Cockrell School of Engineering
Diversity, Equity and Inclusion
2019-2020 Annual Report
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Executive Summary

The mission of the Cockrell School of Engineering is to: educate leaders who think big and think creatively; pursue innovative solutions through research, industry partnerships and a commitment to fostering entrepreneurship; encourage cross-disciplinary collaboration; and provide a supportive and inclusive environment for all members of our community. The diversity, equity and inclusion efforts of the school are driven by the *Diversity, Equity and Inclusion Plan*, a “living” document with goals specific to the community in the Cockrell School. The DEI plan was born out of initial conversations in 2015, revised into a draft plan in 2017, publicly shared in 2019 and revised and refined during the 2019-2020 academic year.

The 2019-2020 plan was structured around three “cornerstones”: *Strengthening the Community, Shaping the Environment* and *Enriching the Experience*. *Strengthening the Community* is broadly related to building a more diverse community through activities for K-12 students, undergraduate and graduate students, and faculty applicants. The second cornerstone, *Shaping the Environment*, focuses on programming and messaging related to creating an inclusive environment. The final cornerstone, *Enriching the Experience*, is driven by a vision of equity and primarily focuses on ensuring that everyone in the Cockrell School community is supported to reach their full potential.

This annual report report details efforts in 2019-2020 towards addressing the goals and initiatives outlined in the DEI plan. The report includes data about diversity, equity and inclusion in the Cockrell School, including community demographics, graduation and retention rates for undergraduate and graduate students, and insights from historical climate surveys.

Highlighted in this report are the creation of a new position of Assistant Dean for Diversity, Equity and Inclusion in the Cockrell School and the appointment of a tenured faculty member to that role. In addition, 2019-2020 saw a major revision of the DEI plan to include concrete, measurable and attainable goals. The DEI plan is intended to be an evolving document -- one that will be continuously assessed and will undergo frequent revision as we achieve a goal or shift our focus based on changes in our community or our priorities. In 2019-2020, the Cockrell School of Engineering received a Bronze status recognition from the ASEE Diversity Recognition Program and took an intentional look at revising policies and practices related to faculty recruiting in an effort to increase the diversity of the faculty. The broader UT Austin campus joined the Aspire Alliance's iChange network, an effort to reflect on hiring and retention practices related to the diversity of faculty. In addition, in response to the events of 2020, including the senseless deaths of George Floyd, Ahmaud Arbery, Breonna Taylor, Jacob Blake and too many others, the university and the Cockrell School shared several messages and plans with the community. These messages and subsequent community conversations have further shaped the school’s DEI plan and focus initiatives.

Many faculty, staff and students in the Cockrell School have contributed substantially to improving the diversity, equity and inclusion of the community. The remainder of this report provides details and data related to these efforts and serves as a framework and benchmark for our continuous efforts to improve.

Christine Julien, August 2020

Assistant Dean for Diversity, Equity and Inclusion

Cockrell School of Engineering
Overview

The mission of the Cockrell School of Engineering is to: educate leaders who think big and think creatively; pursue innovative solutions through research, industry partnerships and a commitment to fostering entrepreneurship; encourage cross-disciplinary collaboration; and provide a supportive and inclusive environment for all members of our community.

History of the CSE Diversity, Equity and Inclusion Plan (Prior to August 2019)

In direct support of diversity, equity and inclusion, UT Austin adopted a formal diversity statement in 2019:

“As The University of Texas at Austin strives to meet its mission of unlocking potential and preparing future leaders of the state, it embraces diversity in many forms. The university is dedicated to attracting highly-qualified students, faculty and staff with a wide range of backgrounds, ideas and viewpoints. This includes those from all races and ethnicities; first-generation college students; women; and others who have been historically underrepresented on campus.

As a university with a past history of denying equitable access to qualified students, UT recognizes the profound benefits of creating an inclusive environment in which students can learn from one another. All students are better prepared to succeed in an increasingly diverse state and interconnected society when they receive the educational benefits of learning on a diverse campus.”

Diversity, equity and inclusion impact all facets of the university, from the classroom, to research, to the work environment. A wide range of perspectives and experiences is a key strength of the university, and the campus actively supports a free exchange of ideas alongside thoughtful considerations of differences. UT’s University Diversity and Inclusion Action Plan (UDIAP), collaboratively developed in 2016-2017 by students, faculty and administrators, is regularly reviewed and updated. Since its adoption in Spring 2017, every college, school and unit has been involved in making changes and embracing best practices to foster open, positive and inclusive environments for everyone.

In support of those efforts, the Cockrell School has also developed a Diversity, Equity and Inclusion Plan that is specific to both the goals and community in the Cockrell School. The school’s DEI Plan is a “living” document, which has a history that predates UT’s overarching UDIAP. Explicit DEI efforts in the Cockrell School were initiated in 2015 when a group of Black students approached Dean Sharon Wood with a set of concerns related to the experiences of students who identify with groups who are historically underrepresented in engineering. As a response, Dean Wood formed the Cockrell School’s Underrepresented Minority (URM) Action Team, which ultimately delivered a set of eight recommendations:

- **Recommendation 1:** The Cockrell School of Engineering should build a diversity action plan and update this plan on a periodic basis.
- **Recommendation 2:** The Cockrell School of Engineering should have a 3<sup>rd</sup> party design and facilitate a climate survey for students, staff and faculty to gain the necessary information and feedback about our current standing of diversity and inclusion.
- **Recommendation 3:** To increase participation and inclusiveness of underrepresented populations, the Cockrell School of Engineering should create new programs that celebrate cultural awareness and provide rewards and encouragement for faculty who positively participate in activities with students from groups that are historically underrepresented in engineering.
- **Recommendation 4:** The Cockrell School of Engineering should review and update current messaging with inclusiveness and diversity awareness language for New Student and New Faculty Orientation programming.
● **Recommendation 5:** The Cockrell School of Engineering should develop diversity fellowships for graduate students and create an emergency fund for undergraduate students with financial need.

● **Recommendation 6:** The Cockrell School of Engineering should provide training on micro-aggressions and unconscious bias to all faculty, staff and students by partnering with external experts.

● **Recommendation 7:** The Cockrell School of Engineering should continue to support funding opportunities for advancement of members of historically underrepresented groups while including historically underrepresented faculty in these submissions.

● **Recommendation 8:** The Cockrell School of Engineering should create two committees: the Dean's Diversity Advancement Committee for Faculty Affairs and the Dean's Diversity Advancement Committee for Student Affairs.

In parallel with the school's URM Action Team, the Cockrell School launched the *You Belong Here* campaign to bring about increased visibility for the importance of diversity in engineering and reinforce a commitment to diversity and inclusion in the school. This moniker is an umbrella for a variety of initiatives, from outreach and yield events for prospective students to programming and professional development for the entire school. Dating back long before these more recent efforts, the Cockrell School's Women in Engineering Program, established in 1991, and the Equal Opportunity in Engineering Program, established in 1970, have long histories of supporting students from groups that have been historically underrepresented in engineering. They have accomplished this through K-12 outreach programs, academic and career support, cultural awareness and programs to connect students, staff, faculty, alumni and other constituents.

The Cockrell School’s DEI Plan is a direct result of the URM Action Team’s first recommendation. In 2016, Dean Wood created the Diversity and Inclusion (D&I) Committee, consisting of administrators, faculty, staff and students, chaired initially by Enrique Dominguez, director of the Equal Opportunity in Engineering Program, and then by Michele Meyer, Assistant Dean for Engineering Student Services. This committee encompassed several task forces, including the Diversity Action Plan (DAP) Task Force, chaired by professor Raissa Ferron, comprising students, faculty and staff from across the school. The DAP Task Force was charged with developing a diversity action plan compatible with UT’s UDIAP and detailing strategies that are implementable within the Cockrell School at the local level. A draft of this plan was created and shared with the university in April 2017. This plan was used by the D&I Committee to conduct a series of charrettes in 2017-2018, which aimed to engage the community in refining the plan. The result was the first Cockrell School DEI Plan (Appendix A), a true community effort that was made available in Summer 2019. The DEI Plan is structured around three “cornerstones”: *Strengthening the Community*, *Shaping the Environment* and *Enriching the Experience*. *Strengthening the Community* is broadly related to building a more diverse community through activities for K-12 students, undergraduate and graduate students, and faculty applicants. The second cornerstone, *Shaping the Environment*, focuses on programming and messaging related to creating an inclusive environment. The final cornerstone, *Enriching the Experience*, is driven by a vision of equity and primarily focuses on ensuring that everyone in the Cockrell School community is supported to reach their full potential.

