



**Adaptations for Sustainable Policies and Increased Recruitment Excellence in Diversity
(ASPIRED)
Evaluation Report
2020-2022
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ASPIRED Program Overview

The ADVANCE program is an initiative aimed at increasing the representation, retention, and advancement of women and ethnically and racially diverse faculty, who are underrepresented across science, technology, engineering, and math departments at the University of Memphis.

Adaptations for Sustainable Policies and Increased Recruitment Excellence in Diversity (ASPIRED) implemented evidence-based strategies from other ADVANCE institutions to change the institutional climate at the University of Memphis (UM) and increase gender equity in recruitment, hiring, retention, and advancement for STEM women faculty. ASPIRED has aimed to address four problems identified by STEM women faculty at UM: 1) implicit bias; 2) isolation; 3) ambiguity and inequality in career advancement; and 4) poor work-life-family integration. To do so, ASPIRED employed three tracks, each incorporating multiple strategies:

- **UM-Intersect** has sought to improve awareness of diversity, inclusion, and cultural responsiveness to foster an inclusive, culturally responsive work environment by educating search committees; conducting focus groups; training on implicit bias using interactive theatre sketches; and improving department climate through workshops and climate improvement grants. Specific elements include:
 - *UM-Intersect STRIDE*
 - *UM-Intersect Welcome Packet*
 - *UM-Intersect Online Resources and Story Map*
 - *UM-Intersect Interactive Sketches*
 - *UM-Intersect Department Climate Workshops and Proposals*
- **UM-Connect** has sought to improve social and professional connections to increase women faculty's sense of community (i.e., decrease isolation) and prospects for professional advancement within their departments through mentoring, networking, and professional development opportunities. Specific elements include:
 - *UM-Connect Mentoring*
 - *UM-Connect STEM Luncheons*
- **UM-Integrate** has sought to increase women faculty's satisfaction with their work-life-family integration and develop STEM department cultures that value personal, familial, and professional roles and responsibilities of faculty. These goals are being achieved by increasing policy awareness and development and supporting professional advancement and work-family integration.
 - *UM-Integrate Grants*
 - *UM-Integrate Family Policy Awareness & Development Initiative*

Additional information about the ADVANCE program can be found at [ADVANCE Adaptation: ASPIRED: Adaptions for Sustainable Policies and Increased Recruitment Excellence in Diversity - Accolades - The University of Memphis.](#)

UM-Intersect

UM-Intersect STRIDE

- A STRIDE committee at the UM was developed and consisted of 7 members. The committee has attended 2 external trainings. One STRIDE workshop offered by Texas A&M, and one webinar series offered by the SEA Change program. They have also attended bi-weekly meetings throughout the year.
- Data have not been collected. The STRIDE committee was provided with a Candidate Evaluation Tool. The plan is to have search committee chairs, with and without STRIDE training, complete the Evaluation Tool. A comparison will be made between the two group's evaluations to determine if they differ in implicit bias and the evaluation of racially diverse and women identifying candidates. Dr. Ozdenerol, PI, is overseeing this project and data collection for it.

UM-Intersect Welcome Packet

- The UM Intersect Welcome packet offers 5 main resources for new faculty, inclusive of links for: navigating the first year, professional development opportunities, childcare information, Memphis area information, and other university resources (e.g., IT help desk). The university web system does collect metrics on clicks or website visits. Mekensie Ivy, Project Coordinator, is overseeing the development of this resource.

UM-Intersect Online Resource and Story Map

- Dr. Ozdenerol has overseen this project and will provide data.

UM-Intersect Interactive Sketches

- Prof. Holly Derr (MFA), who replaced the previous Senior Personnel, and Dr. Craig Stewart, Co-PI, have worked together to prepare sketches for performances for the Directors and Chairs of the College of Arts and Sciences and the STRIDE committee. The initial sketches been developed and were performed in Spring 2022 with a pilot group.
- Dr. Craig Stewart, Co-PI, developed an interview protocol for focus groups, which have been submitted to and approved by IRB. Data was collected from two focus groups in Spring 2022 and is in the process of being analyzed. This data will further inform the content of the interactive sketches.

UM-Intersect Department Climate Workshops and Proposals

- A STEM department climate pre-survey has been conducted, and the full report is in *Appendix A*.
 - Data were collected from 77 men and women representing postdocs, administrators, tenured, tenure-track, and non-tenure track faculty in science, technology, engineering, and mathematics (STEM) departments. STEM departments were chosen and National Science Foundation (NSF, 2019), which included Engineering, Biology, Chemistry, Physics and Materials Science, Computer Science, Mathematical Sciences, and Earth Sciences.
 - In the Spring 2021, emails were sent to 244 potential participants from a university research office using an internet survey procedure (Dillman, 2000). Participants were recruited via an introductory email followed days later by an email with a survey link and two reminder emails. The data were gathered using a Qualtrics online questionnaire, and all responses were confidential and anonymous. The survey was researcher-created and based largely on a review of the literature and a review of NSF ADVANCE grant climate surveys. The survey consisted of 36 items, which measured several subscales that were combined into two areas or

- subscales, woman's experiences with gender discrimination and hostile behaviors and woman's experience with career advancement. Survey items were measured on a five-point Likert type scale, where respondents rated their level of agreement with each item. Each subscale was computed using an average score, ranging from 1 to 5. All subscales had good internal reliability, with Cronbach's alpha coefficient values being over .85 for all subscales.
- The **results** demonstrated that women and men differed in their perspectives related to how women experience diversity, implicit, discrimination, hostile behavior, community, and career advancement. For example, women compared to men believed that women in their STEM departments experienced more discrimination, more hostile behavior, less career advancement support, and less community. Men didn't believe that implicit bias was a major issue or concern in the department while women held a more neutral stance on the topic. Moreover, women rated diversity significantly less favorable than men. Race did not influence responses to the survey. Therefore, the results provide evidence that STEM departments need to build knowledge about gender issues and implicit bias to improve the hiring and retaining of diverse STEM women faculty and improve departmental climate; 2) improve social and professional connections and opportunities to increase women faculty's prospects for career advancement within their departments, and 3) improve the satisfaction women faculty experience in their STEM.
 - Data from 7 chairs were also collected and found in the full report in Appendix A.
- Chairs were provided with "lead it yourself" climate change and submitted Department Climate Improvement Grant proposals. **10** grant proposals were submitted and awarded.
 - In spring 2021, the ASPIRED team conducted department climate surveys and introduced the Department Climate Improvement Grant to all STEM departments to implement climate improvement projects. Examples of activities proposed by the departments include, but are not limited to, symposia or series, search committee training, bias awareness and reduction training, capacity building and networking. These interventions will focus on helping to create climates that are inclusive and responsive to the needs of women and URM faculty — potentially reducing feelings of isolation and reducing hostility and discrimination based on gender and/or minority status. We awarded \$1,000 annual grants to the following departments to improve department climate: Mathematical Science, CERI, Biological Science, Physics and Material Science, Electrical & Computer Engineering, Earth Science, Chemistry, Biomedical Engineering, Computer Science, and Civil Engineering.
 - Each department's planned activities and objectives can be found in a report in Appendix B.

UM-Connect

UM-Connect Mentoring

- Implementation of the first cohort consisting of **3** mentoring groups (mentors: $N = 3$ and mentees: $N = 4$; total = 7/annually) began in Fall 2021. All the mentors and mentees identified as female. All the mentors are professors, some in senior level administration positions. Two of the mentees are associate professors and 2 are assistant professors.
- Dr. Amanda Rockinson-Szapkiw, Co-PI, has overseen the design and development of the training for the mentors and mentees as well as setting up a virtual environment on CANVAS. Oversight of the program is a collaborative effort between Co-PIs Drs. Rockinson-Szapkiw and Parrill.

- Pre and post survey data have been collected and analyzed. Both the mentors and mentees agreed to be satisfied with their career goal progress, professional development opportunities, promotion opportunities, and sense of STEM community at the University of Memphis prior to entering the mentoring program; however, satisfaction ratings in these areas for both the mentor and mentees were higher after participation in the program. Similarly, mentor and mentees rated their mentoring competencies across all areas as high to moderate prior to participating in the mentoring program. However, after participation in the program, competency ratings for both the mentor and mentees improved after program participation.
- The full report is in *Appendix C*.

UM-Connect STEM Luncheons

- **4** STEM luncheons have taken place between Fall and Spring 2022. **90** individuals attended virtually or on campus. Dr. Amanda Rockinson-Szapkiw, Co-PI, has overseen the luncheon program, including invitation and securing of speakers. Mekensie Ivy has assisted with the coordination.
 - Dr. Mellissa Mc Daniels spoke about STEM mentoring on 11/5/2021. **15** participants attend via Zoom, and **15** participated in person.
 - Dr. Lisa Wolf-Wendel spoke about work life balance on 11/30/2021. **10** participants attend via Zoom, and **5** participated in person.
 - Dr. Robin Selinger spoke about career advancement in STEM on 1/24/2022. **5** participants attend via Zoom, and **10** participated in person.
 - Dr. Teri Reed spoke about Diversity, Equity, and Implicit Bias on 2/23/2022. **6** participants attended via Zoom, and **5** participated in person.
 - Dr. Jill Sible spoke about Promoting Excellence and Inclusion in STEM classrooms on 3/22/2022. **14** participants attended via Zoom, and **5** participated in person.
- Pre and post survey data have been collected and analyzed. Results demonstrated that participants agreed that they would again participate in the luncheons and found them useful. They also rated the speakers and topics chosen highly. Finally, they agreed that the luncheons provided improved opportunities to collaborate and network; participants perceived an increased sense of belonging to the UofM STEM community after participation.
- The full report is in *Appendix D*.

UM-Integrate

UM-Integrate Grants

- **5** faculty applied for grants, and **5 \$5,000** grants were awarded to UM faculty in the total amount of **\$25,000**. The ADVANCE budget supported funding for 3 grants, and the Dean of the College of Arts & Science funded via college funds two additional recipients. Co-PIs, Firouzeh Sabri and Stephanie Ivey have had oversight of this program.
- Pre and post survey data have been collected and analyzed. Respondents rated their level of agreement with each item (1 = Strongly Agree; 4 = Strongly Disagree). The lower the mean the stronger the participants agreement. Participant survey respondents (n = 4), after participation in the program, reported improved satisfaction with their career goal progress, professional development opportunities, and promotion prospects. While their perceptions that work interference with family slightly increased, their strain-based work interference with family and family interference with work improved.

Moreover, when asked about the program, 100% ($n = 4$) of the post survey respondents agreed or strongly agreed that they would again apply for the grant and that the program was overall beneficial. All of the respondents ($n = 4$, 100%) agreed or strongly agreed that the proposal application, implementation of the grant, and final reporting for the grant was easy.

- The full report is in *Appendix E*.

UM-Integrate Family Policy Awareness & Development Initiative

Dual-Career Services Taskforce.

- A Dual Career Taskforce at the UM was developed and consisted of 7 members. Co-PIs Drs. Rockinson-Szapkiw and Parrill have had oversight of this project element.
- The taskforce formalized a proposal for programs and policies related to dual-family career services in April 2022. The proposal will be submitted to the faculty senate in Fall 2022.
- To inform the proposal, the task force completed an analysis of comparable institutions' dual career policies and programs (e.g., University of Virginia, Virginia Tech, University of Delaware).
- In January 2022, the task force developed and sent out a needs assessment to solicit buy-in from key stakeholders, to explore community partnerships for dual-career options. Needs assessment data have been collected and analyzed, and the full report is in *Appendix F*.

Note. Due to COVID, the Family-friendly Awareness Taskforce and corresponding activities were not implemented.

Appendix G provides an overview of the project objectives, target, and data collection and analysis plan proposed.

Noteworthy is that a university climate survey, to be conducted every 3 years, has been developed and was Spring of 2022. On the date that this report was written, 418 responses had been collected.

Appendix A: UM-Intersect Department Climate Survey Results

UM ADVANCE conducted a Department Climate Survey across the following departments:

Engineering

Biomedical Engineering
Civil Engineering
Electrical and Computer
Engineering
Mechanical Engineering
Engineering Technology

College of Arts & Sciences

Chemistry
Computer Science
Earth Sciences
Mathematical Sciences
Biological Sciences
Physics and Materials Science

The survey was designed to provide data on the climate across departments to inform ADVANCE programmatic activities. The purpose of this report is to provide a summary of the major themes and results from the 2021 STEM Department Climate Survey.

Survey Development

The ASPIRED Department Climate Survey was based largely on a review of the literature and review of other NSF ADVANCE grant climate surveys. The ASPIRED evaluation team created this survey to include seven scales that were identified as areas of concern in a University Climate survey conducted in 2019. Survey items were measured on a five-point Likert type scale, where respondents rated their level of agreement with each item.

