



ALFRED P. SLOAN
FOUNDATION

Sloan Centers for Systemic Change

The Sloan Foundation will award seed grants of up to \$250,000 to U.S. STEM doctoral programs advancing systemic change to dramatically increase diversity, foster inclusion, and close equity gaps, with the potential for large-scale, long-term investment to follow.

Submission Deadline: May 5, 2023

Informational Webinars:

[March 7, 4:00-5:00pm](#)

[March 24, 3:00-4:00pm](#)

Overview

Since 2013, the Alfred P. Sloan Foundation has partnered with a select number of universities to increase the proportion of domestic¹ Black, Indigenous, and Latina/o/x students graduating with doctoral degrees in the physical sciences and engineering² through an initiative called University Centers of Exemplary Mentoring (UCEM). An independent evaluation³ of the UCEM model has revealed encouraging signs of progress as well as areas of opportunity for graduate programs across the country.

Informed by these findings and by the transformative, evidence-driven work we've seen on many UCEM campuses, the Sloan Foundation is embarking on the next phase of work through a new initiative called the **Sloan Centers for Systemic Change (SCSC)**. Long-term institutional investments made through SCSC will catalyze and deepen systemic change activities in graduate programs nationwide.

Among other attributes, a systemic change approach seeks to identify and remove entrenched biases and barriers at the institutional, college, and departmental levels to dramatically increase diversity, foster inclusion, and close equity gaps. Such work includes policy and practice change, as well as a change in the conduct and standards of STEM faculty and other gatekeepers such that they demonstrate not simply a willingness to promote

¹ We use the term *domestic* to refer to those who are U.S. citizens, permanent residents of the U.S., DREAMers, or holding refugee, asylee, or Jay Treaty status.

² Disciplines included in Sloan's definition: mathematics, statistics, physical sciences, engineering (with the exception of those located in professional schools), and computer science.

³ This evaluation will be released by the Foundation in late February 2023.

diversity, equity, and inclusion (DEI)⁴, but rather a deep commitment to embedding DEI in the fabric of the educational experience. This level of change requires a certain type of readiness—an awareness of the need to change, as evidenced by early experimentation with systemic change approaches.

Sloan investment will take place in two phases:

Phase I: Up to eight campuses will be awarded SCSC seed grants in 2023, each not to exceed \$250,000 over two years.

Phase II: From Phase I grantees, up to four campuses will receive implementation grants in 2025, each not to exceed \$1.4M over four years. These grants may be renewed once for a total of ten years of Sloan support.

SCSC seed grants will allow institutions to put in place new projects—and strengthen existing ones—to improve participation rates, experiences, and outcomes for Black, Indigenous, and Latina/o/x populations, as for all students. This work will pursue systemic change at the university, college, and departmental levels, and as such, project designs will incorporate cross-departmental collaboration and leadership as primary drivers of project activities.

Successful seed grants will be the basis for a competitive application for an implementation award. This second grant will support continued systemic change work while also investing in individual physical science and engineering doctoral students in the form of student scholarships. Each of these “Sloan Scholars” will be awarded \$40,000 in “top-off” funds over the course of their doctoral studies with the expectation that the institution is already providing a full funding package. As with the Sloan UCEM program, it is also expected that most institutions⁵ will provide top-off funds of at least \$10,000 each for an additional group of “institutional match” Sloan Scholars.

We invite seed grant pre-proposals from universities interested in becoming a Sloan Center for Systemic Change. Submissions are due May 5, 2023, by 5:00pm EDT. Compelling pre-proposals will result in the invitation of a full proposal, due October 1, 2023, by 5:00pm EDT.

Award Eligibility

Institutional Criteria

- Accredited, non-profit institutions of higher education classified as either “R1: Doctoral Universities – Very high research activity” OR “R2: Doctoral Universities – High research activity” by the Carnegie Classification of Institutions of Higher Education (Basic Classification).

⁴ A brief discussion of DEI can be found on Sloan’s Higher Education Program website [here](#).