**Cockrell School Diversity -- By the Numbers**

The charts in Figure 1 show the diversity of the Cockrell School across undergraduate students, graduate students, faculty and staff, as of Fall 2019. Generally, efforts to improve diversity, equity and inclusion in the Cockrell school address the needs of community members who identify with groups that are historically underrepresented in engineering. For engineering, these groups include people who identify as women and people who identify as LGBTQ+. Throughout these figures and this report, we use “Native American” to refer to individuals who identify as Native American, Hawaiian Native, Pacific Islander and Alaska Native. The university's systems currently only allow collection of binary gender data, specifically “male” or “female”, so

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our information is limited in this respect. The following series of tables provides diversity information across a five-year window; Appendix C provides even more data, tables, and charts. As Table 1 shows, over the past five years, the Cockrell School has made gains in the number of students who identify as women in all categories except Master’s students. Other demographics are relatively flat over this time period.

Several years ago, UT implemented a campus-wide effort to increase four-year graduation rates. In the Cockrell School, just 32.1% of students who entered in 2007 graduated with an engineering degree in four years, and 61.6% graduated with an engineering degree in six years. For the same cohort, 41% graduated with some UT Austin degree within four years, while 81% graduated with some UT Austin degree within six years. Historically, these statistics are even starker for students who identify as women and who identify as members of other groups that are historically underrepresented in engineering. Table 2 shows how four-year and six-year graduation rates have changed over recent years. These changes are driven by a variety of new student success initiatives both within the Cockrell School and across campus. Notably, the enrollment numbers, retention rates and graduation rates for students who identify as women are high. Further, the retention rates for students from historically underrepresented groups show a promising and significant upward trend (see Appendix C). While the statistics indicate significant progress on all fronts, multiple points

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*The university-level data available for this metric does not disaggregate different races and ethnicities; here, URM includes students identifying as Black, Hispanic, American Indian, and/or Hawaiian native.*
of concern remain. The graduation rates for students who identify as members of groups that are historically underrepresented in engineering remain significantly below overall rates.

Table 3 shows data for degrees conferred. The degrees conferred for graduate programs exhibit some trends that bear investigation. For instance, the percentage of Hispanic students enrolled in master’s programs in Fall 2017 was 8.0%. However, two years later (the expected length of time for the MS degree), Hispanic students account for only 5.6% of the MS degrees conferred. Similarly, the rates of enrollment of doctoral students who identify as women or as members of groups that are historically underrepresented in engineering appear to be higher (even accounting for the time-to-degree) than the graduation rates for those same students.

These numbers help measure diversity, but they do not offer sufficient information about inclusion and equity. For these insights, we have historically relied on climate surveys. Our most recent survey was conducted in 2016-2017 using the PACE (Project to Assess Climate in Engineering) survey. All 6,057 Cockrell School undergraduate students were invited to participate, and 1,757 valid responses were received (a response rate of 29%). The survey asked about interactions with professors, perceptions of engineering as a career, satisfaction with the program and the general climate in the Cockrell School. Overall, respondents were positive about interactions with professors: 78.6% selected “Usually” or “All the time” when asked whether “Professors care whether or not you learn the course material” and 89.9% chose “Usually” or “All the time” in response to “Professors treat you with respect.” Neither question had notable differences for students who identify as women or as members of historically underrepresented groups. However, 13.5% of female student respondents felt they had been “singled out unfairly because of gender” and 13.3% of Black student respondents felt they had been “singled out unfairly because of race/ethnicity.” Further, 7.3% of student respondents (20% of Black student respondents) have “heard engineering faculty express racial/ethnic stereotypes,” and 8.2% of student respondents (14.5% of female student respondents) have “heard engineering faculty express sexist stereotypes.” Finally, 19.6% of student respondents reported they “Never” or only “Rarely” feel like “a part of the Cockrell School community.”

The Cockrell School also conducted climate surveys in 2012 and 2008. Analysis shows improvement in climate: 15.2% of students who identify as women felt they had been singled out unfairly because of gender,

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3 https://depts.washington.edu/paceteam/
and 16.3% of all students (and 23.5% of female students) reported having heard engineering faculty express sexist stereotypes when asked in 2012. Although a planned repeat of the climate survey in 2020 was delayed as a result of the COVID-19 pandemic, the regular performance of a climate survey of the entire Cockrell School community remains an important piece of the school’s DEI Plan.

Highlighted Activities

The remainder of this report details the diversity-, equity- and inclusion-related activities in the Cockrell School of Engineering during the 2019-2020 academic year. We first provide a few highlighted activities that received extra attention and resources in the past academic year. We then look at activities related to each of the three focus areas of the DEI Plan: strengthening community, shaping the environment and enriching the experience.

The Assistant Dean for Diversity, Equity and Inclusion

In Fall 2019, Dean Sharon Wood created the school’s first-ever DEI leadership position, the Assistant Dean for Diversity, Equity, and Inclusion, as a half-time administrative position to be held by a tenured faculty member in the school. The role of the Assistant Dean is to be a general voice and contact point for DEI-related efforts in the Cockrell School, with a primary focus on DEI initiatives related to graduate students, faculty and staff. The Assistant Dean for DEI is expected to work closely with the assistant dean for student services, as well as the directors of the Women in Engineering Program (WEP) and Equal Opportunity in Engineering (EOE) program, which interface primarily with current and prospective students. The Assistant Dean for DEI is also the caretaker of the school’s DEI Plan, an evolving document that is expected to be continuously revisited, revised and measured. The Assistant Dean is part of and collaborates directly with UT’s Coalition of Diversity, Equity and Inclusion Officers4. This group meets regularly with the campus’s Vice Provost for Diversity to share ideas and expertise and plan for campus initiatives. Christine Julien, a professor in the Department of Electrical and Computer Engineering, was appointed as the inaugural assistant dean, starting in August 2019.

ASEE Diversity Recognition Program

In November 2019, the Cockrell School of Engineering applied to the American Society for Engineering Education (ASEE) Diversity Recognition Program (ADRP)5, and, in Spring 2020 was recognized with a Bronze designation by ASEE, which includes a challenge to identify and address concrete DEI goals and access to resources to help us with continuous improvement. The application narrative6 was created collaboratively by a sub-committee of the Cockrell School DEI committee; this sub-committee included students, staff and faculty from across the school. All programs enter the ADRP at the bronze level, which recognizes that the program has, at a minimum, achieved the following concrete goals: (1) the program’s dean has signed the ASEE Deans Diversity Pledge; (2) the program has its own DEI Plan; (3) the program has an established infrastructure to support diverse populations that are traditionally underrepresented in engineering; (4) the program has established at least one program from a provided list of proven best practices7; (5) the program supports at least one K-12 pipeline activity; (5) the program has established metrics and goals related to DEI; (6) the program has an implementation plan for the DEI Plan; and (7) the program is engaged in measuring the outcomes of the implementation of the DEI Plan. It is expected that a program remains at the Bronze designation level for at least two years to build up a history and trajectory of achievements in the DEI space before applying for the Silver or Gold recognition.

4 https://provost.utexas.edu/diversity/diversity-and-inclusion-officers
5 https://diversityrecognition.asee.org/
6 https://www.engr.utexas.edu/images/ASEEProgramNarrative.pdf
7 https://diversityrecognition.asee.org/resources/
A Focus on Faculty Recruiting
In 2019-2020, the Cockrell School focused significant efforts on the faculty recruiting process. Beginning with the 2019-2020 faculty recruiting season, the school now requires all applicants for faculty positions to submit a “statement describing their commitment to promoting diversity and inclusion through research, teaching and/or service.” This builds on a process that has been in place within the Department of Biomedical Engineering since 2014. This new school-wide requirement has two purposes: (1) it allows applicants who have prior contributions to diversity and inclusion to describe those experiences, and (2) it communicates to all applicants that the Cockrell School is committed to promoting diversity and inclusion. We have further developed a set of processes and practices that go beyond simply requesting diversity statements; the assessment of them is built into the entire interview process, including online screening interviews and on-campus interviews.
In addition to requiring diversity statements, we made other changes to faculty recruiting related to diversity, equity and inclusion. We revised all job advertisements to emphasize a focus on diversity. We also provided more resources to the faculty recruiting committees to support their processes. An example is provided as Appendix D. Finally, we also closed the faculty recruiting season with a feedback survey given to all members of search committees in the Cockrell School, with a particular focus on whether the search was an equitable process. In response to this survey, in the 2019-2020 faculty recruiting season, 73% of committee members recalled ways in which their committee performed proactive recruiting, ranging from visits to Historically Black Colleges and Universities (HBCUs), targeted outreach to participants in the Rising Stars program or other community outreach. Further, 62% of recruiting committee members reported that they discussed the potential impacts of implicit biases on the recruiting process at least once; in many cases at every meeting. The results of this survey will inform our faculty recruiting efforts going forward.