The plan is to use this survey for longitudinal analysis of the influence specific ASPIRED activities are having on department climate, with subsequent department climate survey being employed in the 2021-2022 and 2022-2023 academic years.

Methodology

The 2021 ASPIRED Department Climate Survey was administered in Spring 2021. An initial email invitation to participants, with two subsequent reminders. The survey population included all full-time tenured and tenure-track faculty, non-tenure faculty and instructors, post docs, staff, and administrators from the College of Engineering and the natural science departments in College of Arts & Sciences (CAS).

For each item, the percentage of respondents who selected each response is reported. Moreover, the mean and median for each item is reported for both the entire sample and the sample disaggregated

by college. Mann–Whitney U tests demonstrate if a significant effect occurred for gender identity (e.g., man vs. woman) and race/ethnicity (e.g., White vs. non-White).

The survey also included several open-ended questions. These comments were coded using an open coding process to develop an initial set of codes. Themes and quotes are reported.

Sample

87 individuals opened the survey, with 77 completing the survey, yielding of about 30% response rate.

Position: The majority of respondents were T/TT (64.9%) faculty, with those in assistant and full professors’ ranks being almost evenly represented.

Sex/Gender Identity/ Sexual orientation: The respondents skewed slightly more male (54.5%) than female, with only one respondent identifying as non-binary/non-conforming. Among, 96.1% are “straight or heterosexual,” 1.3% are “lesbian, gay, or homosexual,” and 2.6 % indicated they identified as “something else or preferred not to answer.” UM lacks institutional data on sexual orientation, so it is unclear whether this distribution is similar to that of the UM population who was targeted for this survey.

Race/Ethnicity: Minority faculty are underrepresented among respondents, with 71.4 % of respondents being White. Thirty-one (73.8%) of the men reported being White, five (11.9%) Asian, five (11.9%) Black, and one (2.4%) other. The race/ethnicity makeup for the women were similar, with 23 (67.6%) reporting as White, four (11.8%) Asian, six (17.6%) Black, and one (2.9%) other.

Disability: 2.6% of respondents indicated they have a disability.

Departments: Respondents for the college of CAS make up 77.9% of the volunteer sample. The most respondents reported being from the Biological Science Department. It is significant to note that results of Mann–Whitney U tests did not, however, show a significant effect for college on any of the survey items. Therefore, descriptive statistics are reported disaggregated by college; however, analyses that consider gender identity and race/ethnicity are not disaggregated by college.

Table 1 Respondents by Position

Position	All		CAS		COE	
	n	%	n	%	n	%
Staff	11	14.3	9	15	2	14.3
Postdoc	2	2.6	1	1.7	1	7.1
Instructor	7	9.1	7	11.7	0	0
Non-Tenure Track Faculty	2	2.6	2	3.3	0	0
Tenured/ Tenure Track Faculty*	50	64.9	37	61.7	10	71.4
Administrator	4	5.2	3	5	1	7.1
Prefer to Not Disclose	1	1.3	1	1.7	0	0
All Positions	77	100.0	60	100.0	14	100

Note: All respondents were full time employees, hired between 1974 and 2021. *Of the 50 Tenured/ Tenure Track Faculty, 31 (62%) were tenured. The majority of the Tenured/ Tenure Track Faculty were either held the rank of Assistant Professor ($n = 20, 40\%$) or Professor ($n = 19, 38\%$)

Table 2: Respondents by Gender Identify, Sexual Orientation, Race, and Disability

	<i>All</i>		<i>CAS</i>		<i>COE</i>	
Gender Identity	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Man	42	54.5	31	51.7	9	64.3
Woman	34	44.2	29	48.3	5	35.7
Non-binary/non-conforming	1	1.3	0	0	0	0
Sexual Orientation						
Heterosexual or straight	74	96.1	59	98.3	13	92.9
Not listed above [please specify]	2	2.6	1	1.7	0	0
Gay or Lesbian	1	1.3	0	0	1	7.1
Race						
White	55	71.4	43	71.7	9	64.3
Black or African American	11	14.3	9	15	2	14.3
Asian	9	11.7	7	11.7	2	14.3
Other/ Not Reported	2	2.6	1	1.7	1	7.1
Disability						
No	73	94.8	56	93.3	14	100
Yes	2	2.6	2	3.3	0	0
Prefer To Not Answer	2	2.6	2	3.3	0	0

Table 3: Respondents by Department

Department	<i>n</i>	%
Engineering ($n = 14, 18.2\%$)		
Biomedical Engineering	4	5.2
Civil Engineering	4	5.2
Electrical and Computer Engineering	1	1.3
Mechanical Engineering	2	2.6
Engineering Technology	3	3.9
College of Arts & Sciences ($n = 60, 77.9\%$)		
Chemistry	14	18.2
Computer Science	5	6.5
Earth Sciences	9	11.7
Mathematical Sciences	10	13.0
Biological Sciences	20	26.0
Physics and Materials Science	2	2.6
Did Not Report	3	3.9
Total	77	100%

Survey Results: Employees

Diversity

Respondents were asked a number of questions about diversity within their departments. Agreement with statements was measured on a 5-point scale, from (5) strongly agree to (1) strongly disagree, with 3 being neutral. Table 4 provides the results; percentages are reported. Employee’s ratings were neutral to slightly favorable in regard to perceptions diversity in their departments, particularly when looking at their agreement with the overall experience of individuals in the department being accepting of all (79.3% agreed or strongly agreed).

Table 4: Perceptions about Diversity

Items	SA	A	N	D	SD	All	CAS	COE
						M (SD) (Mdn)	M (SD) (Mdn)	M (SD) (Mdn)
My department is committed to diversity.	33.8	39.0	19.5	6.5	1.3	3.97 (.966) (4)	3.95 (.965) (4)	4 (.679) (4)
My department has diverse faculty.	14.3	29.9	29.9	22.1	3.9	3.29 (1.141) (3)	3.22 (1.243) (3)	3.57 (.646) (4)
My department has diverse leadership.	14.3	29.9	29.9	22.1	3.9	3.28 (1.091) (3)	3.27 (1.175) (3)	3.29 (.726) (3)
My department is accepting of all individuals [not hostile].	46.8	32.5	15.6	5.2	0	4.20 (.895) (4)	4.15 (1.209) (4)	4.29 (.975) (4)

However, results of Mann–Whitney U tests showed a significant effect for gender on each diversity item. Across each diversity item women rated diversity significantly less favorable than men. The individual identifying as non-binary/non-conforming was removed for this analysis as only one respondent identified in this manner. Women believed that their departments were less committed to diversity ($U= 404.5, z = -3.415, p= .001$), had less diversity in faculty ($U= 408.5, z = -3.305, p= .001$) and leadership ($U= 421.0, z = -3.167, p= .002$), and were less accepting of all individuals ($U= 318.0, z = -4.454, p< .001$) than their men colleagues. See Table 5.

Table 5: Perceptions about Diversity Disaggregated by Gender Identity

Items	Men			Women			U
	M	SD	Mdn	M	SD	Mdn	p
My department is committed to diversity.	4.31	.78	4	3.64	.929	4	.001
My department has diverse faculty.	3.69	.975	4	2.76	1.146	3	.001

My department has diverse leadership.	3.64	.958	4	2.85	1.093	3	.002
My department is accepting of all individuals [not hostile].	4.60	.665	5	3.76	.867	4	<.001

Minority respondents believed that their departments were more committed to diversity ($U= 586.5, z = -0.091, p= .928$), had diversity in faculty ($U= 499.0, z = -1.127, p= .260$) and leadership ($U= 517.0, z = -0.913, p= .361$) than their non-minority colleagues. The minority faculty compared to non-minority faculty did not rate their departments as accepting of all individuals ($U= 502.5, z = -1.128, p= .259$). Results of Mann–Whitney U tests did not however show a significant effect for race/ethnicity on any of the diversity items. Across each diversity item minority and non-minority respondents rated diversity similarly. One individual was not included in this analysis as he/she/they did not report. See Table 6.

Table 6: Perceptions about Diversity Disaggregated by Race/Ethnicity

Items	Minority			Non-Minority (White)			U
	<i>M</i>	<i>SD</i>	<i>Mdn</i>	<i>M</i>	<i>SD</i>	<i>Mdn</i>	<i>p</i>
My department is committed to diversity.	4	.926	4	4.02	.909	4	.928
My department has diverse faculty.	3.55	1.143	3.5	3.17	1.139	3	.260
My department has diverse leadership.	3.45	1.184	3.5	3.23	1.050	3	.361
My department is accepting of all individuals [not hostile].	4.09	.750	4	4.28	.907	5	.259

Discrimination

Respondents were asked six questions about discrimination within their departments. Agreement with statements was measured on a 5-point scale, from (5) strongly agree to (1) strongly disagree, with 3 being neutral. Table 7 provides the results. Employee’s ratings were favorable, particularly when looking at their overall disagreement with the with each statement. Respondents selected “disagree” or “strongly disagree” at a rate over 55% on all statements. Only 6.5% of respondents reporting “agreeing” or “strongly agreeing” with the statement, “I have experienced discrimination based on my membership in other groups in my department.”

Table 7: Perceptions about Discrimination

	<i>SA</i>	<i>A</i>	<i>N</i>	<i>D</i>	<i>SD</i>	All	CAS	COE
						<i>M (SD) (Mdn)</i>	<i>M (Mdn)</i>	<i>M (Mdn)</i>
Gender discrimination occurs within my	2.6	22.1	19.5	27.3	28.6	2.45 (1.193)	2.47 (2)	2.21 (2)

department.						(2)		
I have experienced gender discrimination in my department.	2.6	14.3	11.7	28.6	42.9	2.07 (1.170) (2)	2.10 (2)	1.79 (1.5)
Racial discrimination occurs within my department.	2.6	7.8	23.4	33.8	32.5	2.16 (1.046) (2)	2.17 (2)	2 (1.5)
I have experienced racial discrimination in my department.	2.6	3.9	11.7	33.8	48.1	1.80 (.980) (2)	1.71 (2)	2 (2)
Discrimination against members of other groups occurs within my department.	2.6	5.2	26.0	32.5	33.8	2.12 (1.019) (2)	2.08 (2)	2.14 (2)
I have experienced discrimination based on my membership in other groups in my department. [please specify] (6)	3.9	2.6	18.2	31.2	44.2	1.87 (.943) (2)	1.83 (2)	1.86 (2)

Mann–Whitney U tests showed a significant effect for gender on each discriminatory item. The individual identifying as non-binary/non-conforming was removed for this analysis as only one respondent identified in this manner. Women believed that their departments were more prone to gender discrimination ($U= 312.0, z = -4.334, p < .001$), racial discrimination ($U= 372.0, z = -3.735, p < .001$), and discrimination against members of other groups ($U=442.5, z = -2.972, p = .003$) than their male colleagues within their department. Furthermore, women had believed that they had more experiences with gender discrimination ($U= 253.0, z = -5.086, p < .001$), racial discrimination ($U=494.5, z = -2.484, p = .013$), and discrimination based on their membership with other groups ($U= 449.0, z = -2.957, p = .003$) than the men within their department. However, both men and women did not believe that discrimination, whether by gender or race, was an issue within their department. See Table 8.

Table 8: Perceptions about Discrimination Disaggregated by Gender Identity

Items	Men			Women			U
	<i>M</i>	<i>SD</i>	<i>Mdn</i>	<i>M</i>	<i>SD</i>	<i>Mdn</i>	<i>p</i>
Gender discrimination occurs within my department.	1.90	.932	2.00	3.06	1.116	3.00	<.001
I have experienced gender discrimination in my department.	1.43	.590	1.00	2.79	1.193	3.00	<.001

Racial discrimination occurs within my department.	1.76	.878	2.00	2.58	.969	3.00	<.001
I have experienced racial discrimination in my department.	1.55	.772	1.00	2.03	1.015	2.00	.013
Discrimination against members of other groups occurs within my department.	1.83	1.010	1.50	2.39	.827	2.00	.003
I have experienced discrimination based on my membership in other groups in my department. [please specify] (6)	1.60	.828	1.00	2.12	.857	2.12	.003

Minority respondents believed that their departments were less prone to gender discrimination ($U= 425.0, z = -1.997, p= .046$) than their non-minority colleagues within the department. However, there were no perceived differences for racial discrimination ($U= 588.0, z = -0.072, p= .943$) nor discrimination against members of other groups ($U= 527.5, z = -0.798, p= .425$) between minority and non-minority individuals. Furthermore, minorities did not believe that they experienced gender discrimination ($U= 436.50, z = -1.905, p= .057$), racial discrimination ($U= 544.0, z = -0.496, p= .620$), nor discrimination against members of other groups ($U= 546.0, z = -0.587, p= .557$) more than their non-minority colleagues. Neither minority nor non-minority individuals believed discrimination, whether gender, racial or among different groups, was an issue within their department. One individual was not included in this analysis as he/she/they did not report. See Table 9.