⁵ Sloan’s expectation that institutions provide matched funds will depend on a given institution’s research activity and expenditures, among other measures.

- Universities⁶ with a minimum of eight doctoral degree programs that will participate in SCSC⁷; each participating degree program should be producing an average of at least three graduates per year.
- Current and former UCEM institutions are not eligible.

Universities designated by the U.S. Department of Education as Minority Serving Institutions, and that meet the other criteria for submission, are especially encouraged to apply.

PI Eligibility

- Minimum three-person PI team, whose members will serve as institutional champions for the project.
- The PI team should include (but is not exclusive to) the graduate school dean (or equivalent), college dean(s), and a social science researcher or expert in STEM DEI (preferably from the same campus).

Questions about eligibility should be submitted via email to DEI@sloan.org.

Phase I: Seed Grant Proposal

Required Activities for Funded Seed Grants

The seed grant is a precursor to a potential long-term Sloan investment and thus should be composed of activities that provide readiness for full execution of the SCSC model at a given institution. **Successful seed grant proposals will include plans for completing the activities listed below as stage-setting for long-term (i.e., Phase II) investment by Sloan.** However, since not all seed grantees will ultimately receive implementation awards, activities should be broad enough to be of intrinsic benefit to the institution. **When reviewing this section, keep in mind the “what we’re looking for” section below.**

Self-Study and Resulting Action Plans

- Participate in the University of Southern California’s [Equity in Graduate Education Consortium](#), where project teams will undergo a self-study and action planning process, thus identifying priority action items, respective short- and long-term plans to see them through, and proposed metrics for success.
- Advance plans responsive to a shifting legal landscape in conjunction with the above self-study and action planning process. The Sloan Foundation will provide resources in partnership with longtime Sloan grantee, the American Association for the Advancement of Science, through their [Diversity and the Law](#) project in partnership with EducationCounsel LLC.

Leadership Formation and Development

- Finalize participating SCSC departments and a long-term staffing plan.

⁶ Excluding medical/health institutions and military academies.

⁷ Disciplines included in Sloan’s definition: mathematics, statistics, physical sciences, engineering (with the exception of those located in professional schools), and computer science.

- Finalize participation on the SCSC steering committee and create internal documentation and understanding of roles, responsibilities, and expectations for each member of the committee. Steering committee members should include members from each participating department and other relevant stakeholders as appropriate (e.g., diversity officers, college leadership, student support office directors, etc.). One member must also be a social science researcher with expertise in DEI in STEM. The committee should also be supported by a knowledgeable legal advisor with a record of effective problem-solving to advance DEI.
- Identify and appoint additional faculty champions focused on student transition and support in the respective participating departments, as well as a plan to incentivize faculty participation in SCSC.
- Ensure the SCSC leadership team participates in community-building activities as facilitated by Sloan and its administrative partner, NACME. These include virtual monthly calls and attendance at annual leadership team retreats held in New York City and the Southern Regional Education Board Institute on Teaching and Mentoring.
- Begin participation in other Sloan-funded strategic supports. These supports will be identified in consultation with the Foundation (see below).
- Plan and facilitate campus-based participation in other DEI professional development activities by SCSC steering committee members, faculty mentors, and other key stakeholders.

Scholar Recruitment and Selection

- Form a comprehensive scholar outreach and recruitment plan across participating SCSC departments that includes the identification of new strategies, relationships, and partnerships. This plan may include the development and cultivation of strong pathways from Minority Serving Institutions to SCSC departments.
- Design the selection criteria for Sloan Scholars (including match scholars) that advance program DEI goals and are legally sustainable.

