

Assessing the Academic Work Environment for Women Scientists and Engineers: Report of the UM 2001 Survey on Academic Climate and Activities

Weighted Analyses Addendum

As discussed in the study report, *Assessing the Academic Work Environment for Women Scientists and Engineers* (September 26, 2002), we had only five possible indicators with which to evaluate the representativeness of the sample: track (tenure, research, clinical), college, rank, race-ethnicity and gender. The three faculty tracks were equivalently represented in the respondent sample and the pool of faculty included in the survey. Within the tenure and research tracks, there were no significant differences by race, rank or school between the respondent sample and the pool of faculty surveyed. This suggests that for tenure and research track faculty our survey sample is representative of the larger pool of faculty in terms of type of appointment held, college of appointment, rank and ethnicity. To assess the possibility that the sample of male respondents was less representative of all male scientists and engineers surveyed we compared male and female respondents to the overall sample pools of men and women separately. We found that for both groups, respondents on the tenure and research tracks did not differ from the pool as a whole; the male and female respondents on these two tracks appear to be equally represented.

However, across tracks, faculty of color responded at a lower rate (26%) than European American faculty (40%), as is often the case with social science surveys. Among clinical faculty, faculty of color and assistant professors responded at a lower rate than white faculty and those at higher ranks. There was also a gender difference on all tracks between survey respondents and the pool of faculty surveyed. Women of both academic groups (scientists/engineers and social scientists) responded at a higher rate than men: 50% female scientists and engineers, 47% female social scientists vs. 26 % male scientists and engineers.

The evidence suggests that the respondent sample is representative of the larger pool of faculty surveyed. However, given the lower response rates for faculty of color male faculty, all analyses presented in the report were replicated using appropriate weights. Weighted data analyses adjust the raw survey data to represent the population from which the sample is drawn. In this case the data were weighted on the basis of race and gender demographic characteristics of the UM faculty population surveyed, as well as the response rates by race and gender. The weighted analyses continued to include the same controls previously used to correct for differences among the three core groups compared in the instructional track analyses. While the original analyses were done using SPSS, the weighted analyses were accomplished using the statistical package Stata, because SPSS significant tests for weighted analyses are based on incorrect error terms.

Summary

Overall, results from the weighted analyses confirm the findings presented in the survey report. All major findings (e.g., those using created scales and that were relatively robust and fit with a pattern of other findings in this survey and/or in other studies) included in the report were replicated. In some particulars (e.g., individual items) the weighted analyses findings differ slightly from the unweighted analyses. In some instances original findings were not replicated (e.g. results from the weighted analyses indicate that men scientists/engineers do not have more undergraduate students than female scientists/engineers and women scientists/engineers are not more likely than men

scientists/engineers to be offered travel funding and course release in contract renegotiations). In other instances, new significant results were found that further supported key points in the report (e.g., weighted analyses indicate that men scientists/engineers are more likely than women scientists/engineers to be offered a partner/spouse position during contract renegotiation and women scientists/engineers are more likely to be single parents than men scientists/engineers). While these differences are important to note, it should be emphasized that the overall patterns of relationships found in the original analyses are sustained in the weighted analyses.

For your information, summary data tables of the weighted analyses, mirroring the tables presented in the original report, are included below.

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Table 72: Professional History – Weighted Analysis

	women scientists/engineers (N=135)		men scientists/engineers (N=100)		women social scientists (N=73)	
	mean	sd	mean	sd	mean	sd
Age	46.17 ^a	8.46	49.49 ^a	11.13	45.50	9.51
Time since highest degree*	3.49 ^a	1.60	4.29 ^a	2.24	3.06	1.90
Time since first UM appointment*	2.54 ^{ab}	1.51	3.29 ^a	2.16	2.10 ^b	1.57
	percentage		percentage		percentage	
Hired in last ten years	56.6 ^{ab}		41.6 ^a		71.6 ^b	
Joint appointment	20.3		17.7		27.0	
Appointment in small college	31.0 ^a		13.9 ^a		26.0	
Full professor rank	27.4 ^a		56.7 ^a		36.0	
Associate professor rank	36.3 ^a		16.7 ^a		31.9	
Assistant professor rank	36.4		26.7		32.1	

*1=1995-2001; 2=1990-1994, 3=1985-1989; 4=1980-1984; 5=1975-1979; 6=1970-1974; 7=1965-1969; 8=1960-1964.

^{a,b} Matching symbols identify groups that differ significantly from each other, $p \leq 0.05$.

Table 73: Household and Partner Employment Characteristics (Percentages) – Weighted Analysis

	women scientists/ engineers (N=135)	men scientists/ engineers (N=100)	women social scientists (N=73)
Household Composition:			
Single (no partner nor children)	10.7 ^a	3.2 ^a	7.6
Children, no partner	5.8 ^a	0.7 ^a	3.8
Partner and children	67.2 ^a	85.6 ^a	62.0
Partner, no children	16.2	10.5	26.6
Partner Employment:			
Partner works fulltime	87.3 ^a	40.9 ^a	80.3
If partner employed at UM (N=52), employed as faculty	78.1 ^a	46.7 ^a	67.0
Considered leaving UM to improve partner's career	50.6 ^a	32.3 ^a	58.2

^a Matching symbols identify groups that differ significantly from each other, $p \leq .05$.

