) Plan as an appendix to their proposal narrative. PIER Plans should describe the activities and strategies applicants will incorporate to promote diversity, equity, inclusion, and accessibility in their research projects. PIER Plans will be evaluated as part of the merit review process and will be used to inform funding decisions." [9]
- Third, federal grants tied to industry workforce development (WFD) require a "holistic perspective on workforce regarding diversity and equitable access to STEM career paths and education" including the [NSF Future of Semiconductors](#) [10] in collaboration with Intel, IBM, Ericsson and Samsung which responds to CHIPS Act requirements.

- Fourth, NSF proposal preparation instructions say “NSF’s mission calls for the broadening of opportunities and expanding participation of groups, institutions, and geographic regions that are underrepresented in STEM disciplines, which is essential to the health and vitality of science and engineering. NSF is committed to this principle of diversity and deems it central to the programs, projects, and activities it considers and supports.” [11]
 - Higher ed institutions applying for NSF grants for \$1-5M projects and \$25M+ centers and institutes must provide [broadening participation in computing \(BPC\)](#) or diversity and culture of inclusion (DCI) plans. After the grant is over, these initiatives are expected to be supported by the institution from non-federal funds.
 - An engineering dept. at UT Austin has NSF grants totaling \$12M/year in research expenditures, which is more than the total amount paid by the state in faculty salaries. For the same department, the remaining \$16M/year in research expenditures come from sources that rely on existing BPC, WFD, and DCI plans.
- Fifth, with national recognition of the importance of DEI, federal agencies are creating initiatives to address racial, ethnic, and socioeconomic disparities, such as the NSF “Growing Research Access for Nationally Transformative Equity and Diversity.” [12]
- Sixth, Dept. of Energy (\$160B annual budget) has an \$8B Regional Clean Hydrogen Hubs program that requires a Community Benefits Plan to advance DEI and accessibility. [13]

Texas public universities will no longer be competitive for these research opportunities. We will lose money, as well as the opportunity to innovate and improve the world by elevating those around us. We will lose faculty and students whose work depends upon a DEI infrastructure. SB 17 will irreparably hurt Texas’s aspiration to be the top research state in the country.

Authors are speaking for themselves as private citizens and not representing any group or institution

Brian Evans, Texas American Association of University Professors (AAUP), halftoning@juno.com

Andrea Gore, Texas AAUP Member, andreacgore@gmail.com

Brian Korgel, korgel-office@cm.acs.org

Diana Marculescu, Texas AAUP member, diana.marculescu@gmail.com

Angela Valenzuela, Black Brown Dialogues on Policy, Blackbrownpolicy@gmail.com

References

- [1] Kate McGee, “[How Republicans’ threats to tenure and diversity might undercut their own efforts to advance Texas’ universities](#)”, *Texas Tribune*, April 11, 2023.
- [2] Brian Evans, “[Tenured and Tenure-Track Faculty in the US, Texas A&M & UT Austin](#)”, Apr. 3, 2023.
- [3] 60x30TX report “[Research Funding in Texas Overview](#)” for FY2022.
- [4] [A&M Ranks 14th In Total U.S. R&D Expenditures, Outpaces Other Texas Universities](#)
- [5] [UT Austin Sources of Revenue as a Percentage of the Budget.](#)
- [6] [NIH Awards by Location & Organization](#)
- [7] [Texas NSF Fact Sheet](#) for FY 2022. Highest amounts: UT Austin \$100M and Texas A&M \$53.7M.
- [8] [NSF Funding and Support Descriptions](#)
- [9] Dept. of Energy Office of Science [Promoting Inclusive and Equitable Research \(PIER\) Plans.](#)
- [10] US NSF [Future of Semiconductors Program](#)
- [11] NSF [Proposal Preparation Instructions](#)
- [12] NSF “[Growing Research Access for Nationally Transformative Equity and Diversity](#)”, Apr. 12, 2023
- [13] Dept. of Energy [Regional Clean Hydrogen Hubs](#). UT Austin is part of a [\\$1B proposal led by GTI Energy for a Hydrogen hub](#) for the Gulf Coast, Galveston, West Texas, and the Texas Triangle.