Mellon College of Science 5-Year Strategic Plan for Diversity, Equity and Inclusion

Introduction

Diversity, equity and inclusion (DEI) is a major focus in Carnegie Mellon University's Strategic Plan 2025 with the goal to "create a diverse and inclusive community and environment where Carnegie Mellon University (CMU) faculty, staff, students, and alumni develop a distinctive ability to work, learn and live in diverse environments." Similarly, achieving diversity, equity and inclusion has been elevated as an important strategic goal of the Mellon College of Science (MCS). We define diversity broadly to include people of all identities, experiences and ideas, and we seek to increase diversity on all dimensions, including gender and underrepresented minority (URM) groups, defined in this plan to include Black, Indigenous and People of Color (BIPOC), Hispanic/Latinx, and LGBTQA+ communities.

As we work to achieve greater diversity, equity and inclusion in our community, we also acknowledge the importance of the fight for racial equality and justice in the world. We recognize our responsibility to work together to assure that racism and injustice in any form are not tolerated in our campus community, and to leverage our influence in advancing true progress in our society.

MCS Value Statement on Diversity

The following statement about "Diversity in the Mellon College of Science" is an update to the one that can be found from the MCS home-page under the "Discover" tab or directly at this link. [Need to update MCS homepage to reflect this statement.]

The Mellon College of Science works actively to build a diverse community of foundational scientists in the Biological and Mathematical Sciences, as well as in Chemistry and Physics, committed to breaking new ground in education and research as well as bringing a wide range of perspectives to these core missions.

We seek to build an inclusive and diverse community both to prepare our students to work in a diverse, global community and to promote creative problem solving and innovation at all levels. We are committed to support the important fight for racial equality, the elimination of systemic injustice in the world, and will not tolerate any form of racism or injustice in our community.

Education is a powerful driver of change. Numerous MCS faculty, staff, postdocs, researchers and students have initiated projects that demonstrate this broad commitment to these goals. For example:

- Curriculum: All MCS students will complete one course in global and cultural understanding as part of the MCS Core Education requirements as of Fall 2017.
- Faculty: The MCS policy on faculty searches requires search committees to be accountable of
 conducting a fair and unbiased search process and follow good faith efforts to achieve diversity
 in the applicant pool. MCS also requires search committee members to develop understanding
 of implicit bias mitigation and accountability to the Dean at key points in the search process.
 MCS provides a web site with resources and guidance to support this effort. Questions can be
 directed to the MCS Associate Dean for Faculty Affairs or the MCS Assistant Dean for
 Diversity. [to be updated to Associate Dean for DEI after search has completed.]
- Graduate recruiting: Departments have engaged in outreach efforts to build awareness of our Ph.D. programs and attract diverse applicants, including recruitment at conferences like the Annual Biomedical Research Conference for Minority Students (ABRCMS) and the National Organization for the Advancement of Black Chemists and Chemical Engineers (NOBCChE) as well as through research collaborations with colleagues at minority-serving institutions and Historically Black Colleges and Universities (HBCU's). In 2020, MCS hosted a Conference for Undergraduate Women in Physics (CUWIP). The Associate Dean for Special Projects is available to advise on departmental and individual faculty and student efforts in recruiting and retaining diverse students.
- Student organizations: Undergraduate-focused student organizations such as Women in Science and the COMPASS (Coaching Minority Progress and Academic Success in Science)

peer mentoring group provide supportive environments and group interactions for students from backgrounds that are traditionally underrepresented in science. These organizations, open to all students, encourage to share experiences with peers and meet with potential role models about different career paths. MCS students also participate in leading Colors@CMU to promote meaningful dialogues and interactions across cultures as well as participate in numerous multicultural student organizations as well as the CMU Center for Student Diversity and Inclusion.

- K-12 Outreach: Innovative faculty-led outreach programs create opportunities for K-12 students to gain experience in hands-on science such as the Physics Concepts Program with local middle school students, CNAST's DNAZone programs for K-12 students, and a variety of activities in the Biological Sciences. The Summer Academy for Math and Science (SAMS) provides opportunities for pre-college students from underrepresented communities to explore STEM-related fields and earn college credit.
- **Teaching development:** MCS offers workshops for faculty and TA's, in collaboration with the Eberly Center for Teaching Excellence, about approaches to teaching, advising and mentoring that are welcoming for students from a wide range of life experiences and backgrounds providing unbiased teaching experiences in the classroom.