Table 9: Perceptions about Discrimination Disaggregated by Race/Ethnicity

Items	Minority			Non-Minority (White)			U
	<i>M</i>	<i>SD</i>	<i>Mdn</i>	<i>M</i>	<i>SD</i>	<i>Mdn</i>	<i>p</i>
Gender discrimination occurs within my department.	2.00	.926	2.00	2.58	1.216	2.00	.046
I have experienced gender discrimination in my department.	1.64	.848	1.00	2.19	1.19	2.00	.057
Racial discrimination occurs within my department.	2.18	1.181	2.00	2.09	.925	2.00	.943
I have experienced racial discrimination	1.95	1.174	2.00	1.68	.779	2.00	.620

in my department.							
Discrimination against members of other groups occurs within my department.	1.95	.950	2.00	2.13	.981	2.00	.425
I have experienced discrimination based on my membership in other groups in my department. [please specify] (6)	1.77	.922	1.50	1.85	.864	2.00	.557

Sexual Harassment

Respondents were asked three questions about sexual harassment within their departments. Agreement with statements was measured on a 5-point scale, from (5) strongly agree to (1) strongly disagree, with 3 being neutral. Table 6 provides the results. Employee’s ratings were overall favorable, particularly when looking at their overall disagreement with that sexual harassment occurred within their departments. 87.1% of respondents “disagreed” or “strongly disagreed” with this statement. However, while a small percentage, it is significant to note that 11.7% of respondents reported “agreeing” or “strongly agreeing” they would not feel safe reporting sexual harassment and another 11.7% selected they were neutral in regards to feeling safe about reporting.

Table 10: Perceptions about Sexual Harassment

						All	CAS	COE
	<i>SA</i>	<i>A</i>	<i>N</i>	<i>D</i>	<i>SD</i>	<i>M (SD)</i> <i>(Mdn)</i>	<i>M (SD)</i> <i>(Mdn)</i>	<i>M (SD)</i> <i>(Mdn)</i>
Sexual harassment occurs within my department.	2.6	6	9.1	41.6	39	1.95 (1.018) (2.00)	2.00 (.802) (2.00)	1.79 (.802) (2.00)
I have experienced sexual harassment in my department in the last two years	0	6.5	3	37.7	40	1.67 (.885) (1.00)	1.71 (.948) (1.00)	1.57 (.646) (1.50)
I would feel safe reporting sexual harassment if it occurred in my department.	35.1	41.6	11.7	7.8	3.9	3.95 (1.070) (4.00)	3.97 (1.050) (4.00)	4.07 (.997) (4.00)

Mann–Whitney U tests showed a significant effect for gender on each sexual harassment item. The individual identifying as non-binary/non-conforming was removed for this analysis as only one respondent identified in this manner. Women believed that their departments were more prone to sexual harassment ($U= 536.5, z = -1.990, p=$

.047) and more likely to have experienced sexual harassment ($U= 483.00, z = -2.683, p= .007$) than their male colleagues within their department. Furthermore, women felt less safe reporting sexual harassment if it occurred ($U= 457.5, z = -2.851, p= .004$) than the men within their department. However, both men and women did not believe that sexual harassment was an issue within their department. See Table 11.

Table 11: Perceptions about Sexual Harassment Disaggregated by Gender Identity

Items	Men			Women			U
	<i>M</i>	<i>SD</i>	<i>Mdn</i>	<i>M</i>	<i>SD</i>	<i>Mdn</i>	<i>p</i>
Sexual harassment occurs within my department.	1.74	.885	1.50	2.21	1.139	2.00	.047
I have experienced sexual harassment in my department in the last two years	1.48	.833	1.00	1.91	.914	2.00	.007
I would feel safe reporting sexual harassment if it occurred in my department.	4.24	.958	4.00	3.58	1.119	4.00	.004

Mann-Whitney U tests showed no significant effects for race on any sexual harassment item. Both minority and non-minority respondents believed that their departments were not prone to sexual harassment ($U= 488.5, z = -1.296, p=.195$) nor had experienced sexual harassment ($U= 493.0, z = -1.286, p= .198$). Furthermore, both minorities and non-minorities felt safe reporting sexual harassment if it occurred in their department ($U= 510.5, z = -1.018, p= .309$). One individual was not included in this analysis as he/she/they did not report. See Table 12.

Table 12: Perceptions about Sexual Harassment Disaggregated by Race/Ethnicity

Items	Minority			Non-Minority (White)			U
	<i>M</i>	<i>SD</i>	<i>Mdn</i>	<i>M</i>	<i>SD</i>	<i>Mdn</i>	<i>p</i>
Sexual harassment occurs within my department.	1.34	.780	2.00	2.06	1.099	2.00	.195
I have experienced sexual harassment in my department in the last two years	1.41	.503	1.00	1.77	.993	2.00	.198
I would feel safe reporting sexual harassment if it occurred in my department.	4.18	.853	4.00	3.85	1.150	4.00	.309

Hostile and Intimidating Behavior

Respondents were asked three questions about hostile and intimidating behavior, again on a 5-point Likert type scale. Statements focused on how contentious, hostile, and threatening behavior in the department. While 61.1% of respondents reported that hostile and intimidating behavior did not occur (I.e., selecting “disagree” or “strongly disagree”); 24.7% reported experiencing hostile and intimidating behavior in their departments in the last two years.

Table 13: Perceptions about Hostile and Intimidating Behavior

	<i>SA</i>	<i>A</i>	<i>N</i>	<i>D</i>	<i>SD</i>	All <i>M</i> (<i>S</i> <i>D</i>) (<i>Mdn</i>)	CAS <i>M</i> (<i>SD</i>) (<i>Mdn</i>)	COE <i>M</i> (<i>SD</i>) (<i>Mdn</i>)
Hostile and intimidating behavior occurs within my department.	7.8	13	18.2	32.5	28.6	2.41 (1.246) (2.00)	2.41 (1.219) (2.00)	2.29 (1.326) (2.00)
I have experienced hostile and intimidating behavior in my department in the last two years.	7.8	16.9	10.4	24.7	40.3	2.26 (1.370) (2.00)	2.19 (1.383) (2.00)	2.43 (1.284) (2.00)
I would feel safe reporting hostile and intimidating behavior if it occurred in my department.	35.1	31.2	14.3	13.0	6.5	3.74 (1.103) (4.00)	3.83 (1.220) (4.00)	3.71 (1.204) (4.00)

Mann–Whitney U tests showed a significant effect for gender on each hostile and intimidating behavior item. The individual identifying as non-binary/non-conforming was removed for this analysis as only one respondent identified in this manner. Women believed that their departments were more prone to hostile and intimidating behavior ($U= 423.5, z = -3.139, p= .002$) and more likely to have experienced it ($U= 435.0, z = -3.053, p= .002$) than their male colleagues within their department. Furthermore, women felt less safe reporting hostile and intimidating behavior if it occurred ($U= 425.5, z = -3.137, p= .002$) than the men within their department. However, both men and women did not believe that sexual harassment was an issue within their department. See Table 14.

Table 14: Perceptions about Hostile and Intimidating Behavior Disaggregated by Gender Identity

Items	Men			Women			U
	<i>M</i>	<i>SD</i>	<i>Mdn</i>	<i>M</i>	<i>SD</i>	<i>Mdn</i>	<i>p</i>
Hostile and intimidating behavior occurs within my department.	2.00	1.059	2.00	2.88	1.293	3.00	.002
I have experienced hostile and intimidating behavior in my department in the last two years.	1.83	1.146	1.00	2.76	1.458	2.00	.002
I would feel safe reporting hostile and intimidating behavior if it occurred in my department.	4.14	1.049	4.00	3.27	1.306	3.00	.002

Mann-Whitney U tests showed no significant effects for race on any implicit bias item. Both minority and non-minority respondents believed that their departments were not prone to hostile and intimidating behavior within their department ($U = 514.0, z = -0.948, p = .343$) nor had experienced it ($U = 506.0, z = -1.056, p = .291$). Furthermore, both minorities and non-minorities felt safe reporting sexual harassment if it occurred in their department ($U = 502.5, z = -1.091, p = .275$). One individual was not included in this analysis as he/she/they did not report. See Table 15.

Table 15: Perceptions about Hostile and Intimidating Behavior Disaggregated by Race/Ethnicity

Items	Minority			Non-Minority (White)			U
	<i>M</i>	<i>SD</i>	<i>Mdn</i>	<i>M</i>	<i>SD</i>	<i>Mdn</i>	<i>p</i>
Hostile and intimidating behavior occurs within my department.	2.14	.990	2.00	2.49	1.325	2.00	.343
I have experienced hostile and intimidating behavior in my department in the last two years.	2.00	1.234	1.50	2.34	1.413	2.00	.291
I would feel safe reporting hostile and intimidating behavior if it occurred in my department.	4.00	1.113	4.00	3.66	1.285	4.00	.275

Implicit Bias

Respondents were asked three questions about implicit, again on a 5-point Likert type scale. Statements focused on personal and departmental implicit bias. Interestingly, 14.3% of respondents did

not believe that all individuals have implicit bias and 26% reported that their judgements and behaviors were not affected by implicit bias, as evidenced by their selection of “disagree” or “strongly disagree” in regard to these statements. 24.7% of respondents believed implicit bias was a concern in the department.

Table 16: Perceptions about Implicit Bias

	<i>SA</i>	<i>A</i>	<i>N</i>	<i>D</i>	<i>SD</i>	All <i>M</i> (<i>SD</i>)) (<i>Mdn</i>)	CAS <i>M</i> (<i>SD</i>)) (<i>Mdn</i>)	COE <i>M</i> (<i>SD</i>)) (<i>Mdn</i>)
All individuals have implicit biases that may influence their judgments and behaviors.	23.4	44.2	18.2	6.5	7.8	3.72 (1.103) (4.00)	3.75 (1.154) (4.00)	3.79 (.699) (4.00)
I have implicit biases that may influence my judgments and behaviors.	10.4	45.5	18.2	15.6	10.4	3.33 (1.148) (4.00)	3.31 (1.221) (4.00)	3.50 (.650) (4.00)
Implicit bias is a major issue or concern in my department.	7.8	16.9	29.9	31.2	14.3	2.75 (1.133) (3.00)	2.80 (1.215) (3.00)	2.64 (.745) (3.00)

Mann–Whitney U tests only showed a significant effect for gender on implicit bias items for one item. The individual identifying as non-binary/non-conforming was removed for this analysis as only one respondent identified in this manner. Both women and men were neutral about whether or not all individuals have implicit biases that may influence their judgments and behaviors ($U=587.0, z = -1.406, p = .160$) and about whether they themselves have implicit biases that may influence their judgments and behaviors ($U=662.5, z = -0.570, p = .569$). However, men did not believe that implicit bias was a major issue or concern in the department ($U=444.5, z = -2.914, p = .004$) while women held a more neutral stance on the topic. However, both men and women did not believe that sexual harassment was an issue within their department. See Table 17.

Table 17: Perceptions about Implicit Bias Disaggregated by Gender Identity

Items	Men			Women			U
	<i>M</i>	<i>SD</i>	<i>Mdn</i>	<i>M</i>	<i>SD</i>	<i>Mdn</i>	<i>p</i>
All individuals have implicit biases that may influence their judgments and behaviors.	3.57	1.151	4.00	3.91	1.042	4.00	.160

I have implicit biases that may influence my judgments and behaviors.	3.24	1.206	4.00	3.42	1.091	4.00	.569
Implicit bias is a major issue or concern in my department.	2.40	1.061	2.00	3.18	1.103	3.00	.004

Minority respondents believed that it was less likely for individuals to have implicit biases that influence their judgments and behaviors ($U= 344.5, z = -3.028, p= .002$) and that they themselves were less likely to have implicit biases that influence their own judgments and behaviors ($U= 260.5, z = -4.048, p < .001$) than their non-minority colleagues within the department. However, there were no perceived differences for whether or not implicit bias was a major issue or concern within the department ($U= 529.0, z = -0.771, p= .441$) between minority and non-minority individuals. Neither minority nor non-minority individuals believed that implicit bias was an issue within their department. One individual was not included in this analysis as he/she/they did not report. See Table 18.