Table 74a: Career Satisfaction – Weighted Analysis

	Tenure track faculty (N=312)	
	<u>mean</u>	<u>sd</u>
Highest Rated Items*		
Sense of being valued as a mentor or advisor by students	4.40	0.95
Sense of being valued as a teacher by students	4.13	1.08
Sense of contributing to theoretical developments in my discipline	3.96	1.09
Opportunity to collaborate with other faculty	3.88	1.28
Middle Rated Items*		
Ability to attract students to work with	3.54	1.35
Level of funding for research or creative efforts	3.75	1.20
Sense of being valued for my teaching by members of unit/dept	3.57	1.28
Level of intellectual stimulation in day-to-day contacts with faculty colleagues	3.52	1.28
Lowest Rated Items*		
Amount of social interaction with members of unit/department	3.55	1.38
Sense of being valued for research, scholarship, or creativity by members of unit/department	3.52	1.35
Current salary in comparison with the salaries of UM colleagues	3.20	1.27
Balance between professional and personal life	3.18	1.28

*Scores on all items ranged from 1 to 5 (1=very dissatisfied; 5=very satisfied).

Table 74b: Career Satisfaction Scale and Item Ratings by Tenure Track Group – Weighted Analysis

	women scientists/ engineers (N=135)		men scientists/ engineers (N=100)		women social scientists (N=73)	
	<u>mean</u>	<u>sd</u>	<u>mean</u>	<u>sd</u>	<u>mean</u>	<u>sd</u>
Career satisfactions (total scale)	3.51	.75	3.74	.82	3.74	.64
<i>Individual items:</i>						
Sense of being valued as a mentor or advisor by students	4.49	0.89	4.36	1.00	4.59	0.69
Sense of being valued as a teacher by students	4.13	1.09	4.10	1.09	4.31	1.00
Sense of contributing to theoretical developments in my discipline	3.84	1.10	3.97	1.11	4.13	0.94
Opportunity to collaborate with other faculty	3.77	1.32	3.92	1.27	3.77	1.29
Ability to attract students to work with	3.74	1.26	3.44	1.39	3.93	1.14
Level of funding for research or creative efforts	3.49	1.31	3.84	1.15	3.61	1.33
Sense of being valued for my teaching by members of unit/dept	3.35	1.34	3.61	1.28	3.64	1.16
Level of intellectual stimulation in day-to-day contacts with faculty colleagues	3.44	1.46	3.55	1.23	3.50	1.38
Amount of social interaction with members of unit/department	3.32	1.41	3.60	1.39	3.62	1.28
Sense of being valued for research, scholarship, or creativity by members of unit/department	3.18	1.43	3.59	1.32	3.55	1.36
Current salary in comparison with the salaries of UM colleagues	3.03	1.22	3.24	1.27	3.28	1.39
Balance between professional and personal life	2.86 ^a	1.35	3.29 ^a	1.25	3.01	1.35

*Scores on all items ranged from 1 to 5 (1=very dissatisfied; 5=very satisfied).

^aMatching symbols identify groups that differ significantly from each other, $p \leq .05$.

Table 75: Productivity – Weighted Analysis

	women scientists/ engineers (N=135)	male scientists/ engineers (N=100)	women social scientists (N=73)
by Gender/Field Groups:			
	<u>mean</u> <u>sd</u>	<u>mean</u> <u>sd</u>	<u>mean</u> <u>sd</u>
Perception of Own Productivity	7.11 1.94	7.31 1.53	7.30 1.63
Perception of Department's View of Own Productivity	5.91 2.32	6.55 1.86	6.02 2.01
	assistant professor (N=95)	associate professor (N=123)	full professor (N=90)
	<u>mean</u> <u>sd</u>	<u>mean</u> <u>sd</u>	<u>mean</u> <u>sd</u>
Perception of Own Productivity	6.90 ^a 1.98	6.97 1.75	7.57 ^a 1.25
Perception of Department's View of Own Productivity	6.18 2.01	6.07 1.86	6.68 1.98

*Scores on all items ranged from 1 to 10 (1=much less productive; 10=much more productive).

^aMatching symbols identify groups that differ significantly from each other, $p \leq .05$.

Table 76: Recognition – Weighted Analysis

	women scientists/ engineers (N=135)	male scientists/ engineers (N=100)	women social scientists (N=73)
by Gender/Field Groups:			
	<u>percentage</u>	<u>percentage</u>	<u>percentage</u>
Nominated for teaching award*	23.6 ^a	39.0 ^a	35.4
Nominated for research award	26.5	31.5	38.4
Nominated for service award	13.1	12.1	20.2
Nominated for clinical award	1.6	3.3	2.7
Nominated for at least one award*	44.3 ^a	59.7 ^a	56.6
Dept failed to nominate for appropriate award	15.4	18.7	7.5
	assistant professor (N=95)	associate professor (N=123)	full professor (N=90)
	<u>percentage</u>	<u>percentage</u>	<u>percentage</u>
Nominated for teaching award	21.4 ^{ab}	44.1 ^a	40.0 ^b
Nominated for research award	24.2	24.3	37.3
Nominated for service award	1.3 ^{ab}	15.6 ^a	19.6 ^b
Nominated for clinical award	0.0	0.0	6.3
Nominated for at least one award	36.4 ^{ab}	61.4 ^a	64.8 ^b
Dept failed to nominate for appropriate award	7.8 ^a	15.7	22.9 ^a

* Difference not significant when controlling for rank

^{a,b}Matching symbols denote statistically significant differences, $p \leq .05$.