5-year MCS Strategic Plan for Diversity, Equity and Inclusion

The Mellon College of Science recognizes that its faculty, staff, researchers, postdocs, as well as undergraduate and graduate communities are not representative of national or local populations that the college aims to serve, particularly in terms of gender and URM status. Thus, the MCS strategic DEI plan aims to increase diversity on all dimensions and at all levels at MCS. Following the goal to actively build a diverse community of scientists committed to breaking new ground in education and research as well as bringing a wide range of perspectives to these core missions, MCS will dedicate personnel and resources to achieve the following objectives in the next five years:

- 1. To actively promote and foster a culture of diversity, equity and inclusive excellence across all platforms within the college, including the promotion of racial equality and justice.
- 2. To meet or exceed the representation of faculty and postdocs at the College's peer institutions from groups who have been historically underrepresented in our academic disciplines, including gender and URM diversity.
- 3. To meet or exceed any Placement Goals as to faculty and as to staff for job groups specific to MCS identified in the University's Affirmative Action Program under Executive Order 11246, and to meet or exceed the University's established benchmark for the hiring of veterans.
- 4. To create and maintain a "critical mass" of undergraduate and graduate students from historically underrepresented groups so as to obtain the educational benefits that flow from a diverse student body and so as to develop a pipeline of diverse scholars for future opportunities in the Academy, including the Mellon College of Science.

Goal and Strategies

The goals and accompanying strategies for the MCS 5-Year Strategic Plan for Diversity, Equity and Inclusion are listed below separately for faculty, staff, postdocs, graduate students, and undergraduates. There are overlaps between the categories as some items apply, for example, to postdocs and also to graduate students.

(A) Faculty

1. Develop and follow best practices for the recruitment and retention of faculty who contribute to the diversity goals of the College such as require applicants to provide diversity statements that address their commitment to promoting diversity.

- 2. Develop an online work-flow system for the faculty hiring process in order to assure use of the MCS check list for faculty hires.
- 3. Develop tools to assess faculty experience and climate, including perceptions of equity and sense of inclusion. MCS will develop the same for postdocs and graduate students.
- 4. Establish designated mentorships for all new faculty hires.
- 5. Charge each department with hosting at least 2 speakers per semester who support diversity.
- 6. Require diverse resources and materials in the classroom such as a statement on Diversity, Equity and Inclusion as part of each course syllabus.

(B) Postdocs

- 1. Participate actively in the Presidential Postdoctoral Fellowship Program and leverage the program to attract more diverse applicants.
- 2. Seek to support 1-2 such postdoc appointments per year across MCS.
- 3. Develop tools to assess the postdoc experience and climate, including perceptions of equity and sense of inclusion.
- 4. Establish designated mentorships for all postdoc hires.

(C) Staff

- 1. Establish ongoing training to increase staff awareness in diversity and inclusion issues.
- 2. Develop and follow best practices for the recruitment and retention of staff who contribute to the diversity goals of the College, including outreach efforts to assure URM diversity in the applicant pool and assuring all candidates are given equal and unbiased consideration.
- 3. Establish designated mentorships for career development.

(D) Graduate Students

- 1. Host national Women in Science and/or URM Ph.D. events open to all graduate students.
- 2. Mentor current MCS undergraduate students to support a diverse student population pipeline of applicants into CMU graduate programs.
- 3. Establish campaigns to reach out to diverse applicants, including URM graduate applicants, with customized emails and landing pages about CMU using the MCS central graduate application system (Slate).
- 4. Participate more actively in M.S. to Ph.D. bridge programs (e.g., Fisk-Vanderbilt Masters-PhD Bridge Program in Physics).
- 5. Leverage connections of the College of Engineering to Howard University or CMU's recent connection to Spelman College.
- 6. Consider establishing a Research Experience for Undergraduate (REU) program to encourage diverse applications to MCS for graduate school.
- 7. Continue to work with the CMU Center for Student Diversity and Inclusion.

(E) <u>Undergraduate Students</u>

- 1. Continue to utilize summer pre-college programs such as APEA or SAMS as pathways to encourage applications of high school students from diverse backgrounds.
- 2. Develop partnerships with local organizations (e.g., M-PowerHouse) to connect with local diverse high-school students.
- 3. Create tutoring program allowing local high school students to receive tutoring by MCS undergraduate students.
- 4. Continue to work closely with CMU Undergraduate Admissions and the Center for Student Diversity and Inclusion.
- 5. Foster the Coaching Minority Progress and Academic Success in Science (COMPASS) peer mentoring and similar groups to provide supportive interactions for MCS students from underrepresented backgrounds.