Table 18: Perceptions about Implicit Bias Disaggregated by Race/Ethnicity

Items	Minority			Non-Minority (White)			U
	<i>M</i>	<i>SD</i>	<i>Mdn</i>	<i>M</i>	<i>SD</i>	<i>Mdn</i>	<i>p</i>
All individuals have implicit biases that may influence their judgments and behaviors.	3.09	1.269	3.00	3.98	.930	4.00	.002
I have implicit biases that may influence my judgments and behaviors.	2.45	1.143	2.00	3.68	.956	4.00	<.001
Implicit bias is a major issue or concern in my department.	2.55	1.101	3.00	2.83	1.156	3.00	.441

Community and Career Advancement

Respondents were asked to indicate their level of agreement with four questions related to community within their department and fourteen questions related to career advancement, including their own career advancement, the career advancement of women, and the career advancement of faculty of color. Overall, respondents positively evaluated community and career advancement support and opportunities within their department (see Table 9). However, some respondents noted that women and faculty of color were not provided with equitable career advancement opportunities, as evidenced respondents selecting by “disagree” or “strongly disagree” at a percentage of approximately 10-20% on all items related to women’s and faculty of color’s career advancement. Additionally, respondents selected “disagree” or “strongly disagree” at a percentage of approximately 15-25% on all items related to their own career advancement, indicating they did not receive sufficient support or

opportunities.

Table 19: Perceptions about Community and Career Advancement

						All	CAS	COE
	<i>SA</i>	<i>A</i>	<i>N</i>	<i>D</i>	<i>SD</i>	<i>M</i> <i>(SD)</i> <i>(Mdn)</i>	<i>M</i> <i>(SD)</i> <i>(Mdn)</i>	<i>M</i> <i>(SD)</i> <i>(Mdn)</i>
Community								
My department is collaborative. [not individualistic]	24.7	41.6	19.5	9.1	5.2	3.74 <i>(1.088)</i> <i>(4.00)</i>	3.81 <i>(1.121)</i> <i>(4.00)</i>	3.64 <i>(.745)</i> <i>(3.50)</i>
Individuals in my department are supportive of one another. [not unsupportive]	26	44.2	18.2	6.5	5.2	3.79 <i>(1.075)</i> <i>(4.00)</i>	3.86 <i>(1.121)</i> <i>(4.00)</i>	3.71 <i>(.611)</i> <i>(4.00)</i>
I belong in my department.	27.3	39	20.8	10.4	2.6	3.79 <i>(1.050)</i> <i>(4.00)</i>	3.88 <i>(1.001)</i> <i>(4.00)</i>	3.71 <i>(.994)</i> <i>(4.00)</i>
I feel supported by others in my department.	32.5	35.1	19.5	9.1	3.9	3.84 <i>(1.108)</i> <i>(4.00)</i>	3.92 <i>(1.087)</i> <i>(4.00)</i>	3.93 <i>(.730)</i> <i>(4.00)</i>
Career Advancement								
Women								
Women and men have equitable networking opportunities in my department.	32.5	29.9	22.1	10.4	5.0	3.76 <i>(1.130)</i> <i>(4.00)</i>	3.83 <i>(1.147)</i> <i>(4.00)</i>	3.71 <i>(.914)</i> <i>(4.00)</i>
Women's career advancement is supported in my department.	29.9	37.7	19.5	11.7	1.3	3.82 <i>(1.029)</i> <i>(4.00)</i>	3.98 <i>(.974)</i> <i>(4.00)</i>	3.43 <i>(.852)</i> <i>(3.00)</i>
Women and men have the same opportunities to seek career advancement in my department.	27.3	36.4	22.1	11.7	2.6	3.72 <i>(1.066)</i> <i>(4.00)</i>	3.85 <i>(1.047)</i> <i>(4.00)</i>	3.64 <i>(.745)</i> <i>(3.50)</i>
Women and men have equitable access to resources for career advancement in my department.	28.6	41.6	19.5	9.1	1.3	3.86 <i>(.976)</i> <i>(4.00)</i>	3.98 <i>(.919)</i> <i>(4.00)</i>	3.79 <i>(.699)</i> <i>(4.00)</i>

Women and men have equitable access to mentorship for career advancement in my department.	29.9	36.4	26	5.2	2.6	3.84 (.994) (4.00)	3.95 (.972) (4.00)	3.79 (.699) (4.00)
Faculty of Color								
Faculty of color are supported in career advancement in my department.	23.4	32.5	33.8	9.1	1.3	3.66 (.974) (4.00)	3.71 (1.001) (4.00)	3.64 (.842) (4.00)
Faculty of color and white faculty have equitable networking opportunities in my department.	26.0	24.7	29.9	14.3	5.2	3.53 (1.160) (4.00)	3.51 (1.194) (3.00)	3.79 (.893) (4.00)

Faculty of color and white	24.7	33.8	35.1	5.2	1.3	3.74	3.78	3.64
Faculty have the same opportunities to seek career advancement in my department.						(.929) (4.00)	(.966) (4.00)	(.842) (4.00)
Faculty of color and white faculty have equitable access to resources for career advancement in my department.	24.7	33.8	36.4	3.9	1.3	3.75 (.911) (4.00)	3.78 (.966) (4.00)	3.71 (.726) (4.00)
Personal								
I receive sufficient networking opportunities in my department.	15.6	44.	19.5	13	7.8	3.47 (1.149) (4.00)	3.53 (1.135) (4.00)	3.43 (1.158) (4.00)
My career advancement is supported within my department.	31.2	35.1	16.9	9.1	7.8	3.74 (1.226) (4.00)	3.80 (1.270) (4.00)	3.79 (.802) (4.00)
I have the opportunities I need to seek career advancement within my department.	28.6	27.3	26	10.4	7.8	3.59 (1.235) (4.00)	3.68 (1.238) (4.00)	3.50 (1.092) (4.00)
I receive resources for career advancement	24.7	32.5	18.2	13.0	11.7	3.46 (1.321)	3.51 (1.344)	3.50 (1.160)

within my department.						(4.00)	(4.00)	(4.00)
I receive mentorship for career advancement in my department.	20.8	23.4	32.5	15.6	7.8	3.36 (1.204) (3.00)	3.39 (1.260) (3.00)	3.29 (1.069) (3.50)

Mann–Whitney U tests showed a significant effect for gender on all community and career advancement items. The individual identifying as non-binary/non-conforming was removed for this analysis as only one respondent identified in this manner. Women felt like their departments were less collaborative ($U= 502.5, z = -2.327, p = .020$) and supportive ($U= 494.5, z = -2.426, p = .015$) than their male colleagues believed of their departments. Furthermore, women felt a lesser sense of belonging ($U= 464.0, z = -2.740, p = .006$) and support ($U= 519.0, z = -2.132, p = .033$) from their departments than the men. Women also perceived more gender and racial bias within their departments for networking opportunities (gender: $U= 282.0, z = -4.693, p < .001$; race/ethnicity: $U= 340.5, z = -4.033, p < .001$), career advancement support (gender: $U= 419.0, z = -3.229, p = .001$; race/ethnicity: $U= 418.5, z = -3.232, p = .001$), and opportunities to seek career advancement (gender: $U= 431.5, z = -3.078, p = .002$; race/ethnicity: $U= 386.0, z = -3.608, p < .001$), as well as access to resources (gender: $U= 520.0, z = -2.141, p = .032$; race/ethnicity: $U= 391.0, z = -3.563, p < .001$) for career advancement than their men colleagues in the department. Women also believed that their departments had more gender bias with mentorship in career advancement and mentorship ($U= 447.0, z = -2.928, p = .003$) than the men in the department. Furthermore, women believed their personally had less networking opportunities ($U= 438.0, z = -3.043, p = .002$), career advancement support ($U= 466.50, z = -2.698, p = .007$), and opportunities to seek career advancement ($U= 426.5, z = -3.102, p = .002$), as well as received less resources ($U= 491.0, z = -2.403, p = .016$) and mentorship ($U= 457.5, z = -2.592, p = .010$) on career advancement. See Table 20.

Table 20: Perceptions about Community and Career Advancement Disaggregated by Gender Identity

Items	Men			Women			U
	<i>M</i>	<i>SD</i>	<i>Mdn</i>	<i>M</i>	<i>SD</i>	<i>Mdn</i>	<i>p</i>
My department is collaborative. [not individualistic]	4.00	.963	4.00	3.48	1.093	4.00	.020
Individuals in my department are supportive of one another. [not unsupportive]	4.07	.867	4.00	3.52	1.149	4.00	.015
I belong in my department.	4.07	.973	4.00	3.52	.972	4.00	.006
I feel supported by others in my department.	4.07	1.045	4.00	3.64	1.055	4.00	.033
Career Advancement							
Women							

Women and men have equitable networking opportunities in my department.	4.31	.811	4.50	3.15	1.064	3.00	<.001
Women's career advancement is supported in my department.	4.14	.952	4.00	3.45	.971	4.00	.001
Women and men have the same opportunities to seek career advancement in my department.	4.05	.987	4.00	3.36	1.025	3.00	.002
Women and men have equitable access to resources for career advancement in my department.	4.05	.987	4.00	3.67	.890	4.00	.032
Women and men have equitable access to mentorship for career advancement in my department.	4.12	.968	4.00	3.55	.905	4.00	.003
Faculty of Color							
Faculty of color are supported in career advancement in my department.	3.98	.924	4.00	3.30	.883	3.00	.001
Faculty of color and white faculty have equitable networking opportunities in my department.	4.00	1.036	4.00	3.00	1.000	3.00	<.001
Faculty of color and white faculty have the same opportunities to seek career advancement in my department.	4.07	.867	4.00	3.33	.854	3.00	<.001
Faculty of color and white faculty have equitable access to resources for career advancement in my department.	4.07	.867	4.00	3.36	.822	3.00	<.001
Personal							

I receive sufficient networking opportunities in my department.	3.86	.926	4.00	3.06	1.197	3.00	.002
My career advancement is supported within my department.	4.07	1.068	4.00	3.36	1.295	4.00	.007
I have the opportunities I need to seek career advancement within my department.	4.00	1.012	4.00	3.12	1.317	3.00	.002
I receive resources for career advancement within my department.	3.81	1.131	4.00	3.06	1.435	3.00	.016
I receive mentorship for career advancement in my department.	3.69	.924	4.00	2.94	1.391	3.00	.010

Mann–Whitney U tests showed no significant effects for race/ethnicity on any community and career advancement items. One individual was not included in this analysis as he/she/they did not report. Minorities did not feel like their departments were any less collaborative ($U= 553.0, z = -0.495, p= .621$) or supportive ($U= 585.5, z = -0.103, p=.918$) than their male colleagues believed of their departments. Furthermore, both minorities and non-minorities felt a sense of belonging ($U= 565.5, z = -0.342, p= .732$) and support ($U= 571.5, z = -0.270, p= .787$) from their departments. Neither minorities or non-minorities perceived either gender or racial bias within their departments for networking opportunities (gender: $U= 582.5, z = -0.137, p= .891$; race/ethnicity: $U= 542.0, z = -0.616, p= .538$), career advancement support (gender: $U= 526.5, z = -0.810, p= .418$; race/ethnicity: $U= 555.5, z = -0.462, p= .644$), and opportunities to seek career advancement (gender: $U= 495.5, z = -1.177, p= .239$; race/ethnicity: $U= 573.5, z = -0.247, p= .805$), as well as access to resources (gender: $U= 504.0, z = -1.1089, p= .276$; race/ethnicity: $U= 562.0, z = -0.387, p= .699$) for career advancement in the department. There were also no differences of perceived gender bias with mentorship in career advancement and mentorship ($U= 543.0, z = -0.613, p= .540$) between minorities and non-minorities in the department. Furthermore, both minorities and non-minorities believed they personally had adequate networking opportunities ($U= 519.0, z = -.907, p= .365$), career advancement support ($U= 579.5, z = -0.173, p= .862$), and opportunities to seek career advancement ($U= 582.0, z = -0.142, p= .887$), as well as received the resources ($U= 592.0, z = -0.024, p= .981$) and mentorship ($U= 512.5, z = -0.846, p= .398$) on career advancement. See Table 21.