Table 77: Influence Over Educational Matters and Resources – Weighted Analysis

	women scientists/ engineers (N=135)		men scientists/ engineers (N=100)		women social scientists (N=73)	
	<u>mean</u>	<u>sd</u>	<u>mean</u>	<u>sd</u>	<u>mean</u>	<u>sd</u>
Unit educational decisions (total scale)	2.62	0.95	2.70	0.92	2.83	0.84
Individual items:						
Unit curriculum decisions	2.74	1.18	2.81	1.27	2.83	1.06
Selecting new graduate students or residents/fellows	3.23	1.37	3.43	1.29	3.45	1.18
Selecting new faculty members to be hired	2.81	1.18	2.97	1.21	3.09	0.92
Determining who gets tenure	2.06	1.20	2.28	1.32	2.41	1.43
Selecting the next unit head	2.07 ^a	1.14	2.04	1.09	2.39 ^a	1.19
Affecting the overall unit climate/culture	2.64	1.01	2.91	1.16	2.71	1.09
Unit resources (total scale)	2.31	0.92	2.34	0.94	2.50	0.85
Individual items:						
Size of salary increases I receive	1.82	0.96	1.79	0.94	1.95	0.96
Obtaining money for travel to professional meetings	2.29 ^a	1.28	2.50	1.32	2.83 ^a	1.16
Securing the facilities or equipment I need for my research	2.86	1.14	2.98	1.12	3.01	0.94

Scores for all items range from 1 to 5 (1=no influence; 5=tremendous influence).

Note: Statistically significant effects on *rank* (assistant, associate, full) were found for salary, securing equipment, selecting new faculty members, and tenure decisions. Statistically significant effects for *Hired in last 10 years* (yes/no) were found for selecting new faculty, overall influence, and influence over curriculum decisions.

^aMatching symbols denote statistically significant difference, $p \leq .05$.

Table 78: Efforts to Secure and Satisfaction with Resources – Weighted Analysis

	women scientists/ engineers (N=135)		men scientists/ engineers (N=100)		women social scientists (N=73)	
	<u>mean</u>	<u>sd</u>	<u>mean</u>	<u>sd</u>	<u>mean</u>	<u>sd</u>
Efforts to secure the following resources*:						
office space	2.32 ^a	1.42	2.39	1.50	1.62 ^a	1.00
research space	3.34	1.34	3.42	1.44	3.00	1.23
computer equipment	2.77	1.24	2.40	1.05	2.50	0.84
lab equipment	3.20	1.29	3.45	1.21	2.73	0.91
service from vendors (repairs, supplies, upgrades)	2.73	1.03	2.92	1.03	2.68	0.94
Satisfaction with the following resources**:						
office space	3.73 ^a	1.37	3.77	1.47	4.16 ^a	1.20
research space	3.29	1.43	3.22	1.53	3.31	1.29
computer equipment	3.54 ^a	1.30	3.78	1.22	3.96 ^a	1.07
lab equipment	3.52	1.32	3.80	1.24	3.72	1.03
service from vendors (repairs, supplies, upgrades)	3.40	1.14	3.31	1.01	3.55	1.04

* Scores on all items range from 1 to 5 (1=no effort; 5=tremendous effort).

** Scores on all items range from 1 to 5 (1=very dissatisfied; 5=very satisfied).

^aMatching symbols denote statistically significant differences, $p \leq .05$.

Table 79a: Frequency of Contract Negotiation and Renegotiation Items – Weighted Analysis

	women scientists/ engineers (N=65)		men scientists/ engineers (N=34)		women social scientists (N=46)	
	<u>mean</u>	<u>sd</u>	<u>mean</u>	<u>sd</u>	<u>mean</u>	<u>sd</u>
Initial Contract Negotiation (for those hired in last 10 yrs)						
Number of items offered by UM	3.25	2.43	3.04	2.52	3.31	1.91
Number of items bargained for	2.75	2.58	2.90	2.97	2.51	2.00
Number of items promised in offer letter	2.54	2.61	3.22	3.05	2.58	2.20
Total number of items received	4.36	2.55	4.43	2.67	4.55	2.12
Contract Renegotiation	(N=109)		(N=72)		(N=58)	
Number of items offered by UM	1.29 ^{ab}	1.59	1.75 ^a	2.10	2.21 ^b	2.16
Number of items bargained for	1.71	1.85	2.04	2.08	2.03	1.78
Number of items received by terms of award	0.96	1.57	1.09	1.61	0.83	1.31
Total number of items received	3.97 ^{ab}	3.47	4.88 ^a	3.99	5.07 ^b	3.82

^{a,b} Matching symbols denote statistically significant differences, $p \leq .05$.