Scholar Support

- Design and begin experimentation/implementation of a cohort-model approach to create community among students identified as potential Sloan Scholars.
- Develop a strong, holistic, and multi-faceted (e.g., faculty, peers, staff) mentoring model that fits the needs and context of the institution and the DEI aims of the program.
- Identify ways to leverage various DEI initiatives and support for greatest impact, including the strategies to be used if awarded an implementation grant.
- Design and begin experimentation/implementation of other community building and student support plans coming out of the self-study (e.g., mental health and well-being, community belonging, academic support, and other needs as identified).
- Design and begin experimentation/implementation of a detailed plan for student professional development in key areas (e.g., workshops, trainings, seminars, etc.). At least two such opportunities should be focused on: 1) financial literacy/managing

money during graduate school; and 2) opportunities for career path exploration in and outside of academe.

Other Funding Opportunities

- Identify internal and external (beyond Sloan) funding opportunities to advance the above work. This should include involvement of advancement/fundraising offices and staff as a means of identifying a path to sustainability of the proposed efforts.

Sloan-Funded Activities for Seed Grantees

Institutions awarded the two-year seed grant will take on their work in partnership with the Foundation to help ensure that programs are launched successfully. In addition to the \$250,000 two-year award, the Foundation will provide:

- Funded participation in:
 - [Equity in Graduate Education Consortium](#); and
 - Programming offered by the [Center for the Improvement of Mentored Experience in Research](#); and/or
 - Programming offered by Pullias Center for Higher Education on [Building Leadership Capacity for Systemic Change](#); and/or
 - Other professional development opportunities deemed necessary by the project team and Foundation.
- Funded participation for students and select project team members to attend the Southern Regional Education Board (SREB) [Institute on Teaching and Mentoring](#) once during the grant period.
- Engagement with [Sloan Scholar Alumni](#) and programming facilitated by the Social Science Research Council.
- Intermediary support and community engagement activities facilitated by the [National Action Council for Minorities in Engineering](#) (NACME), the administrative manager for SCSC.

Submission Process

Proposal submissions will follow a three-step process. Each phase of this process is a building block for the next and is designed to help prospective grantees develop successful applications:

1. Pre-proposal for 2-year seed grant: maximum of 10 pages, plus appendices, **due May 5, 2023**.
2. Full proposal for 2-year seed grant, 20 pages plus appendices, **due October 1, 2023**.
3. Full proposal for 4-year implementation grant, 20 pages plus appendices, due date to be determined. The implementation proposal solicitation will be provided to seed-grant recipients during the award period.

Pre-proposal Components

The below materials should be integrated into a single PDF document and sent by email to dei@sloan.org, with the following subject heading: **SCSC_Lead PI Last Name**. Decisions will be announced by August 1, 2023.

Complete submission packets must include the following components in this order:

1. A 1-page [Sloan Foundation Proposal Cover Sheet, available here](#), summarizing key project details. **Projects should have a proposed start date of January 1, 2024.**
2. A narrative pre-proposal no more than 10 pages in length (excluding required appendices) in 11-point font (Arial or Times New Roman), double-spaced. Submissions should address the following questions, with the below categories serving as section headings. Inclusion of external links to campus websites is welcome. **When answering these questions, keep in mind the “what we’re looking for” section below.**
 - a. **Institutional Overview and Fit: Why is your institution and the proposed departments a good fit for a SCSC seed-grant? (~ 1 page)**

The response should address:

- i. An overview of your STEM graduate education offerings, research environment and opportunities (i.e., for doctoral students), and demographic makeup and DEI record of your faculty.
- ii. A list of the proposed SCSC departments and an overview of how, and at what level, incoming doctoral students are funded in each department.
- iii. Why this project is important and would benefit the institution, its graduate programs, and the proposed SCSC departments.
- iv. Any special state or system context that affects the design of your DEI programs (feel free to elevate any lessons learned from your experience in this context as relevant to your proposal).