Table 21: Perceptions about Community and Career Advancement Disaggregated by Race/Ethnicity

Items	Minority			Non-Minority (White)			U
	<i>M</i>	<i>SD</i>	<i>Mdn</i>	<i>M</i>	<i>SD</i>	<i>Mdn</i>	<i>p</i>
My department is collaborative. [not individualistic]	3.86	1.037	4.00	3.74	1.059	4.00	.621
Individuals in my department are supportive of one another. [not unsupportive]	3.86	.941	4.00	3.81	1.075	4.00	.918
I belong in my department.	3.77	.973	4.00	3.85	1.026	4.00	.732
I feel supported by others in my department.	3.95	.950	4.00	3.85	1.116	4.00	.787
Career Advancement							
Women							
Women and men have equitable networking opportunities in my department.	3.86	.889	4.00	3.77	1.171	4.00	.891
Women's career advancement is supported in my department.	4.00	.873	4.00	3.77	1.068	4.00	.418
Women and men have the same opportunities to seek career advancement in my department.	4.00	.816	4.00	3.64	1.128	4.00	.239
Women and men have equitable access to resources for career advancement in my department.	4.09	.750	4.00	3.79	1.026	4.00	.276
Women and men have equitable access to mentorship for career advancement in my department.	4.00	.816	4.00	3.81	1.039	4.00	.540
Faculty of Color							
Faculty of color are supported in career advancement in my department.	3.73	1.120	4.00	3.66	.898	4.00	.644
Faculty of color and white faculty have equitable networking opportunities in my department.	3.41	1.182	3.00	3.62	1.113	4.00	.538

Faculty of color and white faculty have the same opportunities to seek career advancement in my department.	3.73	1.162	4.00	3.75	.830	4.00	.805
Faculty of color and white faculty have equitable access to resources for career advancement in my department.	3.77	1.110	4.00	3.75	.830	4.00	.699
Personal							
I receive sufficient networking opportunities in my department.	3.68	1.171	4.00	3.43	1.101	4.00	.365
My career advancement is Supported within my department.	3.77	1.232	4.00	3.75	1.223	4.00	.862
I have the opportunities I need to seek career advancement within my department.	3.64	1.255	3.50	3.60	1.230	4.00	.887
I receive resources for career advancement within my department.	3.41	1.469	4.00	3.51	1.265	4.00	.981
I receive mentorship for career advancement in my department.	3.55	1.299	4.00	3.28	1.166	3.00	.398

Tenure, Promotion, & Workload Distribution

Respondent were asked about their workload, with statements about reasonability and equitability of workload measured on a 5-point Likert-type scale from (1) strongly disagree to (5) strongly agree. The results (Table 20) indicate that respondents perceive an overall high level of reasonability regarding their workload. While the majority(61.1%) of respondents “strongly agreed” or “agreed” that their workloads were reasonable, over 30% “disagreed” or “strongly disagreed” that workload was equitably distributed across their departments.

Respondents were asked a number of questions related to the promotion and tenure (P&T) process, including questions about P&T clarity, reasonableness, and equitability in the application of standards. Overall findings about P&T include thar respondents (1) perceive little bias or lack of equitability in the P&T process and (2) perceive clarity in the P&T process. They felt standards were reasonable (Table 10).

Table 22: Perceptions about Tenure, Promotion, and Workload

						All	CAS	COE
	<i>SA</i>	<i>A</i>	<i>N</i>	<i>D</i>	<i>SD</i>	<i>M</i> (<i>SD</i>)) (<i>Mdn</i>)	<i>M</i> (<i>SD</i>) (<i>Mdn</i>)	<i>M</i> (<i>SD</i>)) (<i>Mdn</i>)
Workload								
Workload is equitable in my department.	10.4	28.6	24.7	26	10.4	3.03 (1.189) (3.00)	3.00 (1.287) (3.00)	3.21 (.802) (3.00)
My overall workload is reasonable.	11.7	49.4	24.7	10.4	3.9	3.55 (.972) (4.00)	3.63 (1.015) (4.00)	3.36 (.745) (3.50)
Tenure & Promotion								
The tenure and promotion requirements are reasonable.	23.4	41.6	31.2	3.9	0	3.86 (.828) (4.00)	3.97 (.809) (4.00)	3.43 (.852) (3.50)
The tenure and promotion standards are applied consistently across my department.	24.7	29.9	37.7	6.5	1.3	3.68 (.955) (4.00)	3.73 (.997) (4.00)	3.57 (.646) (3.50)
The tenure and promotion process is free from gender bias in my department.	28.6	28.6	33.8	7.8	1.3	3.74 (.998) (4.00)	3.81 (1.008) (4.00)	3.57 (.756) (3.00)
The tenure and promotion process is free from racial bias in my department.	27.3	31.2	37.7	3.9	0	3.80 (.880) (4.00)	3.83 (.913) (4.00)	3.64 (.745) (3.50)
The expectations for tenure and promotion are consistently communicated to me and my colleagues.	23.4	39.0	23.4	13.0	1.3	3.68 (1.009) (4.00)	3.76 (1.006) (4.00)	3.57 (1.016) (3.50)
The expectations I need to meet for tenure and promotion are clear to me.	23.4	33.8	35.1	6.5	1.3	3.70 (.938) (4.00)	3.71 (.929) (4.00)	3.57 (1.016) (3.50)

Mann–Whitney U tests showed a significant effect for gender on all community and career advancement items. The individual identifying as non-binary/non-conforming was removed for this analysis as only one respondent identified in this manner. Women felt like their departments distributed workloads more unevenly ($U= 406.0, z = -3.315, p= .001$) and their workload was less reasonable ($U= 466.0, z = -2.2795, p= .005$) than their male colleagues in the department. Furthermore, women felt that tenure and promotion requirements were less reasonable ($U= 469.5, z = - 2.716, p= .007$), less consistent standards ($U= 442.0, z = - 2.990, p= .003$), and more apt to gender ($U= 414.0, z = - 3.278, p= .001$) or racial bias ($U= 413.0, z = -3.324, p= .001$) within their departments than the men. Furthermore, women believed that expectations for tenure and promotion within their department were less consistently communicated ($U= 462.5, z = -2.751, p= .006$) and less clear ($U= 411.0, z = -3.330, p= .001$) to them than their male colleagues. See Table 23.

Table 23: Perceptions about Tenure, Promotion, and Workload Disaggregated by Gender Identity

Items	Men			Women			U
	<i>M</i>	<i>SD</i>	<i>Mdn</i>	<i>M</i>	<i>SD</i>	<i>Mdn</i>	<i>p</i>
Workload							
Workload is equitable in my department.	3.43	1.063	4.00	2.55	1.175	2.00	.001
My overall workload is reasonable.	3.83	.853	4.00	3.21	1.023	3.00	.005
Tenure & Promotion							
The tenure and promotion requirements are reasonable.	4.07	.838	4.00	3.61	.747	4.00	.007
The tenure and promotion standards are applied consistently across my department.	3.98	.897	4.00	3.33	.924	3.00	.003
The tenure and promotion process is free from gender bias in my department.	4.07	.894	4.00	3.36	.962	3.00	.001
The tenure and promotion process is free from racial bias in my department.	4.10	.821	4.00	3.45	.833	3.00	.001
The expectations for tenure and promotion are consistently communicated to me and my colleagues.	3.98	.897	4.00	3.36	1.025	3.00	.006

The expectations I need to meet for tenure and promotion are clear to me.	4.02	.841	4.00	3.30	.918	3.00	.001
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Mann–Whitney U tests showed significant effects for race/ethnicity on two tenure, promotion, and workload items. One individual was not included in this analysis as he/she/they did not report. Minorities felt like their departments distributed workloads more unevenly ($U= 358.0, z = -2.785, p= .005$) and their workload was less reasonable ($U= 399.0, z = -2.410, p= .016$) than their non-minority colleagues in the department. However, there were no perceived differences in tenure and promotion requirements reasonability ($U= 504.5, z = -1.090, p= .276$), consistency of standards ($U= 554.5, z = -0.476, p= .634$), and bias to gender ($U= 577.5, z = -0.198, p= .843$) or race/ethnicity ($U= 496.0, z = -1.187, p= .235$) within their departments. Furthermore, both groups believed that expectations for tenure and promotion within their department were consistently communicated ($U= 588.5, z = -0.066, p= .947$) and clear ($U= 591.5, z = -0.030, p= .976$) to them. See Table 24.

Table 24: Perceptions about Tenure, Promotion, and Workload Disaggregated by Race/Ethnicity

Items	Minority			Non-Minority (White)			U
	<i>M</i>	<i>SD</i>	<i>Mdn</i>	<i>M</i>	<i>SD</i>	<i>Mdn</i>	<i>p</i>
Workload							
Workload is equitable in my department.	3.64	1.002	4.00	2.79	1.183	3.00	.005
My overall workload is reasonable.	3.95	.899	4.00	3.40	.968	4.00	.016
Tenure & Promotion							
The tenure and promotion requirements are reasonable.	3.73	.827	3.50	3.92	.829	4.00	.276
The tenure and promotion standards are applied consistently across my department.	3.64	.902	3.00	3.72	.988	4.00	.634
The tenure and promotion process is free from gender bias in my department.	3.73	.883	4.00	3.77	1.031	4.00	.843
The tenure and promotion process is free from racial bias in my department.	3.64	.790	3.00	3.89	.913	4.00	.235

The expectations for tenure and promotion are consistently communicated to me and my colleagues.	3.73	.935	4.00	3.70	1.030	4.00	.947
The expectations I need to meet for tenure and promotion are clear to me.	3.73	.883	4.00	3.70	.972	4.00	.976

Survey Results: Department Chairs

Seven Department Chairs responded to the survey. The results are in Table 25.

Table 25: Perceptions of chairs.

Items	Yes	No	Not Sure	Other	Comment
Does your department support faculty networking at places where they will interact with or learn about diverse candidates (e.g. travel funds, stipends to attend a conference for women or underrepresented scientists)?	5	0	0	2	1 said hopefully in the future subject to funds.
Has your department developed structured relationships with industry partners that have been leveraged to recruit prospective applicants from diverse backgrounds?	1	2	0	3	One blank. One "other" says encouraged but not required. One says in the future.
Does your department invite faculty who are women or from underrepresented groups to give talks as distinguished lecturers or scholars?	4	0	1	2	One "other" says in the future.
Is there a department policy requiring diversity and inclusion or implicit bias training for all search committees?	2	2	0	3	One "other" says in the future. Another says they think it should be a university policy.
Are search committees given guidance on how to assess candidates based on standard and non-standard metrics of success (e.g. contribution to campus	2	3	0	2	One "other" says in the future. Another says they have not served as department chair when a search has happened.

diversity, community engagement, engaged pedagogy)?					
Does your department track effectiveness offers (e.g., why offers are accepted or not)?	1	3	0	3	One “other” says in the future. Another says they have not served as department chair when a search has happened.
Are opportunities to connect with affinity groups (e.g. women faculty, faculty and staff councils) on campus and in the community offered to prospective hires and incorporated into the recruitment process?	2	3	2	0	
Does your department have formal mentoring programs, policies, or guidelines addressing the mentoring of new faculty from underrepresented groups?	2	2	1	2	One “other” says in the future. Another says drafting formal mentoring guidelines now, previously mentoring was informal.
Does your department have formal mentoring programs, policies, or guidelines addressing support for associate professors?	1	4	0	2	One “other” says in the future.
Does your department have formal mentoring programs, policies, or guidelines addressing support for women?	1	3	1	2	One “other” says in the future.
Does your department offer centrally organized opportunities and/or incentives for senior faculty to support and collaborate with junior faculty on writing and research?	1	3	1	2	
Are there department-level opportunities to apply for and receive small grants/seed funding or summer research awards and stipends?	1	4	0	2	
Does your department offer career development support for faculty (e.g., P&T preparation, leadership training, research showcase)?	4	2	0	1	
Does your department have structured opportunities and resources available which address the unique challenges faced by	1	5	1	0	

faculty who are women?					
Do faculty have the opportunity to discuss their progress towards promotion and/or tenure with their department chair or dean more than one time during an academic year?	5	0	0	2	One “other” says in the future. Another says formally and informally at department level. Not sure about dean level.
Do all faculty have access to specific departmental guidance and support in navigating the promotion and tenure process (e.g., mentors, workshops, sample materials)?	5	0	1	1	One “other” says mentors, example materials, individual support from T&P committee chair and department chair.
Is there a formal way to evaluate and incorporate a faculty member’s contribution to campus diversity goals and initiatives in their promotion and tenure review?	0	5	0	2	One “other” says not a formal way.
Are promotion and tenure committees required to complete implicit bias training?	1	5	0	1	One “other” says in the future.
Do departmental committees receive information and guidance on how to evaluate feedback from students, peers or other indicators in the assessment of teaching?	2	4	1	0	
Do department committees receive information and guidance on how to assess and weight evidence related to scholarly productivity and impact?	2	3	1	1	
Do department committees receive information and guidance on how to evaluate and assess faculty participation in service and community engagement?	2	4	0	1	One “other” says discussed, not formal guidelines.
Do department committees receive information and guidance on how to consider the unique challenges of underrepresented faculty and issues related to campus climate in their evaluations?	1	5	0	1	One “other” says seems there are more campus resources available now, moving forward will provide.