Table 79b: Contract Negotiation and Renegotiation Items – Weighted Analysis

	Initial Negotiation (for those hired within last 10 yrs):			Later Renegotiations:		
	women scientists/ engineers (N=74)	men scientists/ engineers (N=43)	women social scientists (N=50)	women scientists/ engineers (N=106)	men scientists/ engineers (N=74)	women social scientists (N=60)
Course release time						
Offered by UM	22.1 ^a	22.1	42.3 ^a	8.3 ^a	18.0	33.4 ^a
Asked/bargained for	16.9	15.4	21.2	23.0	17.2	36.0
Lab space						
Offered by UM	43.6 ^a	27.5	13.9 ^a	13.6	21.7	4.4
Asked/bargained for	40.1	31.8	26.5	27.9	25.8	15.1
Lab equipment						
Offered by UM	22.8	27.5	20.0	7.1 ^a	17.1 ^a	6.8
Asked/bargained for	36.5	37.3	31.0	20.2	29.1	12.1
Renovation of lab space						
Offered by UM	15.0 ^a	13.8	1.7 ^a	7.1 ^a	14.0	11.3 ^a
Asked/bargained for	14.1	15.3	6.1	15.7 ^a	20.3	2.9 ^a
Research assistant						
Offered by UM	7.9	6.9	5.1	4.8	1.6	5.9
Asked/bargained for	23.6	13.8	11.2	16.5	17.9	21.8
Clerical/administrative support						
Offered by UM	27.5	14.4	13.9	13.9	20.3	13.6
Asked/bargained for	7.9	8.2	1.7	13.1	19.4	11.2
Discretionary funds						
Offered by UM	40.1	44.8	53.3	25.0	27.3	36.7
Asked/bargained for	41.6	45.5	37.7	24.7	23.0	33.0
Travel funding						
Offered by UM	30.6	19.9	25.1	17.9 ^a	30.4	35.4 ^a
Asked/bargained for	16.9	21.9	27.2	18.4	21.3	22.4
Summer salary						
Offered by UM	25.2 ^a	26.2	53.9 ^a	9.1 ^a	9.4	25.7 ^a
Asked/bargained for	20.9	11.0	23.8	7.7 ^a	10.1	21.3 ^a
Special bonus						
Offered by UM	1.2	2.7	1.7	18.8	10.8	17.1
Asked/bargained for	3.1	5.5	4.2	9.7	3.1	2.9
Special timing of tenure clock						
Offered by UM	6.7	4.2	10.5	10.0	4.6	9.2
Asked/bargained for	7.9	13.7	3.4	15.0	7.8	8.8
Moving expenses						
Offered by UM	57.0	60.0	68.4	17.6	19.5	27.2
Asked/bargained for	23.3	27.5	27.8	5.1	11.6	9.7
Housing subsidy						
Offered by UM	3.9 ^a	0.8 ^a	0.0	1.6	1.1	0.0
Asked/bargained for	1.2	0.2	0.0	0.0	0.0	0.0
Child care						
Offered by UM	0.0	0.0	0.0	0.0	0.0	0.0
Asked/bargained for	1.2	1.7	0.5	0.0	0.0	0.0
Partner/Spouse position						
Offered by UM	3.6 ^a	1.4	13.3 ^a	1.7 ^{ab}	10.1 ^a	1.3 ^b
Asked/bargained for	10.7 ^a	9.7	25.7 ^a	5.1	2.4	12.1

^{a,b} Matching symbols denote statistically significant differences, $p \leq .05$.

Table 80: Teaching – Weighted Analysis

	women scientists/ engineers (N=135)		men scientists/ engineers (N=100)		women social scientists (N=73)	
	<u>mean</u>	<u>sd</u>	<u>mean</u>	<u>sd</u>	<u>mean</u>	<u>sd</u>
Typical yearly teaching load in department						
Number of undergraduate courses	1.22 ^a	1.18	1.17	1.13	1.94 ^a	0.85
Number of graduate courses	1.45 ^a	1.15	1.32	0.95	1.70 ^a	0.73
Number new courses developed in past 5 years	1.74 ^a	1.75	1.48	2.17	3.67 ^a	2.18
Number of courses released from teaching in past	1.57 ^a	2.79	1.46	2.45	3.92 ^a	4.12
Teaching load winter and fall semesters 2001						
Number of undergraduate courses	1.07 ^a	2.04	0.88	1.32	1.61 ^a	1.99
Number of graduate courses	0.95	1.38	1.00	1.28	1.04	1.24
Number of non-lab courses	1.48 ^a	1.65	1.62	1.65	1.98 ^a	1.62
Number of lab courses	0.55 ^a	1.31	0.24 ^a	0.63	0.67	1.75
Number of undergraduate students	43.37	71.12	70.28	112.76	64.81	111.20
Number of graduate students	44.29	84.61	41.46	75.24	20.92	23.74
Official advising						
Number of undergraduates	2.28	4.63	1.53	4.42	1.47	3.04
Number of graduate students (masters, PhD, medical)	3.18 ^a	3.26	3.12	3.54	6.72 ^a	5.56
Number of postdocs or residents/fellows	1.44 ^a	2.10	1.53	2.90	0.16 ^a	0.51
Number of junior faculty	0.35 ^a	0.80	0.12 ^a	0.39	0.60	1.47

^a Matching symbols denote statistically significant difference, $p \leq .05$.

Table 81: Service – Weighted Analysis

	women scientists/ engineers (N=135)		men scientists/ engineers (N=100)		women social scientists (N=73)	
	<u>mean</u>	<u>sd</u>	<u>mean</u>	<u>sd</u>	<u>mean</u>	<u>sd</u>
How many committees do you serve on in a typical year?	3.8 ^a	2.4	3.2	2.6	3.3 ^a	1.2
How many committees do you chair in a typical year?	0.8	0.9	0.8	0.9	0.7	0.7
How important to you is having a department or college leadership position?*	3.2	1.3	2.8	1.4	2.9	1.3

*Rated on a scale from 1 to 5 (1=not important; 5=very important).

^a Matching symbols denote statistically significant differences, $p \leq .05$.

Table 82a: Mentoring - Weighted Analysis

	women scientists/ engineers (N=135)		men scientists/ engineers (N=100)		women social scientists (N=73)	
	<u>mean</u>	<u>sd</u>	<u>mean</u>	<u>sd</u>	<u>mean</u>	<u>sd</u>
Number of areas of no mentoring from anyone	3.17 ^{ab}	2.53	1.06 ^a	1.82	1.29 ^b	1.46
Number of mentors in same UM unit/department	2.85	3.58	5.25	4.24	5.52	4.06
Number of male mentors at UM	1.78	2.45	3.70	3.05	2.21	2.21

^{a,b} Matching symbols denote statistically significant difference, $p \leq .05$.