Revising the CSE DEI Plan
As part of the reflection that went into preparing for the ASEE Recognition Program, the D&I Committee identified a need to revise the school’s DEI Plan to have more actionable and measurable implementation strategies. In 2019-2020, therefore, a sub-committee of the D&I Committee was formed to draft this new plan, including implementation strategies tied to measurable outcomes. This sub-committee was chaired by Fernanda Leite, associate professor in the Department of Civil, Architectural and Environmental Engineering. The revised plan was released in July 2020\(^9\) and is included as Appendix B. Still under development is the associated metrics document, which will detail suggested concrete metrics for each implementation strategy that will help us assess whether the strategy is having the desired or intended impact. This information will inform our future efforts, progress and reports; in particular the established set of metrics will define the structure for the future data portions of this annual report.

Cockrell School Statements and Activity Related to Racism and Racial Violence
In response to the events of 2020, including the senseless deaths of George Floyd, Ahmaud Arbery, Breonna Taylor, Jacob Blake and too many others, the university and the Cockrell School shared several messages and plans with the community. Interim President Hartzell addressed this in his first message as Interim President\(^9\). On June 1, 2020, Assistant Dean Julien joined with the UT Austin Coalition of Diversity and Inclusion Officers to co-author a public statement\(^10\) to reaffirm our shared commitment to supporting an equitable and inclusive institution in which violence, hate and intolerance are actively combatted. Assistant Dean Julien collected a set of anti-racism materials that were shared with the Cockrell School community on June 22, 2020; these materials are now part of a larger collection\(^11\) assembled by the UT Austin Coalition of Diversity and Inclusion

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\(^9\) [https://www.engr.utexas.edu/about/diversity-and-inclusion/plan](https://www.engr.utexas.edu/about/diversity-and-inclusion/plan)

\(^9\) [https://president.utexas.edu/messages-speeches-2020/turbulent-and-difficult-times](https://president.utexas.edu/messages-speeches-2020/turbulent-and-difficult-times)


\(^11\) [https://provost.utexas.edu/diversity/resources-equity-and-anti-racism](https://provost.utexas.edu/diversity/resources-equity-and-anti-racism)
Officers. Also, faculty and staff from across the Cockrell School participated in the *Experiences of Black STEM in the Ivory: A Call to Disruptive Action* event\(^{12}\) on July 15-16, 2020.

On June 17, 2020, the UT Austin Chapter of the National Society of Black Engineers (NSBE) sent a statement of “Demands for Change in the Cockrell School” to the Cockrell School leadership\(^{13}\). The leadership responded publicly to this statement on June 18, 2020\(^{14}\), and Dean Wood, Assistant Dean Julien, and Assistant Dean Meyer met with the NSBE leadership on June 23, 2020 to plan actions related to this conversation. This conversation will continue, with events and forums planned for Fall 2020 and beyond.

Also on June 17, 2020, a group of UT alumni sent a letter to Dean Wood\(^{15}\). The group had a meeting with Dean Wood, Assistant Dean Julien and Assistant Dean Meyer on July 3, 2020 to make plans for how to collaboratively push forward anti-racism efforts in the Cockrell School. The leadership sent a formal response to the alumni letter on July 24, 2020\(^{16}\), and the group met again on July 27, 2020, to discuss next steps.

In addition, Dean Wood, Assistant Dean Julien and Assistant Dean Meyer also reached out to members of the Graduates for Underrepresented Minorities (GUM) student organization to seek their input on these issues; the first meeting with GUM was held on June 19, 2020, which generated ideas for actions the school can take to support graduate students from underrepresented groups, in particular Black and Hispanic graduate students. Subsequently, GUM sent a list of demands to the CSE leadership on July 17, 2020.

**2019-2020 DEI Shoutouts**

To close this section, we provide a set of DEI “shoutouts”, recognizing individuals and groups in the Cockrell School who have gone above and beyond in contributing to the School's DEI mission. There are many individuals in the school who are passionate about DEI and have made it a priority in their daily lives. The below shoutouts specifically recognize efforts that are beyond ordinary expectations, have the potential for broad impact, or are notable, for instance, for the potential to be replicated in other spaces within the school.

**Noel Clemens, Clint Dawson and the ASE/EM Diversity Committee**

Under the leadership of Department Chair Noel Clemens, the Department of Aerospace Engineering and Engineering Mechanics formed the ASE/EM Diversity Committee in Fall 2019, which was chaired by professor Clint Dawson. As it was the committee’s first year, they spent some time identifying where and how to direct their focus and, among other efforts, contributed substantially to faculty recruiting. In particular, the committee met as a group with each faculty candidate to discuss the candidate's prior efforts and contributions to promoting diversity, equity and inclusion, and to hear the candidate's plans for the future, should they join UT. The ASE/EM Diversity Committee is in an excellent position to mentor additional diversity committees that will be created in other Cockrell School departments.

**Lydia Contreras**

Lydia Contreras, associate professor in the McKetta Department of Chemical Engineering, has taken on a strong leadership role in developing and implementing an equitable graduate admissions process in the Chemical Engineering graduate program. Efforts implemented by Lydia, with the assistance of the department’s graduate coordinator (Ellie Boisjoli), include directed email outreach to potential graduate students at HBCUs, a recruiting visit to Prairie View A&M University, facilitating undergraduate research experiences for students who identify as women or as members of groups that are historically underrepresented in engineering programs, and emphasizing a holistic admissions process for those reviewing graduate applications. Lydia has also developed a mentoring program (First ChEnnections) to promote the inclusion for all incoming graduate students in the Chemical Engineering graduate program.

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\(^{13}\) [https://docs.google.com/document/d/1XvJn_K5WdZHNUgfpcVgcRRAIMPGAykcC0bHyrdATnF/edit](https://docs.google.com/document/d/1XvJn_K5WdZHNUgfpcVgcRRAIMPGAykcC0bHyrdATnF/edit)


\(^{15}\) [https://utengineeringalumni.wordpress.com/letter-to-dean/](https://utengineeringalumni.wordpress.com/letter-to-dean/)

\(^{16}\) [https://www.engr.utexas.edu/leadership-message-in-response-to-alumni-concerns](https://www.engr.utexas.edu/leadership-message-in-response-to-alumni-concerns)
which she is piloting in Summer 2020. The approach in Chemical Engineering can serve as a model of best practices for other Cockrell School graduate programs.

**Ben Hodges and the Planet 2050 Cluster Hire Committee**

With many changes underway for considering diversity, equity and inclusion as part of the faculty recruiting process, many committees and their members made significant adjustments to faculty recruiting processes this year. Of particular note was professor Ben Hodges’s leadership of the Planet 2050 Cluster Hire Committee within the Department of Civil, Architectural and Environmental Engineering. This committee rethought all aspects of the recruiting process, starting with how to consider diversity statements throughout the entire process, but also including proactive outreach to candidates from groups historically underrepresented in engineering, developing a shared set of comparison points for candidates under consideration, asking questions related to DEI throughout the interview process and guiding candidates with respect to the Cockrell School’s initiatives and expectations for faculty regarding DEI activities. Perhaps most importantly, Ben and the committee reflected thoughtfully on what worked well and what could be improved, paving the way for insights to be shared with other faculty recruiting committees in the future.

**Nina Telang**

Nina Telang, associate professor of instruction in the Department of Electrical and Computer Engineering (ECE), has developed and led several efforts related to the success of our undergraduate students. She is a leading participant in an initiative driven by the university’s Counseling and Mental Health Center to develop and share practices related to promoting well-being in learning environments. She developed a supplementary course, called *Enhancing Academic Success*, taken primarily by first and second year ECE students with a focus on non-technical aspects of academic success, like developing a growth mindset, learning strategies and coping with stress. Nina has also developed a student success and well-being canvas module that contains resources shared with the entire ECE community. Finally, when COVID-19 sent everyone away from campus, Nina organized weekly informal virtual gatherings through the student success and well-being canvas group to ensure that undergraduate students in ECE had an outlet during that extremely stressful period.