Does your department encourage faculty to report any grievances, discriminatory experiences, or microaggressions through campus mechanisms (e.g., bias incident report, faculty governance)?	4	1	2	0	
Does your department track the equitable distribution of teaching, advising, and/or committee service loads?	6	0	0	1	One “other” says yes, since they had become chair.
Have data collected through surveys of faculty climate, satisfaction, or workload been used to develop new department policies to improve faculty work life?	1	5	0	1	One “other” says they do not have these data.
Have data collected through surveys of faculty climate, satisfaction, or workload been used to develop new department programs to improve faculty work life?	1	5	0	1	One “other” says they do not have these data.
Does your department encourage the use of formal family leave policies when faculty are caring for a newborn or newly adopted child?	5	0	1	1	One “other” says unfortunately leave policies were not in place when faculty needed them. Now they are and discussions have happened on multiple occasions in the 6 months they had been chair.
Does your department encourage the use of formal full or partial leave policies when faculty are caring for spouses, partners, parents and/or relatives?	5	0	1	1	One “other” says they certainly will be moving forward.
Does your department collect and report data on faculty usage of campus leave policies?	2	4	0	1	One “other” says required.
Does your department provide information on formal leave policies during onboarding sessions for new faculty, chairs and program directors?	4	3	0	0	
Does your department inform tenure-track faculty about the option of extending the pre-tenure time period when family leaves are taken?	6	0	0	1	One “other” says there had been no cases.
Does your department track and report pre-tenure time period	4	2	0	1	One “other” says there had been no cases.

extensions (e.g., tenure clock adjustments due to formal leaves)?					
Does your department annually collect, analyze and report the quantity and quality of faculty office and/or lab space for equity by gender and/or race/ethnicity?	0	5	0	2	One "other" says limited space.
Does your department annually collect, analyze and report distribution of committee assignments for equity by gender and/or race/ethnicity?	1	4	0	2	One "other" says assignments rotate.
Does your department annually collect, analyze and report the distribution of teaching load assignments for equity by gender and/or race/ethnicity?	1	6	0	0	
Does your department annually collect, analyze and report the distribution of student advising responsibilities for equity by gender and/or race/ethnicity?	1	5	0	1	One "other" says assignments rotate.

Appendix B: UM-Intersect Department Climate Improvement Grants

NSF ADVANCE INTERSECT Departmental Grant Proposal responses

Mathematical Sciences

Objectives:

Using funds from the grant, we wish to advertise the department to women and members of historically underrepresented and excluded group. Our approach will include:

1. Encourage applications from women and members of the historically excluded group to apply for faculty positions whenever we have an opening in the department.
2. Invite colloquium distinguished speakers of women and members of the historically excluded group.
3. We hope that we would interest some of these speakers to consider joining our faculty and/or encourage their PhD students who are women or members of historically excluded groups to apply for positions in our department.

Planned activities:

In the Spring of 2021, we have invited two distinguished female statisticians to give colloquium presentations:

1. Professor Mahlet Tadesse is Chair of the Department of Mathematics and Statistics at Georgetown University. She received her doctorate in Biostatistics from Harvard University and served on the faculty at the University of Pennsylvania as prior to joining Georgetown University. She is an elected member of the International Statistical Institute and an elected fellow of the American Statistical Association. Her research focus is on the development of statistical and computational tools for the analysis of large-scale genomic data using stochastic search methods and Bayesian inferential strategies to identify structures and relationships in high-dimensional data sets. Some research problems she is currently working on include identification of biologically relevant markers and prediction of clinical outcomes in a unified manner and integration of biological knowledge in the evaluation of genomic data.
2. Professor Tanya Garcia is an Associate Professor of Biostatistics at the University of North Carolina, Chapel Hill. Dr. Garcia has built a strong interdisciplinary research agenda. It involves national and international collaborations with neuroscientists and biologists, high-impact learning opportunities for students, and service work that promotes a future of diversity in the field of statisticians. Her research focuses on extracting maximal information from large, highly correlated data structures and has led to scientific discoveries in neurodegenerative diseases and the gut microbiome. Her teaching integrates these research activities with interactive, learner-centered projects that promote critical thinking. Her leadership in service activities involves promoting the success of underrepresented groups and providing her professional expertise regionally and internationally.

In addition, Professor Rebecca Hubbard of the University of Pennsylvania has accepted our invitation to be a Colloquium speaker in the Fall of 2022. Her research interest is development

and application of methods to improve procedures for statistical analyses of electronic health records (EHR) and claims data using data science era novel analytic methods.

Budget: At the present, we plan for the presentations to be remote. The department will award an honorarium of \$500 to each of the speakers.

CERI

Objectives:

1. Provide a support mechanism for women scientists at CERI and,
2. Support speaker honoraria for addressing professional development for women in Geophysics.

Planned activities:

Professor Christine Powell and the five current female graduate students met to discuss the working environment for women at CERI on October 5th. They recognized the need for mutual support for one another. Geophysics is a traditionally male field of study and women are usually in the minority. This is the case at CERI. They agreed that providing an outlet for discussion of perceived problems, how to best navigate through the graduate program, and identification of career paths in geophysics would be very beneficial and help foster a positive graduate experience at CERI. They will meet once a month for lunch at a location off campus for a get together of the Seismo Girls of CERI. They have already networked through a WhatsApp group chat. As part of the discussion, they will decide on a list of women who have excelled as geophysicists and invite them to present virtual seminars at CERI. As part of the virtual visit, we will set aside time to discuss each speaker's experiences leading to success as a geophysicist. The funds made available from the University will be used to give each speaker an honorarium and to support the monthly networking activity.

Budget: They estimate that \$750 will be used for three women speakers (\$250 honoraria per speaker). The remaining \$250 will help fund the monthly meetings of the group.

Biological Sciences

Objectives:

Our objectives for the grant include:

1. 1.Increasing awareness of DEI issues that are specifically related to STEM departments
2. 2.Gathering information and points of view from faculty, staff, postdocs, and graduate students about their perceptions and experiences with DEI related issues in STEM and in our department
3. 3.Preparation of an action plan that will help us to address these issues as a department

Planned activities:

Fall of 2022

1. Invite a speaker to discuss the topic "Why Diversity in STEM Matters"
2. Have the speaker facilitate listening groups focusing on areas of STEM DEI, including, but not limited to:

- a. STEM departmental staff
- b. Women in STEM
- c. Non-tenure track faculty
- d. Graduate students
- e. Postdoctoral fellows
- f. Faculty from the Lambuth campus
- g. LGBTQ+

Listening groups are a way for participants to not only present their point of view or experience in a certain area but provide the opportunity for constructive feedback. A facilitator can help to manage and guide the discussions so that participants are equally heard and can help to solicit both positive and critical feedback.

Fall of 2023

1. The speaker/facilitator from Fall of 2022 will return to go through the results from the listening groups/present data that can help the department understand deficiencies in our DEI efforts
2. The speaker will then facilitate a workshop with the department to help create an action plan that is based on the results of the listening groups. The action plan(s) would include short- and long-term objectives and goals to address DEI issues in the department.

Budget: 100%

Physics and Materials Science

Objectives:

- 1) Increase the number of women faculty in the Physics and Materials Science Department
- 2) Educate faculty from diverse backgrounds about appropriate and professional ways to communicate with others, especially women

Planned activities:

- 1) Widely advertise our current position so that we maximize the diversity of the applicant pool. Specifically, advertise among communities that we have not traditionally connected with
- 2) Provide childcare grants to applicants who face challenges attending an interview

Budget:

Year I:

- \$500.00 towards advertising cost. This will allow us to expand our reach and advertise our position among communities that we have not connected with in the past.
- \$500.00 towards child-care grants for female applicants who are selected for interview

Chemistry

Objectives:

1. Increase awareness of DEI issues in STEM at the faculty staff level, graduate student level, and undergraduate level.
2. Improve climate within the department of chemistry related to DEI on issues related to harassment and hostile and intimidating behavior.
3. Supporting efforts to revise tenure and promotion and other department policies to ensure that they are clear and consistent.

Planned activities:

The planned activities include inviting a speaker to speak regarding increased awareness of DEI issues in STEM and improving the climate within the department related to DEI issues, harassment, and hostile and intimidating behavior. Planned activities are expected to include both a workshop and presentation (may be two days). The workshop would be geared more towards faculty discussing DEI issues within the department at the faculty/staff level, graduate level, and undergraduate level. The presentation would be a general seminar for the chemistry department that is geared towards a discussion for faculty, staff, graduate students, and undergraduates. I would like to include the graduate and undergraduates to have a future impact moving forward. This approach is similar to that of a workshop and seminar series on the Meyerhoff program conducted by Michael Summers at Univ. of Maryland Baltimore County (UMBC).

Budget: \$1,000 each year pay an honorarium and travel expenses for a speaker for two days to complete planned activities. Expected funds are \$500 for the honorarium and \$500 in travel expenses. It is anticipated that the department will likely provide additional funds to supplement the ASPIRED funds for both travel and food/snacks.

Earth Sciences

Objectives:

1. Promote increase networking and awareness of equity, diversity, and inclusion as a department priority.
2. Address DEI issues in ESCI, beginning steps in a process. The ASPIRED survey executive summary identified some gaps that faculty were not necessarily aware of, our first step in addressing DEI issues is to discuss what the issues are and how they are experienced in our program.

Planned activities:

1. Promote increase networking and awareness of equity, diversity, and inclusion as a department priority.
 - a. invite speakers for departmentally funded colloquia who not only represent our discipline diversity but intentionally also represent gender, age, rank, and ethnic diversity (no ASPIRED funds sought).
 - b. invite guests to courses who represent gender, age, rank, and ethnic diversity (no ASPIRED funds sought).
 - c. DEI-centered faculty networking time in guest schedules. (no ASPIRED funds sought).
2. Address DEI issues in ESCI, beginning steps in a process.

- a. ESCI seeks ASPIRED funds to hire a facilitator to lead a department faculty conversation to bring experiences driving the identified, gendered gap in experience and perception of department climate and culture. We see this facilitated conversation as key to truly addressing and improving climate/culture.
- b. ESCI seeks ASPIRED funds to hire a facilitator to lead an ESCI student conversation to raise and define student experiences with implicit bias and other DEIJ concerns and to promote professional development for all students with the goal of equipping our graduates with the skills to address DEI issues throughout their graduate and professional careers.

Budget:

1. The department of earth sciences will support the travel funds and other speaker/course guest costs as a department action and priority for investing in our department colloquium series.
2. Refreshments for facilitated session to be paid by department.
3. \$1,000 to hire a professional facilitator from the Mid-South (not UoM) to lead facilitated discussions outlined below. We are working with contacts recommended by Dr. Ozdenerol to identify a facilitator and plan our budget - if we need more than \$1,000 for the sessions outlined below we will identify other department professional development resources.

Facilitator hire for sessions:

- a. 1.5-hr faculty session.
- b. 1.5-hr student session.
- c. planning and discussion ahead of sessions (to review ASPIRED executive summary and experiences shared by faculty and students (anonymous submissions)).
- d. debrief with other STEM chairs (if interested)

** We, the ESCI faculty, consider this to be the first step in a sustained and deliberate effort. We will identify resources to maintain these priority investments following this \$1,000 ASPIRED support.

Thank you for the opportunity to seek funds to address DEI in our STEM program.

Electrical and Computer Engineering

Objectives:

1. Increase awareness of DEI issues in STEM
2. Increase awareness of implicit bias and how to deal with it
3. Improve Faculty Search Committee practices

Planned activities:

1. Invite a speaker to give a talk to our department or have a small workshop on reducing implicit bias (e.g., invite Dr. Dana Crawford who gave a talk last Friday at Psychology, but I was not able to attend due to schedule conflict)

2. Invite an expert in Diversity, Inclusion, and Equity in STEM to speak to our department
3. Have STRIDE Faculty Search Committee training

Budget:

Funds will be used for:

1. paying speaker honorarium
2. for travel expenses, if event is in person and not virtual
3. for some snacks during the talk/workshop

Biomedical Engineering

Objectives:

1. Learn best practices for creating sustainable climate that fosters awareness and supports DEI issues in Biomedical Engineering
2. Create a community that committed to fostering a welcoming, diverse, equitable, and inclusive culture and that provides opportunities for networking to promote awareness, and reinforces identity for Biomedical Engineering faculty, post-docs, and graduate students.