**Table 82b: Percent With No Mentoring in Each Area, for Assistant Professors Only--
Weighted Analysis**

Percent who received no mentoring from anyone in- or outside UM in each of the following areas:	women scientists/ engineers	men scientists/ engineers	women social scientists
Assistant Professors only	(N=46)	(N=28)	(N=21)
role model	38	17	37
networking	56 ^a	24 ^a	53
advancement	38	24	26
publishing	48 ^a	22 ^a	33
department politics	57	38	39
resources	54	36	47
advocacy	51	32	41
balancing work/family	72	67	70

^a Matching symbols denote statistically significant differences, $p \leq .05$.

**Table 83a: Stereotyping, Discrimination and Sexual Harassment Indicators--
Weighted Analysis**

	women scientists/ engineers (N=117)		men scientist/ engineers (N=80)		women social scientists (N=65)	
Stereotyping*	<u>mean</u>	<u>sd</u>	<u>mean</u>	<u>sd</u>	<u>mean</u>	<u>sd</u>
Gender stereotyping	1.91 ^{ab}	0.74	1.47 ^a	0.60	1.67 ^b	0.68
Ethnic/religious stereotyping	1.51	0.66	1.35	0.64	1.36	0.52
Discrimination at UM in past 5 years	<u>percentage</u>		<u>percentage</u>		<u>percentage</u>	
Gender	41.7 ^a		3.5 ^a		35.1	
Race/ethnicity**	4.3		6.5		7.9	
Sexual orientation	2.4 ^a		0.0 ^a		1.2	
Physical disability	0.0		0.0		0.0	
Religious affiliation	0.0		0.0		1.2	
Sexual harassment at UM in past 5 years	<u>percentage</u>		<u>percentage</u>		<u>percentage</u>	
Individuals reporting sexual harassment	18.9 ^{ab}		5.2 ^a		12.1 ^b	
Individuals reporting others reported sexual harassment	37.1 ^{ab}		19.0 ^a		27.1 ^b	

*Scores range from 1(low) to 5 (high) on all variables.

**Note that the rate of faculty of color is different by group (women scientists 16%; men scientists 32%; women social scientists 21%).

^{a,b}Matching symbols identify groups that differ significantly from each other, $p \leq .05$.

Table 83b: Gender Discrimination (Percentages) – Weighted Analysis

	women scientist/ engineers (N=115)	men scientists/ engineers (N=81)	women social scientists (N=603)
Experienced gender discrimination at UM within past 5 years in:			
Hiring	6.7 ^a	1.4	2.2 ^a
Promotion	15.0 ^a	6.9 ^a	3.3
Salary	34.0 ^a	.7 ^a	35.7
Space/equipment, other resources	19.0 ^a	1.4 ^a	10.9
Access to administrative staff	11.1 ^a	10.9 ^a	3.0
Graduate student or resident/fellow assignments	5.9 ^a	.7 ^a	3.0

^aMatching symbols identify groups that differ significantly from each other, $p \leq .05$

Table 84: Departmental Climate Scales* - Weighted Analysis

	women scientists/ engineers (N=135)		men scientists/ engineers (N=100)		women social scientists (N=73)	
	<u>mean</u>	<u>sd</u>	<u>mean</u>	<u>sd</u>	<u>mean</u>	<u>sd</u>
Positive climate	3.13 ^a	0.98	3.53 ^a	0.89	3.45	0.97
Tolerant climate	3.50 ^{ab}	0.86	3.86 ^a	0.72	3.83 ^b	0.94
Gender egalitarian atmosphere	3.12 ^{ab}	0.90	3.88 ^a	0.74	3.63 ^b	0.88
Scholarly isolation	2.77	0.52	2.64	0.52	2.79	0.61
Felt surveillance	2.96 ^a	1.04	2.41 ^a	0.92	2.61	0.94
Tokenism	2.84 ^{ab}	1.28	1.73 ^a	1.13	2.37 ^b	1.20
Department chair as fair	3.25 ^{ab}	1.14	3.65 ^a	0.97	3.75 ^b	1.05
Department chair creates positive environment	3.14 ^{ab}	1.15	3.51 ^a	1.04	3.78 ^b	1.14
Dept chair committed to ethnic/racial diversity	3.47 ^a	1.24	3.81	1.02	4.39 ^a	1.05

*Scores range from 1(low) to 5 (high) on all items that make up the scales.

^{a,b}Matching symbols identify groups that differ significantly from each other, $p \leq 0.05$.

Table 85: Institutional and Departmental Climate Ratings: Correlations with Overall Satisfaction with Position - Weighted Analysis

	Overall Satisfaction with UM Position	
	tenure track (N=308)	women scientists/engineers (N=135)
Institutional Factors:		
Gender stereotyping	-0.12*	-0.29**
Ethnic/religious stereotyping	-0.09	-0.17
Gender discrimination	-0.25***	-0.16
Unwanted sexual attention	-0.20***	-0.20*
Departmental Factors:		
Positive climate	0.55***	0.57***
Tolerant climate	0.28***	0.46***
Gender egalitarian atmosphere	0.27***	0.42***
Scholarly isolation	-0.11	-0.15
Felt surveillance	-0.34***	-0.49***
Race/gender tokenism	-0.41***	-0.28**
Rating of department chair as fair	0.44***	0.52***
Rating of department chair as able to create positive environment	0.45***	0.51***

* $p \leq 0.05$, ** $p \leq 0.01$, *** $p \leq 0.001$

Note: Correlation coefficients indicate the magnitude and direction of the relationship. Thus, the correlation -.22 between gender stereotyping and overall satisfaction indicates that gender stereotyping is related to low satisfaction at a modest level. In contrast, the correlation .59 between positive climate and satisfaction indicates that positive climate is related to high satisfaction at a substantial level.