**Alyson Bodner and the Cultural Awareness Committee**

As the chair of the Cultural Awareness Committee (CAC) in 2019-2020, Alyson Bodner, the director of student life in the Cockrell School, played a pivotal role in building community and community awareness around cultural diversity in the Cockrell School. Bringing together students, faculty and staff, the CAC led several events highlighting different cultures and their traditions. The members of the CAC devoted extra hours to planning, organizing and working at these events. Of special note were the student volunteers, who took ownership of some of the planning and hosting of events while helping to manage the day-of student and staff volunteers who contributed to make the events successful. In addition, during Summer 2020, Alyson supported the CAC in holding virtual meetings to discuss and brainstorm action in support of the Black Lives Matter movement, providing an important means of connection and conversation during an important but challenging time.

**Equal Opportunity in Engineering (EOE) and Women in Engineering Programs (WEP)**

The EOE and WEP offices are, for many students and alumni, the primary face of diversity, equity and inclusion efforts in the Cockrell School. The program directors, Tricia Berry and Enrique Dominguez, as well as their hardworking staff members, support several student groups, plan and conduct multiple sections of First-Year Interest Groups (FIGs), develop and deliver programming for current and prospective students and host K-12 outreach events throughout the calendar year. In Summer 2020, the annual summer camps and other programs that EOE and WEP traditionally hold had to be canceled or
dramatically changed, forcing both programs to shift their models to provide virtual opportunities to maintain the connection for future members of the Cockrell School community.

Details in the Context of the CSE Diversity, Equity and Inclusion Plan

In this section, we take each of the three cornerstones of the 2019-2020 DEI Plan (Appendix A) in turn and describe the efforts within the Cockrell School to address the activities listed for each cornerstone. Within each cornerstone, the list of activities provides a set of example strategies, and we do not expect to be able to make meaningful progress on every strategy in every year. For completeness, we include all of the strategies here that are listed in the 2019-2020 DEI Plan. If no specific activity can be tied to that strategy, we indicate that with “No specific activities in 2019-2020”.

Cornerstone 1: Strengthening the Community

Strengthening and expanding recruitment efforts for undergraduate and graduate students

Building a pipeline of young engineers must be a long-term commitment to increase diversity in engineering. Through the efforts of the staff in the Equal Opportunity in Engineering (EOE) Program and Women in Engineering Program (WEP), the Cockrell School has continued to offer many opportunities for K-12 students to explore engineering, even in the face of the COVID-19 pandemic, when many of these activities have had to move to a virtual format. As an example, the annual Girl Day at UT Austin was held in person in 2020, engaging more than 8,000 K-8 girls in hands-on engineering and science activities, demonstrations and shows led by over 150 corporate, university and community partners and over 1,600 STEM role model volunteers. WEP and EOE also usually run several different summer camp programs for K-12 students, but these programs had to be canceled in Summer 2020 as a result of the COVID-19 pandemic. In their stead, WEP and EOE both held regular virtual events to reach the wider community, including admitted undergraduate students and prospective undergraduate students.

WEP also leads the Texas Girls Collaborative Project (TxGCP), which fosters collaboration, builds capacity and creates a state-wide network of informal and formal STEM educators and advocates. A 2015 survey of the National Girls Collaborative Project (NGCP), which includes TxGCP, found that 82% of participating organizations indicated NGCP collaborations helped their organization better serve girls. Further, 78% of participants indicated NGCP involvement helped them increase girls’ interest in STEM, and 77% indicated that participation helped their organization increase girls’ confidence in STEM.

In addition, the Cockrell School’s Engineer Your World (EYW) program, which was developed by professor David Allen, offers a student-centered high school engineering program that combines high-quality, design-based courses with innovative teacher training and support. Launched in 2011 with funding from the National Science Foundation, EYW responds to a national need for a high-quality, low-cost high school engineering course for all learners. Now in its ninth year, EYW serves approximately 10,000 students per year in more than 260 schools across 29 states. With a focus on improving engineering literacy and diversifying the engineering workforce, EYW engages students who are typically underserved by engineering programs. More than half of EYW schools serve predominantly economically disadvantaged students, and 57% of the schools are majority-minority. The EYW curriculum is intentionally designed to appeal to students from historically underrepresented groups by framing engineering as a helping profession through which students can make a difference in the world, as recommended in the National Academy of Engineering’s 2008 report Changing the Conversation:

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https://www.txgcp.org/

http://engineeryourworld.org/
Messages for Improving Public Understanding of Engineering. EYW collaborates with educators to create resources for recruiting students from underrepresented groups, including targeted flyers, a student recruitment video and marketing tips for teachers. These resources have helped partner schools increase participation of students from historically underrepresented groups: from 2012 to 2018, the population of EYW students grew from 25% to 28% women and from 30% to 49% URM students.

Supporting undergraduate students from diverse backgrounds and exposing them to graduate school

The Graduates Linked to Undergraduates in Engineering (GLUE) program is a mentoring program that links undergraduate students with graduate students conducting research across the Cockrell School; it has been running continuously for the past 18 years under the direction of professor Kerry Kinney and in collaboration with WEP. More than 900 students have participated in GLUE since its inception, including students from every department in the school. In Fall 2019, the GLUE program paired 30 graduate students with 30 undergraduate students; the undergraduate students include 2 Black students and 9 Hispanic students. In Spring 2020, GLUE had 29 pairs of graduate and undergraduate students; of the undergraduate participants, 6 students were Black or Hispanic, and all 29 undergraduate participants were female students.

The Texas Research Experience (TREX) Program, run by EOE, provides a unique opportunity for successful upper-division students to enhance their academic experience with undergraduate research, learn about careers in research and the benefits of obtaining a graduate engineering degree, and use the experience to become a competitive graduate school applicant. TREX participants receive a $3,000 research stipend and spend an average of 10-15 hours per week on a research project throughout the fall and spring semesters. Active since 2001, since its inception more than 35% of students participating in TREX have gone on to pursue graduate studies. In the 2019-2020 academic year, 9 students participated in TREX (selected from 13 competitive applications); 8 of these students were students from groups that are historically underrepresented in engineering.

In addition to these specific programs, several Research Experience for Undergraduates (REU) programs are run within the Cockrell School of Engineering. The NASCENT and MRSEC research centers each administer their own program, and several departments and individual faculty also host undergraduate researchers for summer periods. While these programs are open to all undergraduate students, there is a specific emphasis on recruiting students who identify as women or with groups that are historically underrepresented in engineering. During Summer 2020, the opportunities were more limited because of the COVID-19 situation, but the programs aim to restart once we return to in-person experiences for undergraduate students in labs.

Building a stronger recruiting pipeline through outreach to K-12 schools and other undergraduate institutions

While the EYW high school program and REU programs are two facets of recruiting students from historically underrepresented groups into the Cockrell School, members of the school community are actively developing new initiatives to solidify and expand pipeline and pathway programs. A collaborative grant from Assistant Dean Julien, professor Lydia Contreras, professor S.V. Sreenivasan and Tricia Berry developed a plan with three Minority Serving Institutions (Prairie View A&M University, an HBCU, and Texas State University and the University of Texas at El Paso, both HSIs), along with partners at national labs and engineering companies. The team has applied for funding from the National Science Foundation to collaboratively develop a pathway program that intentionally develops new talent for graduate programs in the Cockrell School. A second team, led by ECE Department Chair Diana Marculescu and professor Seth Bank has also applied for external support for a similar program in ECE. In both cases, it is expected that the programs will start in the 2020-2021 academic year, focusing on workshops to develop partnerships and perform outreach to students at the partner institutions.
Providing financial aid to support diversity recruitment

No specific activities in 2019-2020.

Expanding success programs and support services for at-risk and undocumented students

First-generation college students accounted for an average of less than 13% of incoming students for 2015 through 2018. The Cockrell School has developed initiatives for first-generation students, including appointing a dedicated academic advisor and developing specialized programming for families. In 2016, we created the Ramshorn Scholar Program (RSP), a learning community dedicated to helping select undergraduate students persevere through the rigors of the UT engineering curriculum. The program’s goal is simple: to ease the transition from high school to college by supporting each student’s individual needs. Over 70% of students in RSP are first-generation college students. RSP offers reserved seats in select first-year courses, supplemental instruction, academic coaches, community building events and leadership development. In Fall 2019, first-generation college students account for 17% of the incoming class.