Planned activities:

1. Invite Dr. Christine Schmidt, Chair of BME at UofFL or Dr. Martine LaBerge, Chair of Bioengineering at Clemson University, both of whom have been very successful in creating, retaining, and promoting success of a diverse faculty spanning underrepresented groups (e.g., women, ethnic, racial and gender etc) for in person workshop on best practices for creating sustainable climate that fosters awareness and supports DEI in academic depts/programs.
2. Examine and evaluate existing culture and decide about training and changes moving forward to enhance inclusivity DEI, particular attention to inclusivity.
3. Develop plans for how we would organize events/talks that involve leaders/successful Biomedical Engineering faculty from underrepresented groups during heritage months that promote awareness and provide opportunities for networking (e.g., African American, Women, LGBTQI, LatinX and Native American months)
4. Develop recruiting and hiring strategies for growing a diverse faculty spanning underrepresented groups

Budget: \$800 for invited speaker travel expenses; \$200 food

Computer Science

Objectives:

- 1) Increase the number of underrepresented faculty members in the Computer Science Department
- 2) Increase awareness of DEI (Diversity, Equity, and Inclusion) issues among Computer Science faculty members.

Planned activities:

1) Hire a consultant to conduct a 2-hour workshop for our faculty members on DEI issues in STEM fields. The topics may include, but are not limited to, implicit bias, impostor syndrome, toxic environment, role models, and mentoring.

2) The consultant will also talk to our faculty search committee members, examine our faculty search process, and suggest improvements to increase our success in hiring underrepresented faculty.

3) Invite a speaker who conducts research on diversity issues in computer science to our Fall 2022 colloquium.

Budget:

- \$750.00 towards hiring a consultant. The department will cover any additional expenses as needed.
- \$250.00 towards speaker honorarium.

Civil Engineering

Objectives:

1. Learn best practices for creating sustainable climate that fosters awareness and supports DEI issues in Civil Engineering
2. Create a community that committed to fostering a welcoming, diverse, equitable, and inclusive culture and that provides opportunities for networking to promote awareness, and reinforces identity for Civil Engineering faculty, post-docs, and graduate students.

Planned activities:

- Invite a speaker to discuss and promote success of a diverse faculty spanning underrepresented groups (e.g., women, ethnic, racial and gender etc.) for in person workshop
- Develop plans and organize talks that by inviting leaders and successful Civil Engineering faculty from underrepresented groups during heritage months that promote awareness and provide opportunities for networking
- Develop recruiting and hiring strategies for growing a diverse faculty spanning underrepresented groups

Budget: \$1,000 for invited speaker travel expenses and food

Engineering			CAS		
Department	Have plans	Do not have plans	Department	Have plans	Do not have plans
Biomedical Engineering	X		Biological Sciences	X	
Civil Engineering	X		Chemistry	X	
Electrical & Computer Engineering	X		Computer Science	X	
Engineering Technology		X	Earth Sciences	X	
Mechanical Engineering		X	Mathematical Sciences	X	
			Physics & Material Science	X	
			CERI	X	

Appendix C: UM-Connect Mentoring Data

UM ADVANCE collected pre and post survey data from mentors and mentees participating in the UM-Connect Mentoring program.

The survey was designed to provide data on the effectiveness of the program and to inform ADVANCE programmatic activities. The purpose of this report is to provide a summary of the major themes and results from the data collected.

Survey Development

The pre and post surveys were based largely on a review of the mentoring literature. The ASPIRE evaluation team created this survey to include fifteen scales that were identified as central to effective mentoring and based on a validated mentoring competency and self-efficacy instrument (Rockinson-Szapkiw, in press). Survey items were measured on a five-point Likert type scale (1 = Strongly Agree and 5 = Strongly Disagree) and a twelve-point Likert type scale (0 = Can not do and 11 = Certainly Can do), where respondents rated their level of agreement with each item.

Methodology

The survey was administered in Fall 2021 at the beginning of the program and again in Spring 2022 at the end of the program. At both points in time, an initial email invitation to participants, with two subsequent reminders. The survey population included all full-time tenured and tenure-track faculty participating in the UM Connect Mentoring Program

For each subscale, the mean and standard deviation are computed. Percent change calculation was planned; however, it was not reported as all participants did not complete both the pre and post surveys.

Sample

3 mentors (100%, $N = 3$) and 2 mentees (50%, $N = 4$) completed the presurvey. Mentors were tenured (66.67%, $n = 2$) or tenure-track (33.33%, $n = 1$) professors. One mentor was a dean. A majority of the mentors were non-Hispanic White, U.S. citizens (66.67%, $n = 2$). Mentors came from the College of Arts and Sciences (66.67%, $n = 2$) and College of Engineering (33.33%, $n = 1$). Responding mentees were also non-Hispanic U.S. citizens who were tenure-track professors (100%). These mentees came from the College of Engineering (50%, $n = 1$) and the Lowenberg College of Nursing (50%, $n = 1$). All three mentors completed the presurvey, but only one mentor completed the post survey. Two mentees completed the pre and post survey.

Results

Both the mentors and mentees agreed to be satisfied with their career goal progress, professional development opportunities, promotion opportunities, and sense of STEM community at the University of Memphis prior to entering the mentoring program; however, satisfaction ratings in these areas for both the mentor and mentees were higher after participation in the program. Similarly, mentor and mentors rated their mentoring competencies across all areas as high to moderate prior to participating in the mentoring program. However, after participation in the program, competency ratings for both the mentor and mentees improved after program participation.

Mentor Survey Data (n =3)

<i>SubScale</i>	<i>PreSurvey (n = 3)</i>		<i>Post Survey (n = 1)</i>	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
<i>Satisfaction</i>				
Career Goal Progress (Q=4)	1.25	0.45	1.00	0.00
Professional Development and Opportunity (Q=5)	1.40	0.63	1.00	0.00
Promotion (Q=4)	1.58	0.90	1.00	0.00
Brief Sense of Community (Q=4)	1.83	0.94	1.00	0.00
<i>Mentoring Competencies</i>				
Facilitate Mentor Meetings (Q=4)	9.08	1.38	10.00	0.00
Align STEM Mentoring Relationship Expectations (Q=4)	8.17	1.70	10.00	0.00
Set and Accomplish Goals (Q=4)	7.75	1.22	10.00	0.00

Build and Maintain a Trusting Mentoring Relationship (Q=7)	9.71	1.82	10.00	0.00
Empathetically Challenge my Mentee (Q=6)	7.17	3.15	10.00	0.00
Facilitate my Mentee's Academic and Professional Development (Q=4)	8.33	2.53	10.00	0.00
Support Psychosocial Development (Q=4)	9.42	1.73	10.00	0.00
Use Technology to Facilitate the Mentoring Relationship (Q=4)	8.33	2.15	10.00	0.00
Cultural Responsiveness (Q=8)	9.46	2.34	10.00	0.00
Engage in Ethical Behavior (Q=3)	9.67	2.69	11.00	0.00
Affective Component (Q=5)	6.47	2.90	6.00	4.47

Note. Percentage of chance was not calculated as the mentors who completed the presurvey did not complete the post survey.

Mentee Survey Data (n =2)

<i>SubScale</i>	<i>PreSurvey (n = 2)</i>		<i>Post Survey (n = 2)</i>	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
<i>Satisfaction</i>				
Career Goal Progress (Q = 4)	1.71	0.76	1.13	0.35

Professional Development and Opportunity (Q = 5)	2.10	1.37	1.20	0.42
Promotion (Q = 4)	2.50	1.69	2.00	0.00
Brief Sense of Community Scale (BSCS) (Speer, 2008) [modified] (Q = 4)	3.00	2.14	1.25	0.46
<i>Mentoring Competencies</i>				
Facilitate Mentoring Meetings (Q=4)	9.88	1.25	9.75	1.50
Align STEM Mentoring Relationship Expectations (Q=4)	9.63	1.60	10.25	0.96
Set and Accomplish Goals (Q=4)	9.75	1.75	9.25	0.50
Build and Maintain a Trusting Mentoring Relationship (Q=7)	10.57	0.94	10.00	1.00
Accept Challenge (Q=6)	8.92	2.07	9.33	1.21
Engage in Academic and Professional Development (Q=4)	9.75	1.39	10.50	1.00
Engage in Psychosocial Development (Q = 4)	10.13	1.73	10.50	1.00
Use Technology to Engage the Mentoring Relationship (Q=4)	11.00	0.00	11.00	0.00

Cultural Responsiveness (Q=8)	10.69	0.79	10.50	1.07
Engage in Ethical Behavior (Q=3)	10.83	0.41	11.00	0.00
Affective Component (Q=5)	5.40	4.27	5.80	4.27

Note. Percentage of chance was not calculated as the mentees who completed the presurvey were not the same mentee participants who not completed the post survey.

Appendix D: UM-Connect Luncheon Data

UM ADVANCE collected survey data from the UM-Connect Luncheon participants.

The survey was designed to provide data on the effectiveness of the program component and to inform ADVANCE programmatic activities. The purpose of this report is to provide a summary of the major themes and results from the data collected.

Survey Development

The pre and post surveys was based largely on a review of the literature. The ASPIRE evaluation team created this survey to include 17 items that were identified as central to the goals of each luncheon. Survey items were measured on a four-point Likert type scale, where respondents rated their level of agreement with each item (1 = Strongly Agree; 4 = Strongly Disagree). The lower the mean the stronger the participants agreement.

Methodology

The survey was administered following each luncheon in Fall 2021 and Spring 2022. An initial email invitation to participants, with a subsequent reminder.

For each item the mean and standard deviation are computed.

Sample

Of the 90 luncheon participants, only 9 (10%) completed the survey across all four luncheons. Of the 9 respondents, 77.78% ($n = 7$) attended the event on campus and 22.22% ($n = 2$) attended via zoom. 8 respondents provided demographic information and reported that they were U.S. citizens coming from various colleges: the College of Arts and Sciences (12.5%, $n = 1$), the College of Education (12.5%, $n = 1$), the College of Engineering (37.5%, $n = 3$), the College of Health Sciences (12.5%, $n = 1$), the Graduate School (12.5%, $n = 1$), and the Lowenberg College of Nursing (12.5%, $n = 1$). Participants reported being tenured (55.56%, $n = 5$), tenure-track (22.22%, $n = 2$), and non-tenured (11.11%, $n = 1$) professors.

Results

Respondents rated their level of agreement with each item (1 = Strongly Agree; 4 = Strongly Disagree). The lower the mean the stronger the participants agreement. With means close to one on each item, participants agreed that they would again participate in the luncheons and found them useful. They also rated the speakers and topics chosen highly. Finally, they agreed that the luncheons provided improved opportunities to collaborate and network; participants perceived an increased sense of belonging to the UofM STEM community after participation.

STEM Luncheon Data (n =9)

<i>Item</i>	<i>M</i>	<i>SD</i>
1. I would participate in an ASPIRED	1.22	0.44

CONNECT webinar/luncheon again.		
2. The webinar/luncheon was overall useful.	1.33	0.50
3. The webinar/luncheon speaker was knowledgeable about the topic.	1.00	0.00
4. The webinar/luncheon speaker had good communication skills.	1.11	0.33
5. The webinar/luncheon speaker was engaging.	1.33	0.71
6. The webinar/luncheon speaker had good presentation materials.	1.44	0.73
7. The webinar/luncheon registration was easy.	1.00	0.00
8. The webinar/luncheon was convenient to attend.	1.11	0.33
9. I liked the webinar delivery system (e.g., on-campus, Zoom).	1.11	0.33
10. The webinar/luncheon was conducive to the goals set for the event.	1.11	0.33
11. The webinar/luncheon provided resources useful to my career advancement.	1.22	0.44
12. The webinar/luncheon increased my opportunities for career advancement.	1.67	0.71
13. The webinar/luncheon increased my networking opportunities within the STEM community.	1.78	0.83
14. The webinar/luncheon increased my opportunities for	1.89	0.93

interdisciplinary collaboration.		
15. The webinar/luncheon increased my sense of belonging within the University of Memphis community.	1.67	0.71

<i>Item</i>	<i>M</i>	<i>SD</i>
The webinar/luncheon medium improved my knowledge about mentoring.	1.57	0.53
The webinar/luncheon medium improved my mentoring skills.	1.86	0.69
The webinar/luncheon medium improved my knowledge about work-life integration.	1.00	0.00
The webinar/luncheon medium improved my work-life integration.	2.00	0.00

Benefits and Suggestions for Improvement

What information did you learn at the luncheon/webinar that will be useful/beneficial to your work or advancement at the University of Memphis?	Useful mentoring techniques and information
What did find most useful/beneficial about the luncheon/webinar experience?	Resources (e.g., mentoring, work-life balance) Opportunity for networking
What could make your luncheon/webinar experience better? What could be improved?	Icebreaker/ Get to Know Each Other Activities Additional opportunity and time to interact with the speaker Roundtable discussions on luncheon topics Networking time after presentation
We're looking for suggestions for luncheon/webinar topics. What topics are of interest to you, or do you think would be valuable?	Professional networking Recruiting for Diversity techniques Enhancing leadership and management skills Work-life balance Fostering mental health

	Creating an inclusive environment Interactive mentoring and collaboration Best practices for mentoring and mentees
Please provide additional comments.	Good food Breakout time to get to know colleagues across campus

Appendix E: UM-Integrate Grant

UM ADVANCE collected pre and post survey data from grant recipients participating in the UM-Integrate grant program.