- b. **Graduate Education and Systemic Change at Your Institution: What existing evidence points to your institution’s change readiness and commitment to systemic change to advance DEI in STEM graduate education? (~ 2-3 pages)**

The response should address:

- i. How your institution/project team defines systemic change—given your institutional context—as a path to advance STEM DEI.
- ii. A discussion of your most salient DEI barriers and challenges, specifically in graduate education and across the proposed SCSC departments.
- iii. How you are thinking about your graduate programs’ DEI goals and program design to achieve them considering a shifting legal landscape, including high-level information on how your program design addresses the requirements of the Supreme Court’s decisions in the pending Harvard and UNC admissions cases, if decisions are issued before submitting your proposal. Or, how you are preparing for the range of possible decisions if

the decisions are not issued before you submit—to assure continued commitment and meaningful action that is also legally sustainable, whatever the Court decides.

- iv. Systemic change efforts underway in the graduate school (or equivalent) and proposed departments, and how this project will complement or extend those efforts. This may include a description of how the proposed departments have modeled or otherwise exemplify change-readiness to advance DEI.
- v. As needed, a brief discussion of the required trend data (see required appendices section).

c. Project Team: How is the project team well-suited for this project? (~ 1 page)

The response should address:

- i. Qualifications of PIs and key project team members, and how each is well-suited for the proposed effort (to include information on team members' ability to contribute to DEI interests).
- ii. Where SCSC would be housed administratively and why.

d. Project Activities: How will the project team carry out the required seed-grant activities? (~ 3-4 pages)

The response should address:

- i. Your team's proposed plan for carrying out leadership formation and development; scholar recruitment and selection; community building and student supports; other funding opportunities; and information on any self-study or action planning you have done to date that will complement participation in the Equity in Graduate Education Consortium.
- ii. How you will utilize the current administrative and programmatic infrastructure to carry out these activities, including available accountability, incentive, and reward levers.

e. Measures of Success: How will you know if this project is successful? (~ ½ page)

The response should address:

- a. Your definition of success for this project (in addition to securing long-term Sloan funding).

Required Appendices

- 3. A brief timeline for the proposed activities, not to exceed 1 page (table format preferred).
- 4. Doctoral student admissions, degree progression, and completion data by race/ethnicity in the proposed SCSC departments, provided in [the form available here](#). Admissions data should reflect the most recent year available, while degree progression and completion data should reflect the most recent five years (combined) available.
- 5. A draft budget table and budget justification for the proposed project. The budget table document is available on the forms section of the Sloan website [here](#). The Budget

Justification (1-2 pages) should provide additional detail on expenses cited on the budget form (i.e., how the proposer arrived at these numbers).

Allowable expenses will generally include:

- a. For faculty: salary, plus benefits for time spent on project and/or for course buy-out.
 - b. For administrative support staff: salary, plus benefits, based on project time commitment.
 - c. For graduate students, postdoctoral researchers, or undergraduate students contributing to the project: salary/stipend, plus benefits, based on project time commitment (note: direct scholarship support is reserved only for the Implementation phase).
 - d. Program expenses, e.g., faculty training, honoraria, participant stipends, and other expenses.
 - e. Workshop and research expenses: travel, meals, lodging, conference fees, room rentals, speaker stipends, audio-visual equipment, and dissemination expenses.
 - f. Indirect overhead expenses, capped at 20% of direct costs.
6. References/bibliography list (no more than 2 pages).
 7. Brief CVs of key project leads and personnel (no more than 2 pages per person).
 8. Letter of support from President or Chancellor.

Review Process

Sloan Foundation staff and advisors will assess the submitted pre-proposals. Finalists will be contacted in June to schedule project team interviews with Sloan. Selected submissions will then be invited to prepare full proposals for consideration. Invited full proposals will be further reviewed by a diverse set of subject matter experts, and proposers will then be asked to prepare a response to reviews.

Questions can be sent to dei@sloan.org with the subject heading, "SCSC." Note the two informational webinars at the top of this document.