**Table 86: Departmental Experiences Indicators:
Correlations with Overall Satisfaction with Position - Weighted Analysis**

	Overall Satisfaction with UM Position			
	tenure track (N=308)		women scientists/engineers (N=135)	
Significant Factors for Women Scientists/Engineers:				
Career satisfactions	.73	***	.73	***
Influence on decisions	.22	*	.43	***
Effort to obtain resources	.43	***	-.43	***
Satisfaction with resources	.16		.44	***
N areas of non-mentoring	0.43	***	-0.34	***
N mentors in same department	0.28	**	0.28	**
N male mentors in same dept	0.45	***	0.22	*
Productivity—self view	-0.34	***	0.13	
Productivity—department view	-0.41	***	0.44	***
Non-significant Factors for Women Scientists/Engineers:				
Committee service	-0.04		-0.06	
Committee chair	-0.03		-0.01	
Failure to nominate for award	-0.10		-0.09	

*p≤.05, **p≤.01, ***p≤.001

**Table 87: Personal and Position Indicators and Household Characteristics:
Correlations with Overall Satisfaction with Position - Weighted Analysis**

	Overall Satisfaction with UM Position			
	tenure track (N=308)		women scientists/engineers (N=135)	
Personal & Position Indicators:				
Age	0.10		-0.03	
Ethnicity	-0.07		-0.10	
Years at UM	0.00		0.05	
Years since Ph.D.	0.16	**	0.06	
Joint appointment	0.09		-0.04	
Rank	0.07		0.06	
Small college	-0.06		-0.11	
Household Characteristics:				
Single, no children	-0.01		-0.23	*
Partner and children	0.01		0.02	
Partner employed fulltime		**		
	-0.24	*	0.04	
Partner employed as faculty	-0.16		0.11	

*p≤.05, **p≤.01

Table 88: Harassment–Relationship with Satisfaction & Climate Ratings – Weighted Analysis

	Tenure Faculty			Women Scientists/Engineers		
	experienced harassment (N=39)	experienced no harassment (N=264)	sig.	experienced harassment (N=26)	experienced no harassment (N=106)	sig.
Satisfaction with position	mean (sd) 3.01 (1.22)	mean (sd) 3.77 (0.99)	**	mean (sd) 3.08 (1.17)	mean (sd) 3.89 (0.89)	*
Climate variables:						
Gender stereotyping	2.38 (0.85)	1.49 (0.60)	***	2.63 (0.68)	1.88 (0.64)	***
Positive climate	3.13 (0.88)	3.51 (0.91)	*	3.11 (0.85)	3.49 (0.89)	
Tolerant climate	3.33 (1.06)	3.88 (0.72)	*	3.25 (0.96)	3.73 (0.78)	*
Gender egalitarian atmosphere	3.16 (1.12)	3.79 (0.79)	*	2.99 (1.01)	3.59 (0.80)	***
Felt surveillance	2.72 (1.01)	2.44 (0.97)		2.81 (0.92)	2.69 (0.90)	
Tokenism	2.55 (1.37)	1.87 (1.19)	*	3.00 (1.20)	2.77 (1.11)	
Department chair as fair	3.51 (1.15)	3.61 (0.99)		3.47 (1.15)	3.40 (0.98)	
Department chair creates positive environment	3.30 (1.11)	3.50 (1.05)		3.19 (1.15)	3.46 (0.98)	*

*p≤.05, **p≤.01, ***p≤.001

Table 89: Discrimination –Relationship with Satisfaction & Climate Ratings – Weighted Analysis

	Tenure Faculty			Women Scientists/Engineers		
	experienced discrimination (N=86)	experienced no discrimination (N=222)	sig.	experienced discrimination (N=56)	experienced no discrimination (N=79)	sig.
Satisfaction with position	mean (sd) 2.97(1.26)	mean (sd) 3.66 (1.10)	***	mean (sd) 3.07 (1.12)	mean (sd) 3.89 (0.86)	
Climate variables:						
Gender stereotyping	1.91 (0.77)	1.41 (0.64)	***	2.06 (0.73)	1.94 (0.67)	*
Positive climate	3.03 (1.02)	3.49 (0.87)	**	3.05 (1.00)	3.52 (0.85)	
Tolerant climate	3.39 (0.85)	3.90 (0.75)	**	3.36 (0.80)	3.74 (0.81)	**
Gender egalitarian atmosphere	2.91 (0.95)	3.88 (0.76)	***	2.75 (0.80)	3.67 (0.77)	***
Felt surveillance	3.36 (1.06)	2.35 (0.93)	***	3.16 (1.02)	2.60 (0.84)	**
Tokenism	3.03 (1.21)	1.74 (1.12)	***	3.04 (1.14)	2.71 (1.12)	
Department chair as fair	3.24 (1.12)	3.68 (0.96)		3.21 (1.06)	3.48 (0.98)	
Department chair creates positive environment	3.21 (1.11)	3.52 (1.04)		3.21 (1.05)	3.48 (0.99)	