First-Year Interest Groups (FIGs), small cohorts of 15-25 students with common interests, provide a tight-knit community within the larger Cockrell School. FIG members enroll in the same sections of first-year courses and meet weekly for community building and skill-building for student success. One-year retention among FIG participants is roughly 5% higher than non-FIG students. While departments also host their own FIGs that meet in the fall semester, EOE and WEP both offer their own FIGs, reaching 119 students in 2019-2020, in total, with 36% of the participants drawing from students who identify with racial and ethnic groups that are historically underrepresented in engineering, and 45% of them identifying as women. These FIGs also offer students the opportunity to continue to meet in the spring semester, providing a longer on-ramp to EOE and WEP students in their first year.

Providing resources and training to faculty and staff to expand their knowledge and cultural competency

In June 2020, Assistant Dean Julien provided an anti-racism reading list for the Cockrell School community. The list was well received, and we will continue to collect and share resources on a regular basis. As part of the newly expanded DEI section of the Cockrell School website, we are collecting and archiving all resources. In addition, the D&I Committee will have a series of DEI “themes”, communicated and publicized once per month, for the 2020-2021 academic year.

In July and August of 2020, Leonard Moore, UT’s Vice President for Diversity, Equity and Inclusion and a professor of American history, taught an online course that was open to all UT faculty and staff called “The History of the Black Experience”. At least 139 faculty, staff and administrators from across the Cockrell School registered for the course; many others watched the recorded sessions online via YouTube, which were made available publicly. In addition, the Cockrell School organized small staff and faculty discussion groups to continue the conversation within the engineering context and identify actions the school can take as a result of the information learned in the class. In total, 65 members of the Cockrell School faculty and staff (22 faculty and 43 staff) participated in these weekly discussion groups in addition to taking the class; this is a 2.5-hour time commitment per week for six weeks, plus readings assigned outside of class time, on top of one’s regular work assignments.

Engaging students from historically underrepresented groups in faculty hiring

For the past several years, the Cockrell School has included undergraduate student meetings in every on-campus faculty interview. Students participate in the interview and offer feedback as part of the process. This also gives faculty interviewees a view into the quality and diversity of our undergraduate student population. This process continued in 2019-2020, within individual departments, which were given the responsibility of identifying the set of students who meet with each candidate.
Advertising faculty and staff openings to encourage more diverse candidate pools

As described above, faculty recruiting was a focus area for DEI efforts this year. The recommendations for search committees (Appendix D) contained additional suggestions for proactively recruiting candidates, including encouraging outreach to HBCUs and Hispanic Serving Institutions (HSIs). Departments and search committees were also given guidance about writing advertisements to encourage applicants from groups that are historically underrepresented in engineering.

In Fall 2019, UT joined the Aspire Alliance’s iChange network, a program funded by the National Science Foundation to help institutions develop and strengthen the inclusive recruitment, hiring and retention of faculty in STEM. This effort is led by the Office of the Provost, and Assistant Dean Julien, along with Shelly Sakiyama-Elbert, department chair and professor in the Department of Biomedical Engineering, are representing the Cockrell School in this effort. In 2019-2020, the efforts centered around a guided self-reflection on the recruiting and retention practices of the school. These reflections will be collected in the Provost’s office, aggregated with reflections from other colleges and schools on campus, and the entire campus team will then develop a plan for change.

Establishing an advocates/allies mentoring program -- encompassing students, staff and faculty -- across the school

In Spring 2020, Kasey Faust, assistant professor in the Department of Civil, Architectural and Environmental Engineering and Maura Borrego, professor in the Walker Department of Mechanical Engineering, organized a series of working lunches on the topic of Inclusive Mentoring of Graduate Students. Specifically, the goal was to begin identifying best practices and increasing the equity and access of graduate students to quality mentoring. The sessions were organized around a topic, with small groups discussing the topic and then reporting back out to the larger group. The discussions were guided to focus on students’ voices first, with faculty participating but not as the primary voice. We hosted two in person sessions in spring 2020, the first on the topic of Communicating Expectations (with 25 attendees) and the second on the topic of What’s Appropriate (35 attendees) before the COVID-19 pandemic put a halt to the in-person series. In April 2020, we hosted a virtual social gathering and invited any previous attendees to the workshop (roughly 10 people attended this informal conversation), and we have made plans to restart the series, virtually, in the 2020-2021 academic year. The ultimate goal of the series is to generate a “best mentoring practices” document that can be shared throughout the Cockrell School.

Cornerstone 2: Shaping the Environment

Increasing school-wide programming that celebrates the intersectionality and diversity of cultures within engineering

Since the launch of the Cultural Awareness Committee (CAC) in Spring 2017, the group has created events to celebrate the diverse cultures and backgrounds of the members of the Cockrell School. Initially, the group hosted events like movie screenings and poster campaigns to highlight different cultural groups throughout the year. The committee has coordinated efforts to support the LGBTQIA+ and first-generation communities by supporting Day of Silence, Pride Month and National First-Generation College Celebration Day. It has grown and now also plans and hosts multiple large-scale annual events. Starting in 2018, these events included the Latinx/Hispanic Heritage Festival (November 2, 2018 and October 18, 2019) and the Black Excellence in STEM Festival (February 15, 2019 and February 14, 2020). Additionally, the CAC has participated in the Austin MLK Celebration for several years (January 15, 2018, January 21, 2019 and January 20, 2020). The CAC organized groups from the Cockrell School community to join the march along the route from UT to Huston-Tillotson University (HT), as well as to table at the community festival at the end of the march route at HT. At the festival, CAC organized tables for both the Cockrell School generally, as well as for several engineering student organizations, for the purposes of
community outreach/celebration. Planned efforts around the Asian/Pacific Islander Celebration in the Fall 2019 semester were postponed because of a lack of volunteers, and an event celebrating the LGBTQIA+ community slated for May 1, 2020 was placed on hold as a result of COVID-19. In general, these events are open to the public and attended by students, faculty and staff, and sometimes even prospective students and their families. The CAC has amplified its efforts by becoming a joint committee with the College of Natural Sciences to host the first annual Black Excellence in STEM Festival in 2019, and they have partnered together for about a year and a half. In Summer 2020, the CAC transitioned its efforts to focus on the Black Lives Matter movement, hosting a series of conversations focused on action planning in the context of BLM. These conversations included students, faculty and staff from across the Cockrell School; several conversations were held in Summer 2020, with attendance ranging from about 8 to 33 people. In Summer 2020, CNS members of the CAC decided to focus on conversations specifically for the CNS community, so CAC is now re-focusing specifically on Cockrell School efforts.

**Strengthening and building upon the school’s current “You Belong Here” campaign**

The Cockrell School has developed programming around the “You Belong Here” campaign. This effort was originally conceived as an inclusivity initiative, directly addressing concerns such as implicit biases and the imposter syndrome. Cockrell School efforts related to “You Belong Here” include a workshop series that is modeled after BiasBusters@CMU and Google’s Bias Busting@Work. The current series includes eight workshops tailored for engineering and natural sciences students, faculty and staff. The workshops can be varied in length and customized to the audience. Most include role-playing based on real-life scenarios, providing a powerful and effective approach to engage participants in creating personalized commitments to greater inclusivity. Since the creation of the series, the UT Bias Busters Team, which includes 77 members from across campus, has presented over 120 workshops reaching over 4,000 participants. Workshop participation has grown from 30 participants in a single workshop in 2016 to 539 participants in nine workshops in 2017, to 2,991 participants in 46 workshops in 2018. In 2019, the team delivered more than 60 You Belong Here Workshops, reaching over 3,000 students, staff and faculty.

In addition, we have created stickers and other materials (including a photo booth and props) supporting the “You Belong Here” campaign and creating increased visibility and awareness for our commitment. These materials are used for events held by the Cultural Awareness Committee, for the Gone to Engineering orientation session, and for the “You Belong Here” dinner hosted by EOE and WEP, which includes students and corporate representatives. Finally, the Engineering Student Leaders group discusses the “You Belong Here” campaign at every meeting of the student organization presidents (which occur monthly), and the leaders discuss how their groups are working to be more inclusive.

**Creating opportunities for community-building across departments and among diverse groups, and implementing a strategy to engage LGBTQIA+ students, faculty and staff**

The Cultural Awareness committee held a focus group and then a few meetings for LGBTQIA+ undergraduate and graduate students in March. The group was planning a large community event to be held in May 2020, but this was postponed as a result of COVID-19. A new student organization was formed this year, the LGBTQ+ Engineers (aka “LGBQT-ies”), and it became a student group affiliate of the Gender and Sexuality Center. The mission of the organization is to recruit, retain and graduate LGBTQ+ engineering students and allies by providing a safe place for discussion, awareness and support.