(F) Overall MCS Strategies

- 1. Start a dialogue series on Diversity, Equity and Inclusion to empower discussions on race and diversity for all MCS members.
- 2. Establish a college advisory group on DEI issues.
- 3. Require training to increase awareness in DEI and establish a DEI professional development program for all MCS faculty, staff, postdocs, and graduate students.
- 4. Hire a full-time Associate Dean of Diversity, Equity and Inclusion experienced in the full spectrum of DEI issues to coordinate and direct the MCS 5-year strategic plan.
- 5. Incorporate CMU's To Serve and To Shine guidelines into the selection of faculty and staff for committees, prizes and recognitions.

Timeline

Due to the global COVID-19 pandemic overshadowing many campus activities in the S20 semester, events originally planned for the spring semester were moved to the fall F20 or spring S21 semester. In particular, MCS plans a well-advertised college-wide Town Hall meeting and small focus discussion groups for all college members to roll out the MCS DEI initiative. The following timeline shows activities of the strategic plan that have already started and gives tentative dates for other items to take place or begin.

Ongoing or Already Started Activities

The following items of the strategic plan are ongoing or have already started as of the fall of 2020: A1., A2., A6., D1., D7., E1., E2., E4., E5., F1., F2., and F4.

Plan Elements to Start in Spring 2021

The following items of the strategic plan are planned to start in the Spring of 2021: A3., A4., A5., B1., B3., B4., C1., C2., C3., D3., D5., and E3.

Plan Elements to Start later than AY 2020/21

The following items of the strategic plan are planned to start after the 2020/21 academic year: B2., D2., D4., D6., F3., F5., and F6.

Assessment Metrics

Some of the goals of the MCS strategic plan are already in progress as of August 2020. These include for example, D1. (e.g., the Department of Physics hosted a regional American Physical Society Conference for Undergraduate Women in Physics in Jan 2020), as well as the undergraduate goals such as E1. (to further exploit the APEA and SAMS summer pre-college programs), E2. (to develop partnerships with local organizations), and E4. (to continue working closely with CMU Undergraduate Admissions) as well as D7. (to continue working with CMU's Center for Student Diversity and Inclusion). In addition, MCS already hosted a thought-provoking first dialogue on Diversity, Equity and Inclusion with further conversations this year scheduled for the fall (F1.)

For other goals of the strategic plan, MCS is in the process of developing assessment metrics to track progress toward the goals of the 5-year plan. Such metrics include establishing a dashboard to monitor the hiring process of faculty, staff, and postdocs, as well as monitor the admission of graduate and undergraduate students by going back 5 years in order to first establishing a baseline and then assessing each year the new trends. Other goals such as A6. (to require a statement on DEI in each course syllabus) are also pursued university wide as of F20 and supported, e.g., by the Eberly Center for Teaching Excellence.

Furthermore, a checklist will be prepared to assess the progress of all goals planned for the 2020/21 academic year with MCS taking stock in the summer of 2021, which of the AY20/21 goals have been achieved. MCS is also in the process of hiring a full-time Associate Dean of Diversity, Equity and Inclusion experienced in DEI issues who will be essential to direct and coordinate the MCS 5-year strategic plan and expand it in the future.

In summary, the initial goals and basic implementation strategies for the MCS 5-Year Strategic Plan for Diversity, Equity and Inclusion are in place with some goals already in progress and most of the others planned to start in the 2020/21 academic year.

Finally, the MCS Strategic Plan is rooted in Carnegie Mellon's longstanding commitment to equal opportunity, diversity, and affirmative action. As an institution, Carnegie Mellon has long been committed to the principle of equal employment opportunity that is free of unlawful discrimination and where employment decisions are made in an unbiased manner. As an institution, Carnegie Mellon has been equally committed to, and has embraced, diversity as a core value and one of utmost importance to the University, and to its continued growth and vitality. The diversity of its faculty, staff, and students is a major focus in Carnegie Mellon's Strategic Plan 2025, which identifies as a part of the core mission of the University "attracting and retaining diverse, world-class talent." Nothing in this Strategic Plan should be construed as a preference, quota, set-aside, or as a floor or ceiling for any group, and nothing in this Plan supersedes Carnegie Mellon's commitment to equal opportunity employment and merit principles.