*p≤.05, **p≤.01, ***p≤.001

Table 90: Response Rates by Track and Gender (Percentages)

	men scientists/ engineers	women scientists/ engineers	women social scientists	total
Tenure	30	52	47	41
Research	22	48		32
Clinical	23	48		34
Total	26	50	47	

Table 91: Professional History by Track – Weighted Analysis

	Tenure (N=235)		Research (N=95)		Clinical (N=117)	
	<u>mean</u>	<u>sd</u>	<u>mean</u>	<u>sd</u>	<u>mean</u>	<u>sd</u>
Age	48.87 ^a	10.72	45.53 ^a	9.37	47.45	8.67
Time since highest degree	4.14 ^a	2.15	3.10 ^{ab}	1.93	4.18 ^b	1.88
Time since first UM appointment	3.15 ^a	2.07	2.48 ^a	1.85	2.31	1.54
	<u>percentages</u>		<u>percentages</u>		<u>percentages</u>	
Faculty of color	15.51 ^a		17.04 ^b		4.81 ^{ab}	
Hired in last ten years	44.42 ^a		59.88		63.98 ^a	
Joint appointment	18.17 ^a		11.10		8.13 ^a	
Small college	17.12		24.12 ^a		8.91 ^a	
Full professor/ research scientist (includes sr. res. scientist)	51.16 ^{ab}		21.85 ^a		10.09 ^b	
Assoc. professor/ assoc. res scientist (includes sr. assoc. res. scientist.)	20.35 ^{ab}		6.57 ^{ac}		38.71 ^{bc}	
Asst. prof./ asst. research scientist (includes res. invest.)	28.49 ^{ab}		71.58 ^{ac}		51.20 ^{bc}	

*1=1995-2001; 2=1990-1994, 3=1985-1989; 4=1980-1984; 5=1975-1979; 6=1970-1974; 7=1965-1969; 8=1960-1964.

^{a,b,c}Matching symbols identify groups that differ significantly from each other, $p \leq .05$

Table 92: Household & Partner Employment Characteristics by Track (Percentages) Weighted Analysis

	Tenure (N=235)	Research (N=95)	Clinical (N=116)
Household Composition:			
Single (no partner nor children)	5	4	5
Children, no partner	2	4	2
Partner and children	82	83	81
Partner, no children	12	9	12
Partner Employment:	(N=204)	(N=84)	(N=101)
Partner works fulltime	49	64	37
Partner employed at UM	54	31 ^a	58 ^a
If partner employed at UM, employed as faculty	54	31	58
Considered leaving UM to improve partner's career	35	49 ^a	25 ^a

^aMatching symbols identify groups that differ significantly from each other, $p \leq .05$

Table 93: Indicators of Productivity by Track (Percentages) – Weighted Analysis

	Tenure (N=235)	Research (N=95)	Clinical (N=116)
Number of external grant proposals (PI or co-PI)	56 ^a	79 ^b	47 ^{ab}
Total dollar amount of external grants (PI or co-PI)	32 ^{ab}	13 ^{ac}	50 ^{bc}
Number of external fellowships	97	98	98
Number of articles published in refereed academic or professional journals	98 ^a	96	86 ^a
Number of monographs written	11	4	13
Number of books edited	5	5	12
Number of book chapters	15	13	27
Number of dissertations chaired	29 ^a	27 ^b	1 ^{ab}
Number of presentations at national/international conferences	68	58	58
Number of patents	5	12	10

^{a,b,c}Matching symbols identify groups that differ significantly from each other, $p \leq .05$

Table 94: Productivity* by Track – Weighted Analysis

by Track	Tenure (N=235)		Research (N=95)		Clinical (N=116)	
	mean	sd	mean	sd	mean	sd
Perception of own productivity	7.27 ^a	1.62	6.97 ^b	1.87	5.61 ^{ab}	2.26
Perception of department's view of own productivity	6.42	1.96	6.28	1.88	5.83	2.27
by Rank	Assistant (N=235)		Associate (N=142)		Full (N=148)	
	mean	sd	mean	sd	mean	sd
Perception of own productivity	6.12 ^{ab}	2.27	6.69 ^{ac}	1.84	7.61 ^{bc}	1.27
Perception of department's view of own productivity	5.74 ^a	2.00	6.16 ^b	1.96	6.82 ^{ab}	1.98

*Scores on all items ranged from 1 to 10 (1=much less productive; 10=much more productive, compared to researchers in your area and at your rank nationwide).

^{a,b,c}Matching symbols identify groups that differ significantly from each other, $p \leq .05$.

Table 95: Recognition by Track (Percentages) – Weighted Analysis

	Tenure (N=235)	Research (N=95)	Clinical (N=116)
Nominated for teaching award	36 ^a	3 ^{ab}	30 ^b
Nominated for research award	31 ^a	19 ^b	5 ^{ab}
Nominated for clinical award	3 ^a	0 ^b	12 ^{ab}
Nominated for service award	12	3	12
Nominated for at least one award	57 ^{ab}	21 ^a	36 ^b
Dept failed to nominate for appropriate award	18 ^a	6	5 ^a

^{a,b}Matching symbols identify groups that differ significantly from each other, $p \leq .05$