**Reviewing and updating content and messaging on digital and print marketing materials to highlight our commitment to diversity and inclusion**

In Fall 2019, the D&I Committee started brainstorming a revision to the Cockrell school web presence related to diversity, equity and inclusion. After examining the webpages of peer institutions and other programs at UT—and after reassessing our own values and community—the committee assembled a set
of suggested content for a website revision. Working with the Cockrell School communications and marketing team, a significantly expanded DEI section was was developed throughout 2019-2020, which will serve as a resource for everyone in the community, including current students, prospective students, staff, faculty, alumni and members of the general public to learn about DEI at the Cockrell School. The new web section was launched in August 202020.

Providing cultural competency trainings for a wide variety of employees and students

The annual Cockrell School Student Leaders Conference (SLC), a day-long collaborative training and leadership development experience for students from across the Cockrell School, has integrated workshops and trainings from the You Belong Here Workshop Series to help student leaders understand implicit bias, learn strategies to create inclusive spaces and practice bystander interventions. The SLC ensures quality and consistency of student employees and leaders within the Cockrell School, demonstrates to student employees and leaders that they are an integral part of the Cockrell School team, and provides participating students professional development experiences. In a post-conference survey, 95% of participating students indicated that they learned something new, and 98% indicated that they were confident they could contribute effectively in their student leader role.

Ensuring inclusive physical spaces when designing and renovating Texas Engineering facilities

No specific activities in 2019-2020.

Cornerstone 3: Enriching the Experience

Engaging and training faculty in an effort to cultivate a greater sense of community in the classroom and throughout the school

In Spring 2018, Cockrell School faculty joined a project in UT’s Counseling and Mental Health Center promoting well-being in learning environments. The project is based on research demonstrating that well-being is essential to students’ effective learning; currently, twelve Cockrell School faculty are collaborating with the project to actively work to embed wellness practices in instructional environments. Over the past two years, more than 1,300 Cockrell School students have participated in these classes. Wellness strategies that Cockrell School faculty are using include incorporating growth mindset techniques, encouraging positive psychology strategies, using cooperative learning activities to enhance students’ conceptual understanding and build social connectedness, talking directly with students about practicing self-care (e.g., getting enough sleep, taking brain breaks) and humanizing themselves by talking about their failures. These efforts build on a successful history of Cookie Connections, a program in which cookies are delivered to students in lower-division courses and instructors spend time talking about something of interest to them, from career opportunities, to their own professional paths, to how they manage stress. Student responses to Cookie Connections are overwhelmingly positive, and the most often cited value is the ability to connect with the instructor.

Growing co-curricular programming in areas focused on themes such as leadership, social justice, equity, cultural competence, intersectionality and teamwork

In 2019-2020, as in previous years, the Cockrell School offered many professional development seminars and courses for students. The WEP Leadership Seminar helps students explore leadership and communication styles through a gendered lens using interactive role play, personal assessments, industry guest speakers and role models, and discussions that explore the impact of diverse identities in leadership. The EOE Program provides career and leadership development seminars focused on individual awareness, self-efficacy and success. The Ramshorn Scholars Program helps students strengthen their

20 https://www.engr.utexas.edu/about/diversity-and-inclusion
engineering identity through a variety of workshops on engineering design, communications, working with global teams and creating collaborative workplaces.

As examples of specific programming, the LeaderShape Institute\textsuperscript{21}, which is a six-day program of dialogue and self-discovery in a supportive learning community that is open to all UT students, addresses all of these topics. This program, which was held January 11-17, 2020, reached 120 undergraduate students. In addition, the Engineering Ambassadors program\textsuperscript{22} supports a group of students who serve as representatives of the Cockrell School. A weekly seminar for the ambassadors addresses topics relating to leadership, equity, teamwork, and other important topics.

The Cockrell School Cares (CSC) initiative began in 2018 as a week-long student-driven campaign to promote mental health, diversity, equity and inclusion among the student community. Since its inaugural year, CSC has grown significantly. In April 2019, CSC’s two-week campaign comprised 27 events that emphasized student well-being, with the first week focused on mental health and self care, and the second week focused on diversity and inclusion. Some notable events include sessions on helping a friend in distress, healthy eating, embracing failure, overcoming racial barriers, understanding masculinity and the imposter syndrome. Professors, staff and external guests serve as speakers for a number of these events, and many professors offered extra credit to students for attending and participating in CSC. In addition, the student leaders “took over” the Cockrell School’s institutional social media channels to promote the events and engage directly with fellow students. The 2019 campaign had over 900 student attendees. In 2019-2020, CSC grew into a 40-member external committee of the Student Engineering Council and developed plans for year-long events as well as a two-week campaign in the spring. Unfortunately, as a result of the COVID-19 pandemic, the Spring event had to be canceled.

\textit{Increasing project-based classroom experiences that emphasize teamwork and input from diverse voices}

No specific activities in 2019-2020.

\textit{Increasing support services (academic, physical and mental health) for students from historically underrepresented groups}

With the URM Action Team’s recommendation to create an emergency fund for students in financial distress, multiple endowed scholarship accounts continued to be earmarked specifically for students experiencing unexpected or insurmountable financial obstacles that could prevent them from successfully continuing to pursue their engineering degrees. In 2019-2020, 14 Cockrell School students received an average award of $2,084 in emergency funding. Additionally, two students were awarded $10,000 scholarships from anonymous donors to alleviate extreme financial need after they exhausted other resources. In addition to responding to standard individual requests this year, the Engineering Scholarship Program matched $70,000 in scholarship and fellowship awards granted by Student Emergency Services as a result of the COVID-19 crisis during Spring 2020.

\textit{Creating new faculty, staff and student events that include speakers from diverse backgrounds}

No specific activities in 2019-2020.

\textit{Increasing integration of diversity and inclusiveness into the Cockrell School curriculum}

In the 2019-2020 academic year, faculty from across the Cockrell School experimented with integrating diversity and inclusion content and activities into their coursework. We started collecting these experiences, reflecting on them, and seeking to expand them. In Summer 2020, Maura Borrego assembled a set of inclusive teaching practices and resources, which will be shared with the Cockrell

\textsuperscript{21}https://www.engr.utexas.edu/student-life/leadership-development/leadershape-institute

\textsuperscript{22}https://www.engr.utexas.edu/student-life/leadership-development/engineering-ambassador-program
School faculty in Fall 2020. It is expected that this set of resources will be a “living” collection, continuously and regularly updated and made available on the Cockrell School website.

A Clear Path Forward
In the 2020-2021 academic year, we will use our newly revised DEI Plan (Appendix B) to guide our efforts. The Cockrell School of Engineering is committed to diversity in its many forms, and we aim to promote an inclusive and equitable environment with a strong sense of belonging for all students, faculty and staff. We recognize that individuals from all groups have not historically had the same access to engineering education, in general, and to the Cockrell School, more specifically, and we seek to address this moving forward. We also recognize that the different spaces that community members inhabit may require different approaches to diversity, equity and inclusion. We embrace the differences among us and strive to create learning and working environments enriched by those differences, and we are committed to providing the best education possible for students from all backgrounds, including those who have been marginalized and who come from traditionally underserved communities.
Appendix A
Diversity, Equity and Inclusion Plan (2019-2020)

Overview: A Steadfast Commitment
For the engineering profession to fully reach its potential, our academic and industry communities must engage, include and encourage people from all segments of society. We must work together — utilizing the broad array of perspectives, backgrounds and life experiences that come with a truly diverse community — if we wish to develop the creative solutions needed to address the challenges of the future.

In the Cockrell School of Engineering, we are deeply committed to diversity in its many forms. The Diversity, Equity and Inclusion (DEI) Plan is a defined framework and set of initiatives — developed in the 2018-19 academic year by Texas Engineering faculty, staff and leadership along with critical assistance from students — that will guide our future decisions and investments across all departments and communities, including those defined by race, ethnicity, physical ability, sexual orientation, gender identity and gender expression, socioeconomic background and first-generation status. The plan is informed by the work of the school’s Diversity Action Plan Task Force; the Underrepresented Minorities Task Force; the Diversity and Inclusion Standing Committee; the 2008, 2012 and 2016 Climate Surveys; and the Diversity and Inclusion Charrettes organized by Engineering Student Services in February 2018.

