Introduction

CEMS is committed to continuing to build a culture of inclusive excellence in the college. The primary motivation for this is: In order to solve the grand challenges of our time, representation from all identity groups need to be at the table. This is particularly critical for the STEM disciplines where there is a history of biased data and perspective as technical solutions are developed and implemented.

The CEMS Diversity, Equity, and Inclusion Committee (DEIC) recognizes how the limited scope of data impacts actions and recommends actions, budget, and support that would affect groups not represented in the plan. The following plan promotes actions which rely on limited admission and persistence data. This committee emphasizes the need for bold action from the College, including institutional support that expands beyond communities that receive attention in mainstream scholarship, policies, and structures.

CEMS acknowledges the importance of how identities and affiliations impact community members’ experiences. CEMS recognizes identities pertaining to race, ethnicity, citizenship and documented status, gender identity, sexual and romantic orientations, ability, age, and spiritual and religious practices. We also recognize affiliations, including military and veteran status, that may increase community members' marginalization. CEMS has a responsibility to help end identity-based oppression within higher education and advocate for resources and data needed to identify challenges, implement impactful changes, and measure progress.

UVM has defined 4 pillars of Inclusive Excellence under which the CEMS activities are organized: Academic, Community, Environment, Operations. Our overarching goal for each of these pillars is:

- Academic: Parity in graduation rates for students regardless of their background
- Community: A College that is open and affirming for all
- Environment: Accessible curriculum and spaces
- Operations: Operations that support and evaluate inclusive behavior

The key outcome goals are:

- Parity in retention and graduation rates no matter a students’ background or identity.
- Increase in our 1st year to second year retention rate to 90% and our 6-year graduation rate to 80% by 2023.
- Increase the percentage of undergraduate women and underrepresented minority students (40% women and 10% underrepresented minority students in the first-year class by 2025).
- A student, faculty, and staff culture that embraces diversity, inclusion, respect, and collaboration as measured through the climate surveys.

The current situation in the college is mixed in terms of representation for historically underrepresented groups in STEM.
1. The number of women in the college has increased from approximately 18% to ~30% in the first-year class over the last 5 academic years. Currently, women graduate at a higher rate than men in the college. The 4-year graduation rate for women is ~70%, while it is 60% for men, and after 6 years, the graduation rate for women is about ~74% compared to ~72% for men.

2. 29% of our faculty are women (not including research professors). A majority of our research faculty (60%) are women.

3. 5% of our faculty are Black, Latinx or Indigenous.

4. Overall, our 1-year retention rate has increased from 85% to 89%, but our college’s six-year graduation rates hover around 72%. In our college, students from historically underrepresented groups in STEM have significantly lower retention and graduation rates. The low numbers of students mean that there is huge variability in the % of students graduating in 4 or 6 years.

The following summarizes our actions to achieve these outcomes.

Annual Events since 2018:

1. Diversity workshop for faculty and staff on inclusive excellence at a college meeting each spring semester. This has occurred for two years now. The first year, the workshop themed on unconscious biases was then run by several other units within CEMS.

2. Financial and advising support for student travel to conferences focused on supporting students from underrepresented groups. This funding has been at least $10K / year and has impacted about 20 students a year.

3. A Diversity, Equity, and Inclusion Committee to review and provide recommendations and programming.

4. Co-sponsorship of programming across campus on diversity and inclusion. These include support for affinity group programming, and support for speakers coming to campus who broaden our diversity and inclusion awareness and competency. The funding committed has been between $200 and $500 per event.

Pillar One: Academic

*Overarching Goal: Parity in graduation rates for students regardless of their background*

Recent Diversity and Inclusion Activities:

1. Diversity workshop in the College Meeting on implicit bias and microaggressions. The hope is that as the faculty become more aware of their behavior, they will improve their classroom environments.

2. $10,000 of support for the new National Society of Black Engineers chapter to support travel to both the regional and national conference for the club officers (4) and a few members at large.

3. Supported travel to the [Grace Hopper Conference](https://www.ghcconference.com) for underrepresented groups in Computer Science (we recently received the funding for next year so this will continue) and our continued participation with [BRAID](https://www.braidorg.org).

4. For the past three years, we’ve been sending representation from CEMS Student Services to the annual [NACAC STEM College Fair](https://www.nacac.org) in NYC, which attracts a diverse population of prospective students and parents from the NY metro area.
Year 1 (2020-2021) Action Items:
1. Begin planning for (and raising funds for) a cohort-based program to recruit and retain students from underrepresented groups. A grant to HHMI was submitted and made the first round of cuts. In addition, we have an alum who is awaiting a proposal.
2. Offer and strongly encourage participation in workshops at our pedagogy workshop on Universal Design for Learning and ADA compliance which provides a broad perspective on inclusion in the classroom.
3. Pilot a CEMS-specific Student Success workshops that would be made available for all students to help build academic study skills and confidence and is required for students with a 2.3 or below. Data from other institutions shows that this can increase retention for students in this GPA range.
4. Ensure that student awards are based on cohort instead of # of credits so that those with AP credit are not being considered for awards before those who did not have that access.
5. Add a community service and leadership award to the CEMS student awards to ensure that some awards are not GPA based.
6. Improve the inclusivity of the CEMS website: [https://www.uvm.edu/deanofstudents/student_advocacy](https://www.uvm.edu/deanofstudents/student_advocacy)
7. Add psychological safety measures to CEMS meetings, and encourage faculty to bring that practice into their classrooms.