What We're Looking For

Our experience, corroborated by findings from an independent evaluation of the UCEM model, tells us that successful institutional change at any level requires a variety of conditions. These conditions include strong, shared leadership at the institution, college, and departmental levels, commitment among a critical mass of faculty members, and an overall willingness to change with clear avenues by which to pursue it. To these points, successful pre-proposals will be from institutions **that have many or most** of the following attributes and accomplishments (in no particular order):

- Competitive funding packages for incoming doctoral students in the proposed SCSC departments, including support for tuition/fees and living stipends.
- A strong track record of creating conditions that have enabled (and have potential to increase) the recruitment, enrollment, retention, graduation, and career trajectories of

domestic Black, Indigenous, and Latina/o/x (as for all) doctoral students in the SCSC disciplines.

- Evidence of change or a change-readiness mindset in graduate education and across the proposed SCSC departments when it comes to furthering these efforts by way of graduate education policy and practice change, including conduct and standards that recognize the value of DEI as inextricably intertwined with overall educational and research excellence. This could include, for example:
 - Graduate recruitment and admissions (re)design that reflect effective and legally sustainable DEI-driven criteria (e.g., in holistic admissions);
 - Strong formal and informal faculty-student mentoring beyond the standard apprenticeship model (e.g., team mentoring structures, creating inclusive mentor-mentee communities, etc.);
 - Integration of diverse perspectives and content into the graduate curriculum and other requirements, not as an add-on but as a concerted focus;
 - Existing standing committees, learning communities, special projects, or similar efforts to engage faculty in DEI efforts;
 - Attention to graduate student experience and outcomes as they relate to campus and departmental climate, culture, and prevailing policies and practices;
 - Learning and engagement with institutional peers and external experts on promising and effective practices; and
 - Other innovative, evidence-informed activities that take a systemic change approach.
- A strong and increasingly diverse (especially by gender, race/ethnicity) faculty body and a high-quality research environment in the proposed SCSC departments, particularly as they relate to access to research opportunities for doctoral students. For example:
 - Level of faculty involvement in research and doctoral education (e.g., percent of faculty with external funding who are mentoring PhD students);
 - Institutional support for exceptional faculty advising, mentorship and sponsorship, with special attention to attracting and supporting a diverse student body so that all students are well served;
 - Attention to assuring that research opportunities are not only offered but fully accessible to all students;
 - Strong interdisciplinary and otherwise collaborative research environment; and
 - Evidence of faculty performance assessment systems that value an individual's contributions to an inclusive learning and research experience and to the role of diversity, equity, and inclusion as key ingredients for research excellence.
- Complementary student supports, faculty development, and other DEI STEM initiatives that can be leveraged to support the proposed activities.
- Professional development resources that focus on a full range of career outcomes for PhD graduates.
- Demonstrated track record of data-informed decision-making (i.e., strong data infrastructure used by multiple stakeholders) to identify and disrupt barriers to DEI

aims, including the collection of student experience and climate data at the graduate level.

- Appreciation for the changing legal landscape for DEI activities by individual(s) on the SCSC leadership team. This attribute includes having or being willing to engage the support of an advisor who has law and policy knowledge, as well as a problem-solving orientation, to elevate what can be done to effectively navigate legal design parameters to achieve DEI aims now and in the future.
- Diversity among project leadership and the broader project team in knowledge, commitment, and experience needed to meaningfully advance the program's DEI aims and a strong plan for integrating DEI principles as they relate to the inner workings of these teams (e.g., day-to-day decision making).

While interested in advancing STEM DEI at large, the SCSC model is designed to specifically improve domestic Black, Indigenous, and Latina/o/x participation, experiences, and outcomes in the physical sciences and engineering.

About the Alfred P. Sloan Foundation

The Alfred P. Sloan Foundation is a nonpartisan not-for-profit, grantmaking institution dedicated to improving the welfare of all through the advancement of scientific knowledge. Established in 1934 by Alfred Pritchard Sloan Jr., then-President and Chief Executive Officer of the General Motors Corporation, the Foundation makes grants in four broad areas: direct support of research in science, technology, engineering, mathematics, and economics; initiatives to increase the quality and diversity of scientific institutions and the science workforce; projects to develop or leverage technology to empower research; and efforts to enhance and deepen public engagement with science and scientists.