The survey was designed to provide data on the effectiveness of the program and to inform ADVANCE programmatic activities. The purpose of this report is to provide a summary of the major themes and results from the data collected.

Survey Development

The pre and post surveys were based largely on a review of the family integration literature. The ASPIRE evaluation team created this survey to include 7 scales that were identified as central to effective work-life integration. Survey items were measured on a four-point Likert type scale, where respondents rated their level of agreement with each item.

Methodology

The survey was administered in Fall 2021 at the beginning of the program and again in Spring 2022 at the end of the program. An initial email invitation to participants, with two subsequent reminders at each point in time. The survey population included all full-time tenured and tenure-track faculty participating in the UM-Integrate Grant Program ($N = 5$).

For each subscale, the mean and standard deviation were computed. Percent change calculation was planned; however, it was not reported as participants did not complete both the pre and post surveys.

Sample

5 recipients (100%) completed the presurvey. All respondents were either U.S. Citizen (50%, $n = 3$) or Permanent Resident (50%, $n = 3$). Half of them were White (50%, $n = 3$), while the others were Asian (33.33%, $n = 2$) or American Indian/Alaskan Native (16.67%, $n = 1$). There were five (83.33%) tenure or tenure-track faculty with one (16.67%) non-tenure track faculty member. There were 4 (80%) respondents for the post survey.

Results

Respondents rated their level of agreement with each item (1 = Strongly Agree; 4 = Strongly Disagree). The lower the mean the stronger the participants' agreement. Participant survey respondents ($n = 4$), after participation in the program, reported improved satisfaction with their career goal progress, professional development opportunities, and promotion prospects. While their perceptions that work interference with family slightly increased, their strain-based work interference with family and family interference with work improved. Moreover, when asked about the program, 100% ($n = 4$) of the post survey respondents agreed or strongly agreed that they would again apply for the grant and that the program was overall beneficial. All of the respondents ($n = 4$, 100%) agreed or strongly agreed that the proposal application, implementation of the grant, and final reporting for the grant was easy.

Grant Recipient Survey Data

<i>SubScale</i>	<i>PreSurvey (n = 5)</i>		<i>PostSurvey (n = 4)</i>	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Career Goal Progress (Q = 1)	1.85	0.93	1.00	0
Professional Development and Opportunity (Q = 2)	2.00	0.73	1.00	0
Promotion (Q = 4)	2.05	1.23	1.00	0
Time-based work interference with family (Q = 3)	1.58	0.67	1.75	.81
Time-based family interference with work (Q = 3)	3.42	1.00	1.75	.81
Strain-based work interference with family (Q = 3)	1.75	0.75	1.58	.61
Strain-based family interference with work (Q = 3)	3.25	0.45	1.58	.61

Appendix F: Dual Career Needs Assessment

A dual career policy is being developed as part of ASPIRED. To inform policy development, two Dual Career Policy Surveys (one for chairs and one for faculty) were conducted across the following departments to inform policy development.

Engineering

Biomedical Engineering

Civil Engineering

Electrical and Computer
Engineering

Mechanical Engineering

Engineering Technology

College of Arts & Sciences

Chemistry

Computer Science

Earth Sciences

Mathematical Sciences

Biological Sciences

Physics and Materials Science

The surveys were designed to provide data on dual career needs across departments to inform ADVANCE proposed policy. The purpose of this report is to provide a summary of the major themes and results from the 2022 surveys.

Survey Development

The ASPIRED Dual Career Policy Surveys was based largely on a review of the literature and review of other NSF ADVANCE grant surveys and dual career policy websites. The Dual Career Policy committee created the survey to include 16 items scales. Survey items were measured using primarily bipolar responses [yes or no] and open-ended responses.

Methodology

The 2022 ASPIRED Dual Career Policy Surveys were administered in Spring 2022. An initial email invitation to participants. The survey population included all full-time tenured and tenure-track faculty, and administrators from the College of Engineering and the natural science departments in College of Arts & Sciences (CAS).

For each item, the percentage of respondents who selected *each response is reported*. The survey also included several open-ended questions. These comments were coded using an open coding process to develop an initial set of codes. Themes and quotes are reported

Sample

26 faculty completed the survey. Demographics were not collected.

Survey Results: Faculty

Twenty-six faculty responded to the survey.

While no faculty member is currently considering leaving the University of Memphis, 2 (7.7%) noted that their spouse or partner is considering alternative employment, which would require them to leave the university and 5 (19.2%) of faculty respondents are living in a location separate from their spouse or partner due to careers. A few faculty have declined job offers ($n= 5, 19.2\%$) or considered declining their University of Memphis position ($n= 4, 15.4\%$) due to lack of services or employment for a spouse or partner.

Almost half of faculty respondents ($n= 12, 46.2\%$) noted that they would have requested a remote or hybrid position to better accommodate their spouse/partner dual careers, when hired if was available and the job responsibilities allowed for the accommodation. Additionally, three (11.5%) faculty who did not need to consider spouses or partners at the time of hire would have requested this accommodation if they would have had a spouse or partner to consider. Thus, more than half of respondents (57.7%) noted that this was an important accommodation for the U of M to offer. More than half of respondents (53.8%) reported the need for dual career services at the UofM.

Table 1: Faculty Responses

Items	No		Yes		No partner	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Spousal Consideration						
Have you declined a position due to lack of spouse/partner job placement?	21	80.8	5	19.2		
Did you consider declining your University of Memphis position due to lack of spouse/partner job placement assistance?	18	69.2	4	15.4	4	15.4
Are you currently a dual career couple living in separate locations?	19	73.1	5	19.2	2	7.7

Have you considered leaving your University of Memphis position due to lack of employment for your spouse/partner?*	24	92.3	0	0	2	7.7
Remote, Hybrid, and Flexible Work						
When you were hired, would you have requested a remote or hybrid position to better accommodate your and your spouse/partner dual careers, if it was available and your job responsibilities allowed for the accommodation?	12	46.2	9	34.6	5*	19.2
When you were hired, would you have requested a flexible schedule to better accommodate your and your spouse/partner dual careers, if it was available and your job responsibilities allowed for the accommodation?	10	38.5	12	46.2	4**	15.4
Spousal/Partner Assistance						
When you were hired, would you have requested assistance with spouse/partner job placement, if it was available?***	11	42.3	11	42.3	4**	15.4

Note. *in the open-ended responses two faculty however noted that their spouses were considering out of town positions, which may require them to quit. ** 3 respondents Didn't have a spouse/partner but would have requested this accommodation. ***When spousal assistance would have been requested, 6 (23.1%) of the respondents would have requested a faculty position and 3 (11.5%) a staff position within the university for the spouse. 12(46.2%) would have requested assistance with finding a position external to the university. 5 (19.2%) found this question N/A.

Types of Services

Respondents were asked resources would or would have been most helpful when helping with spouse/partner job placement. The following were their answers.

Responses	<i>n</i>	%
Career Services Person dedicated to spouse/partner job placement (whether internal or external to the university)	20	76.9

Memphis area job boards	6	23
Funds to help create a new position for a partner/spouse	4	15.4
Community Career Network	4	15.4
Guide for dual career faculty seeking academic appointment	2	7.7
Other	3	11

Moreover, respondents provided open ended responses about obstacles experienced related to dual career. They noted the following:

Funding for Spousal/ Partner Positions: One faculty noted that “A lack of funds to support hiring a qualified spouse into a faculty line (tenure-track or non-). Both my wife and I turned down jobs where a university could not provide such opportunities.” While two other faculty noted that they choose UofM as both they and their spouse were offered positions at the university. For example, one stated, “Fortunate that UofM had faculty positions for both of us. During employment, the insurance policies penalize couples who both work for the UofM.” However, another faculty noted that lack of career advancement at UofM was a challenge for the spouse.

Remote Flexible Schedule Options: 2 (7.7%) faculty noted that their spouses’ companies allowed for remote or flexible work which enabled them to move to Memphis and navigate the dual career situation well.

Childcare: 4 (15.4%) noted that childcare options were a challenge.

Survey Results: STEM Chair Results

Eight chairs responded to the survey.

Administrators have experienced dual career challenges with 50% of respondents reporting that faculty have declined offers due to lack of spouse/partner job placement assistance and that 50% of faculty have left positions due to spouse/partner's employment in another location.

Administrators have also had at least 25% of faculty request remote, hybrid, or flexible work to accommodate dual career family challenges.

Table 1: Administration [Chair] Responses

Items	No		Yes	
	<i>n</i>	%	<i>n</i>	%
Have you had a faculty candidate decline a position due to lack of spouse/partner job placement assistance?	4	50.0	4	50.0
Have you had a faculty member leave your department due to a	4	50.0	4	50.0

spouse/partner's employment in another location?				
Have you had a faculty member leave your department due to a spouse/partner's lack of employment opportunities?	6	75.0	2	25
Have you had a job candidate that requested assistance with spouse/partner job placement?	2	25	6	75
Have you had a job candidate that request a flexible schedule to accommodate a dual career family?	6	75	2	25
Have you had a job candidate that request a hybrid or remote work location to accommodate a dual career family?	5	62.5	3	37.5

Types of Services

Respondents were asked resources would or would have been most helpful in hiring faculty with dual career situations. The following were their answers, with 75% of chair respondents noting that a Career Services Person dedicated to spouse/partner job placement and Funds to help create a new position for a partner/spouse would be helpful.

Responses	<i>n</i>	%
Career Services Person dedicated to spouse/partner job placement (whether internal or external to the university)	6	75
Funds to help create a new position for a partner/spouse	6	75
Guide for dual career faculty seeking academic or other appointment	5	62.5
Memphis area job boards	3	37.5
Community Career Network	3	37.5
Information on hiring a spouse or partner for a position without a search (search waiver criteria in search policy)	2	25

Moreover, via open ended questions, chairs reported the following challenges.

lack of positions for spouses, often in specialized areas

lack of mechanisms/resources to find jobs for spouse

lack of funds for spousal hiring

Lack of remote and hybrid opportunities, with one administrator noting, “It was really difficult for me to make the decision to join here, and it was good fortune that my husband received an opportunity to work remotely for a company in the city we were moving out from.”

Appendix G: Data Analysis Plan

Objectives	Target	Data and Analysis
<p>UM-Intersect Decrease implicit bias and foster inclusive, culturally responsive work environment</p>	<p>-Increased awareness and understanding of implicit bias -Increased knowledge of how to improve diversity and create an inclusive, culturally responsive and respectful work environment -Increased access to campus resources for new hires and faculty</p>	<p>- Metrics for participation and policy usage - Pre/post Survey (pre/post intervention) - Focus Group interviews (search committees) - Taskforce interviews/Focus groups (annual) - Observation (bi-annual) - Document review (biannual) - Climate survey/institutional data(annual) - Within group analysis and Qualitative analysis Yin's [50] case study guidelines</p>
<p>UM-Connect Decrease in isolation and increase women faculty's social (e.g., sense of community) connections</p>	<p>-Increased networking across departments and colleges -Increased interdisciplinary and community collaborations -Improved sense of belonging -Understood tenure and promotion policies, resources, opportunities -Increased prospects for career advancement (e.g., obtaining tenure, promotion, administration position)</p>	<p>- Mentor/Mentee Pre-Post Survey and intervention - Post STEM Luncheon (after each luncheon) - Interviews and Focus Groups (post mentoring intervention) - Intervention Observation (bi-annual) - Document review (bi-annual)- - Climate survey/ institutional data (annual) - Within-group analysis and Qualitative analysis Yin's [50] case study guidelines</p>
<p>UM-Integrate Enhance work/life integration</p>	<p>-Understood, transparent, consistent hiring protocol -Positive views of dual career hires -Increased awareness of parental leave and family friendly policies -Increased participation for social networking and family friendly events -Increased satisfaction with work-life-family integration</p>	<p>- Document review (monthly) - Institutional data (annual) - Task force group (annual) - Dual career task force group (annual) - Family Friendly task force group (annual) - Work/life integrate grant review (annual) - - Within-group analysis and Qualitative analysis Yin's [50] case study guidelines</p>