Year 2-3 (2021-2023) Action Items:
1. Continue to empower and support the Diversity, Equity, and Inclusion Committee and revise the action plan based on their recommendations annually.
2. Pilot a cohort-based program to recruit and retain students from underrepresented groups, and assign or create at least a .5 FTE staff member position to support this program.
3. Organize workshops on “mentoring the mentor, being an effective mentee and team mentoring.” In order to help faculty provide effective mentoring that spans the spectrum of diversity, integrate students' families into their education, and provide rigorous and innovative college experiences.
4. Ask the CEMS faculty to create a policy that establishes mandatory faculty attendance at inclusiveness trainings or a course to direct faculty about language and discriminatory expressions, inclusive excellence.
5. Consider keeping the no GRE requirement as permanent for graduate admissions.
6. Develop a fact sheet to collect important tips and guidelines for advising, teaching, and researching inclusively. Update it regularly, centering BIPOC and other underrepresented scholars and voices.

Pillar Two: Community

Overarching Goal: A College that is open and affirming for all

Recent Diversity and Inclusion Activities in addition to those mentioned above
1. Revamped hiring process that included best practices from U. Michigan on the interview evaluation process. Of the last 14 hires, 4 were women, 2 were from URM in STEM, and 4 were BIPOC (not counting the 2 URM in STEM). The remaining 6 were white men. This is significantly different from hiring in the past.
2. Partnered with RSENR and the Peace & Justice Center to train graduate students on diversity & inclusion during orientation. (This training was required for all Graduate Teaching Assistants (GTAs)).
3. Continued programs that encourage K-12 students in STEM including FIRST Robotics, Girls Who Code, Math Counts and more.
4. Departments will begin discussing including diversity and inclusion in the RPT guidelines, and annual evaluations in the fall of 2021. This may also end up required by the CBA.

Year 1 (2020-2021) Action Items:
1. Educational and Outreach activities to K-12 groups to increase the pipeline of students interested in STEM with a focus on school systems with a more diverse student body. Initially this will be Winooski High School.
2. Developing alumni funding to increase the summer bridge program run by the Mosaic Center to include BIPOC students enrolled as FTFY in CEMS.
3. Continued support of faculty and staff participating in inclusive excellence activities that align with the College’s IE Action Plan.
4. As new positions for hiring become available, continue to aggressively recruit faculty and staff from underrepresented groups.
5. Continue our focus on ensuring that search committees have diversity on the search committee including women, BIPOC, and LGBTQ+.
6. Add this link to the CEMS website with a similar format shown here: https://www.uvm.edu/deanofstudents/bias_response_program

Year 2-3 (2020-2022) Action Item:
1. We will continue to focus on the activities in Year 1 and expand as suggested by our new Diversity, Equity, and Inclusion Committee.
2. Build a Diversity in the Workplace workshop into the new Graduate Career Series that we’re developing for CEMS graduate students for the 2021-2022 academic year.

Pillar Three: Environment
Overarching Goal: Accessible curriculum and spaces

Recent Diversity and Inclusion Activities
1. Swapping of space to enable the development of a larger and more impactful student services space connected to our student lounge space that creates a more welcoming student services environment.
2. New classrooms with technology that makes it easier to record lectures and present material in a variety of ways that can better enable students’ access to class-based material.

Year 1-3 (2020-2023) Action Items:
1. Offer and strongly encourage participation in workshops at our pedagogy workshop on Universal Design for Learning and ADA compliance.
2. Incorporate a "DEI Committee Minute" at each CEMS College Meeting, where a suggestion of a small teaching or advising change can make a classroom more inclusive.
Pillar Four: Operations
Overarching Goal: Operations that support and evaluate inclusive behavior

Recent Diversity and Inclusion Activities
   1. Inclusion of advising activities as part of the faculty annual evaluation process.
   2. Encouragement of all faculty, staff, and students to participate in the University-level climate survey.

Year 1-3 (2020-2023) Action Items:
   1. Comprehensive document review to ensure that inclusive excellence criteria are present in the advising survey, RPT, annual review, staff performance appraisals, course evaluations, and onboarding of new employees.
   2. Advocate for the University to allow reimbursement for childcare costs to support professional development.