Goals and Outcomes
Through a sustained effort to strengthen diversity within the Texas Engineering community and through the long-term implementation of the DEI Plan, the Cockrell School aims to achieve the following long-term outcomes:

1. Improved school climate, which supports and encourages community members and provides a strong sense of value and belonging among all students, faculty and staff
2. Increased compositional diversity among faculty, students, staff, researchers and administration
3. Increased retention and graduation rates for Cockrell School students and increased retention and promotion of faculty, researchers and staff who are members of groups that are historically underrepresented in engineering
4. Increased transparency, communication and evaluation of the school’s efforts, initiatives and successes surrounding the DEI Plan
5. Continued strengthening of the resources provided to students, faculty and staff that lead to the development of the full potential of each member of the community

Strategic Cornerstones
In order to achieve the goals set forth in this plan, three themes, or “cornerstones,” have been identified as strategic areas where we will focus our efforts to enhance diversity, equity and inclusion in the Cockrell School.

Cornerstone 1: Strengthening the Community
Through well-planned and deliberate efforts, the Cockrell School will work to build a more diverse and inclusive community throughout the organization. This includes a commitment to not only hiring and retaining individuals who identify within groups traditionally underrepresented in engineering, but also individuals who
Proposed future action items include but are not limited to:

- Strengthening and expanding recruitment efforts for undergraduate and graduate students
- Supporting diverse undergraduate students and exposing them to graduate school
- Building a stronger recruiting pipeline through outreach to K-12 schools and other undergraduate institutions
- Providing more financial aid to support diversity recruitment
- Expanding success programs and support services for at-risk and undocumented students
- Providing resources and training to faculty and staff to expand their knowledge and cultural competency
- Engaging students from historically underrepresented groups in faculty hiring
- Advertising faculty and staff openings to encourage more diverse candidate pools
- Establishing an advocates/allies mentoring program — encompassing students, staff and faculty — across the school

Cornerstone 2: Shaping the Environment

The Cockrell School is committed to ensuring that all members of the engineering community have the resources they need to excel and reach their potential. To that end, we will continue to create diverse, equitable and inclusive environments — both inside and outside of the classroom and workplace — that provide our students, staff and faculty with the types of experiences and interactions that will serve them better in their lives and careers.

Proposed future action items include but are not limited to:

- Increasing school-wide programming that celebrates the intersectionality and diversity of cultures within engineering
- Strengthening and building upon the school’s current “You Belong Here” campaign
- Creating opportunities for community-building across departments and among diverse groups, and implementing a strategy to engage LGBTQIA students, faculty and staff
- Reviewing and updating content and messaging on digital and print marketing materials to highlight our commitment to diversity and inclusion
- Providing cultural competency trainings for a wide variety of employees and students
- Ensuring inclusive physical spaces when designing and renovating Texas Engineering facilities

Cornerstone 3: Enriching the Experience

The Cockrell School is committed to an educational experience that ensures all members of the community can reach their potential in an increasingly diverse and multicultural world. We will provide the best, most complete education possible for students from all backgrounds, and we will enhance the workplace environment to provide a more inclusive experience for faculty and staff.

Proposed future action items include but are not limited to:

- Engaging and training faculty in an effort to cultivate a greater sense of community in the classroom and throughout the school
- Growing co-curricular programming in areas focused on themes such as leadership, social justice, equity, cultural competence, intersectionality and teamwork
- Increasing project-based classroom experiences that emphasize teamwork and input from diverse voices
- Increasing support services (academic, physical and mental health) for students from historically underrepresented groups
- Creating new faculty, staff and student events that include speakers from diverse backgrounds
- Increasing integration of diversity and inclusiveness into the Cockrell School curriculum

We do not identify within these groups but embrace, value and champion diversity, inclusiveness and equity as core elements of our culture.
A Clear Path Forward

In the Cockrell School of Engineering, we are committed to diversity in its many forms, and we aim to promote an inclusive and equitable environment with a strong sense of belonging for all students, faculty and staff. Moving forward, we are committed to providing the best education possible for students from all backgrounds, including those who have been marginalized and who come from traditionally underserved communities. We embrace the differences among us and strive to create a learning and working environment enriched by those differences.
Appendix B

Diversity, Equity, and Inclusion Plan (2020-2021)

Overview: A Steadfast Commitment

For the engineering profession to fully reach its potential, our academic and industry communities must listen to, engage, include, and encourage people from all segments of society. We must work together — utilizing the broad array of perspectives, backgrounds, and life experiences that come with a truly diverse community — if we wish to develop the creative solutions needed to address the challenges of the future.

In the Cockrell School of Engineering, we are deeply committed to diversity in its many forms. The Diversity, Equity, and Inclusion (DEI) Plan is a defined framework and set of initiatives that will guide our future decisions and investments across all departments and communities, including those defined by race, ethnicity, physical ability, sexual orientation, gender and gender expression, socioeconomic background, and first-generation status.

Definitions

We begin our plan by defining key terms:

**Diversity** is the quality of being different or unique at the individual and/or group level including characteristics such as age, disability status, ethnicity, gender, gender identity and expression, nationality, race, religion, sexual orientation, socioeconomic status, and veteran status. Promoting diversity includes embracing the unique differences and contributions of each individual in our community, including recognizing and supporting individuals’ multiple and intersecting identities.

**Equity** is giving each individual access to the resources they need to learn, perform, work, and thrive. Promoting equity means providing access to resources so that each individual in our community has what they need to succeed — access to opportunity, networks, resources, and support systems — based on where they are and where they want to go.

**Inclusion** is creating an environment that welcomes, embraces, and leverages the diversity that exists in our community to ensure that individuals feel supported, listened to, empowered, and able to do their personal best and contribute fully to the community. Inclusion promotes a sense of belonging and creates a cohesive community.

Goals and Outcomes

Through a sustained effort to strengthen diversity within the Texas Engineering community and through the long-term implementation of the DEI Plan, the Cockrell School aims to achieve the following long-term outcomes.

**Outcome 1.** Foster an inclusive school climate that supports and encourages community members and provides a strong sense of value and belonging among all students, faculty, and staff.

**Outcome 2.** Attract diverse applicants for faculty, student, staff, and administrator roles.

**Outcome 3.** Increase diversity and the community’s awareness of diversity among faculty, students, staff, and administrators.

**Outcome 4.** Retain and recognize diverse faculty, staff, and administrators.

**Outcome 5.** Improve student experiences, success, retention, graduation rates, and sense of belonging.

**Outcome 6.** Support the development of the full potential of each member of the community.
Implementation Strategies

In alignment with the Goals and Outcomes listed above, the Cockrell School of Engineering has identified the following short-term implementation strategies. We recognize that the work necessary to realize the DEI Plan will require substantial effort and resources, and it may not be possible to undertake all of these implementation strategies simultaneously. We also emphasize that this work is the responsibility of the entire community and should not fall solely on the shoulders of the systemically oppressed groups we aim to support.

Cross-Cutting Implementation Strategies

1. Collect data on diversity, equity, and inclusion, including surveys of staff, faculty, and students on inclusive school climate and the impact of CSE DEI efforts.
2. Analyze data on diversity, equity, and inclusion and use the results to inform ongoing revision of the CSE DEI efforts and this DEI plan.
3. Create and disseminate information about diversity and DEI related efforts, initiatives, and successes through publications, websites, and communication campaigns, including an annual report on DEI in the Cockrell School and public recognition of DEI “wins” by individuals and groups.

Implementation Strategies in Support of Outcome 1

Fostering an inclusive climate

1.1 Develop and deliver programming around monthly DEI themes for the entire Cockrell School (students, faculty, and staff).
1.2 Create and implement a strategy to broaden the delivery and impact of focused DEI-related workshops (including Bias Busters and leadership workshops).
1.3 Promote open and regular conversations within Cockrell School communities about DEI-related concerns and initiatives.
1.4 Continue and extend programming to celebrate diverse cultures in the Cockrell School of Engineering.

Implementation Strategies in Support of Outcome 2

Creating diverse pipelines

2.1 Identify and implement ways to increase the pool of diverse undergraduate student applicants to the Cockrell School.
2.2 Create and support pipeline programs with minority-serving institutions to mentor racially diverse students into successful graduate school careers in our School.
2.3 Develop programming to mentor and support diverse undergraduate research participants into graduate school (e.g., through REU programs).
2.4 Develop intentional and coordinated outreach efforts to attract a more diverse pool of candidates for post-doctoral positions.
2.5 Understand, document, and address concerns and challenges related to recruiting diverse staff across different staff communities in the Cockrell School.
2.6 Collect best practices for diverse faculty recruiting from other institutions and create a faculty recruiting process that facilitates opportunities for faculty applicants from historically marginalized groups.
2.7 Develop programs and opportunities to prepare diverse mid-career faculty for leadership positions.
Implementation Strategies in Support of Outcome 3
Increasing community diversity and awareness

3.1 Train everyone involved in admissions and hiring about biases, including racism and sexism, and develop procedures that explicitly mitigate the disparate and negative impacts of these biases on hiring and admissions.

3.2 Create opportunities for continuous feedback and refinement of best procedures and practices for diverse recruiting of faculty, students, staff, and administrators.

Implementation Strategies in Support of Outcome 4
Retaining and recognizing diverse community members

4.1 Develop programs and resources for mentoring diverse faculty, staff, and administrators, including accessible “talking point” guides for mentors.

4.2 Ensure all staff have access to regular, high quality feedback about actionable steps and timelines for career advancement.

4.3 Develop strategies and policies to value/recognize DEI efforts and “invisible service”.

4.4 Develop a process for both “exit interviews” to survey faculty and staff who leave the Cockrell School about their experiences and decision to leave and “stay interviews” to collect data about faculty and staff who choose to remain in the Cockrell School.

Implementation Strategies in Support of Outcome 5
Improving the student experience

5.1 Continue to support and engage graduate students and faculty on discussions of best-practices in student mentoring; distill lessons in graduate student mentoring into a handbook of best practices.

5.2 Foster, support, validate, and engage with existing efforts by students to improve DEI in the community (e.g., through existing student organizations).

5.3 Recognize outstanding efforts related to retention of undergraduate and graduate students, with particular focus on impact of DEI efforts.

Implementation Strategies in Support of Outcome 6
Enabling individual and community success

6.1 Assess and improve the quality of mentoring of graduate students and faculty.

6.2 Identify and remove artificial barriers for undergraduate and graduate students, from curricula to policies to student programming.

6.3 Collect and analyze data on fellowship and scholarship awards (for graduate and undergraduate students) with respect to equitable distribution across diverse groups and use this data to support recruiting and retaining individuals from underrepresented groups.

6.4 Collect and analyze data on faculty, staff, and graduate student service obligations from an equity lens and use this data to develop strategies to balance service across all faculty, staff, and graduate students.

6.5 Collect feedback from diverse faculty, staff, post-docs, and students on impactful professional development programs; use this feedback to guide future community participation on professional development.

6.6 Regularly assess and evaluate the DEI programs that the school provides to ensure that they meet the needs of their target populations.
A Clear Path Forward

In the Cockrell School of Engineering, we are committed to diversity in its many forms, and we aim to promote an inclusive and equitable environment with a strong sense of belonging for all students, faculty, and staff. We recognize that individuals from all groups have not historically had the same access to engineering education, in general, and to the Cockrell School, more specifically, and we seek to address this moving forward. We recognize that the different spaces that community members inhabit may require different approaches to diversity, equity, and inclusion. We embrace the differences among us and strive to create learning and working environments enriched by those differences.

For questions or more information about the DEI Plan, contact Christine Julien, Assistant Dean for Diversity, Equity, and Inclusion for the Cockrell School of Engineering, at c.julien@utexas.edu.
Appendix C
Data and Charts

Faculty Five Year Trends
These first two charts show the demographics of the faculty by rank over the past five years.

Student Enrollments Five Year Trends
The next two charts show the demographics of undergraduate and graduate students over the past five years.
**Undergraduate Student Graduation Rates**

In the following charts, we show four and six year graduation rates both for students who started in CSE and graduated from CSE and for students who started in CSE and graduated from any program at UT. The years listed in the charts indicate the year the students entered the program.

**Undergraduate Student Retention Rates**

In the following charts, we show one and two year retention rates for students who started in CSE and remain in CSE and for students who started in CSE and remain in any program at UT. The years listed in the charts indicate the year the students entered the program.
Appendix D
Faculty Recruiting Handout

COCKRELL SCHOOL OF ENGINEERING
Assistant Dean for Diversity, Equity, and Inclusion

FACULTY SEARCH COMMITTEE RECOMMENDATIONS

Overarching Goals
Each of these recommendations aims to achieve one or more of three very specific goals:

- broaden, expand, and diversify the pool of candidates considered at all stages of the process
- improve the yield of all candidates
- make the recruiting process more equitable

Actively Recruiting Candidates
Active and engaged outreach for candidates is essential. If the goal is to diversify the pool relative to previous searches, you will need to explore new avenues for outreach. Recommendations involving the advertisements are included here, though the ad is often an input to the search committee rather than something under its purview.

- **Be attentive to the language in the advertisement.** Avoid superlatives. Avoid gendered language. Avoid over constraining the position. Consider the 60/100 rule (i.e., that women will apply to a position only when they meet 100% of the stated qualifications; men will apply if they meet 60%). We should decide whether a candidate is “excellent” enough rather than allowing candidates to deselect themselves.

- **Integrate diversity and inclusion language throughout the ad.** Refer to “our diverse student population” or the expectation of collaboration with others “from wide ranging backgrounds.” Reference our commitment to diversity and the fact that successful hires will have space to contribute to those goals.

- **Double and triple check any ad or outreach efforts for accidental implications.** Avoid coupling “women and minorities are encouraged to apply” with “a security sensitive background check will be performed”. Do not rely on legally required statements for diversity and inclusion content.

- **Broaden outreach efforts.** Post the ad in publications targeting women and minorities. Expand personal networks beyond the common institutions and groups. Look for institutions with ADVANCE grants. Outreach to Historically Black Colleges and Universities, Hispanic Serving Institutions, etc.

Using Diversity Statements
The Cockrell School of Engineering will require all applicants to submit a statement of diversity as part of their application materials. Given that we will request and receive these statements, it is important to have a criteria and set of processes associated with the statements. Further, keep in mind that the diversity statements serve dual purposes: (1) they help us determine the degree to which an applicant will contribute to our mission of diversity and inclusion (especially if the applicant has something particularly noteworthy in the statement) and (2) they provide a way for us to demonstrate our diversity and inclusion commitments to applicants.

- **Understand what the department wants to know about the candidates’ commitments to diversity, equity, and inclusion.** The search committee should discuss and characterize their expectations around diversity statements. In doing so, the committee should identify the key criteria by
which these statements will be evaluated. The committee should consider what an “adequate”, a “good”
or an “unacceptable” diversity statement looks like.

- **Be prepared to offer applicants guidance on preparing diversity statements when and if asked.**
  This will likely fall to department chairs, but **everyone** involved in the recruiting process should be aware of
  the existence of the statements and what the departments’ expectations and criteria for them are.

- **Request diversity statements in a way that communicates an openness to candidates from all backgrounds and experiences.** Do not **require** descriptions of past efforts. While an applicant may
draw on past experiences or efforts, the statement should certainly include the applicants’ intentions
related to creating an inclusive classroom, research lab, etc. in the future.

- **Review diversity statements early in the process.** And then also revisit the candidate’s perspective on
diversity throughout the recruiting process, referencing the pre-established criteria. Pre-screening
interviews (via Skype or telephone, etc.) should reference diversity and inclusion, and it should be
discussed in the interview process. **Everyone** involved in recruiting should be prepared to talk about the
department’s shared diversity and inclusion goals.

**Building an Equitable Recruiting Processes**

Biases, implicit or explicit are a fact of human nature. When these biases creep into the faculty recruiting process,
they can influence decisions large and small, leading to potentially inequitable hiring processes.

- **Recognize and accept that you, as a human, are susceptible to bias.**

- **Before reviewing any applications, develop and agree upon a set of well-defined criteria.** Apply
  some structure to the review, even for your individual informal notes. Be sure to address, albeit with
  varying priorities, all aspects of the application. Ensure that the criteria are uniformly applied to all
  applicants. Identify and document relative weights and priorities **before** beginning any application review.

- **Devote time and attention to individual reviews in isolation.** Search committee members should
  review and rate applications independently. No application should be discussed until all assigned
  members have completed their individual review. Initial reviews should not rank the applicants relative to
  one another. Rather establish the degree to which an individual applicant satisfies the criteria.

- **Continually remind committee of the established criteria and the potential for biases.** Continue
  these reminders throughout the establishment of the long and short lists. Focus on, “inclusion” rather than
  “exclusion” Avoid relying on any external information not contained in the application itself.

- **For pre-screening interviews, develop a shared set of core questions to ask all applicants.** Share
  the questions in advance with the applicants. Avoid straying (too far) from the script. Establish time quotas
  for each question/topic and appoint a timekeeper for each call to keep the conversation on track.

- **Solicit structured feedback about interviews.** Focus this feedback on the agreed-upon criteria. Avoid
  allowing (only) free-response feedback. Encourage both the search committee members and others who
  met with the candidate to send feedback immediately.