Table 96a: Career Satisfaction Ratings by Track – Weighted Analysis

	Tenure (N=235)		Research (N=95)		Clinical (N=116)	
	mean	sd	mean	sd	mean	sd
Scale:						
Satisfaction with unit/department	3.69	0.81	3.55	0.61	3.62	0.82
Individual items:						
Sense of being valued as a mentor or advisor by students	4.38	0.98	4.30	1.04	4.19	0.95
Sense of being valued as a teacher by students	4.11	1.08	4.30	1.05	4.07	1.05
Sense of contributing to theoretical developments in my discipline	3.94 ^a	1.11	3.93 ^b	0.92	3.50 ^{ab}	1.22
Opportunity to collaborate with other faculty	3.89	1.28	4.12	1.07	3.93	1.13
Ability to attract students to work with	3.50 ^a	1.37	3.24 ^b	1.30	3.97 ^{ab}	0.90
Level of funding for research or creative efforts	3.77 ^a	1.19	3.72 ^b	1.15	3.11 ^{ab}	1.30
Sense of being valued for my teaching by members of unit/dept	3.56 ^a	1.29	2.66 ^{ab}	1.35	3.52 ^b	1.28
Level of intellectual stimulation in day-to-day contacts with faculty colleagues	3.52	1.27	3.72	1.16	3.93	1.22
Amount of social interaction with members of unit/department	3.54	1.39	3.27	1.09	3.72	1.20
Sense of being valued for research, scholarship, or creativity by members of unit/department	3.51	1.35	3.53	1.26	3.16	1.32
Current salary in comparison with the salaries of UM colleagues	3.20	1.26	3.25	1.28	3.45	1.20
Balance between professional and personal life	3.20	1.27	3.33	1.22	3.33	1.24

^{a,b}Matching symbols identify groups that differ significantly from each other, $p \leq .05$

Table 96b: Career Satisfaction Item Ratings, Ranked by Ratings -Weighted Analysis

	science/engineering faculty across tracks (N=446)	
	<u>mean</u>	<u>sd</u>
Scale:		
Satisfaction with unit/department	3.64	0.78
Highest Rated Items*		
Sense of being valued as a mentor or advisor by students	4.32	0.98
Sense of being valued as a teacher by students	4.12	1.07
Opportunity to collaborate with other faculty	3.95	1.20
Sense of contributing to theoretical developments in my discipline	3.83	1.11
Middle Rated Items*		
Ability to attract students to work with	3.56	1.28
Level of intellectual stimulation in day-to-day contacts with faculty colleagues	3.68	1.25
Amount of social interaction with members of unit/department	3.53	1.29
Level of funding for research or creative efforts	3.60	1.24
Lowest Rated Items*		
Sense of being valued for my teaching by members of unit/dept	3.47	1.31
Sense of being valued for research, scholarship, or creativity by members of unit/department	3.43	1.33
Current salary in comparison with the salaries of UM colleagues	3.28	1.25
Balance between professional and personal life	3.26	1.25

*Scores on all items ranged from 1 to 5 (1=very dissatisfied; 5=very satisfied)

Table 97a: Influence over Educational Decisions and Unit Resources by Track - Weighted Analysis

	Tenure (N=235)		Research (N=95)		Clinical (N=116)	
	<u>mean</u>	<u>sd</u>	<u>mean</u>	<u>sd</u>	<u>mean</u>	<u>sd</u>
Scales:						
Unit educational matters	2.68 ^{ab}	0.92	1.76 ^{ac}	0.69	2.21 ^{bc}	0.88
Unit resources (salary, money for travel, facilities/equipment)	2.33 ^a	0.93	2.63 ^{ab}	0.77	2.11 ^b	0.84
Individual items:						
Unit curriculum decisions	2.80 ^a	1.25	1.38 ^{ab}	0.73	2.75 ^b	1.12
Size of salary increases I receive	1.80	0.94	1.80	0.90	1.82	0.79
Obtaining money for travel to professional meetings	2.46 ^a	1.31	3.11 ^{ab}	1.42	2.29 ^b	1.15
Securing the facilities or equipment I need for my research	2.95	1.12	3.09 ^a	0.88	2.61 ^a	1.02
Selecting new graduate students or residents/fellows	3.39 ^a	1.30	2.65 ^a	1.21	3.01	1.27
Selecting new faculty members to be hired	2.93 ^{ab}	1.20	1.84 ^{ac}	0.84	2.42 ^{bc}	1.20
Determining who gets tenure	2.24 ^{ab}	1.29	1.24 ^a	0.62	1.47 ^b	0.87
Selecting the next unit head	2.05 ^{ab}	1.10	1.53 ^a	0.80	1.46 ^b	0.81
Affecting the overall unit climate/culture	2.86 ^a	1.14	2.39 ^a	0.96	2.76	1.07

Scores for all items range from 1 to 5 (1=no influence; 5=tremendous influence).

Note: Statistically significant effects on *rank* (junior, middle, senior) were found for curriculum decisions, securing equipment, selecting new graduate students, selecting new unit head and tenure decisions. Statistically significant effects on *hired in last 10 years* (yes/no) were found for influence over educational matters scale, selecting new unit head, and influence over curriculum decisions.

^{a,b,c} Matching symbols denote statistically significant difference, $p \leq .05$.

Table 97b: Influence over Educational Decisions & Unit Resources by Rank - Weighted Analysis

	Asst level (N=236)		Assoc level (N=142)		Full level (N=149)	
	<u>mean</u>	<u>sd</u>	<u>mean</u>	<u>sd</u>	<u>mean</u>	<u>sd</u>
Scales:						
Unit educational matters	1.92 ^{ab}	0.78	2.56 ^{ac}	0.93	2.86 ^{bc}	0.95
Unit resources (salary, money for travel, facilities/equipment)	2.29	0.92	2.34	0.81	2.49	0.91
Individual items:						
Unit curriculum decisions	2.06 ^{ab}	1.07	2.93 ^a	1.30	2.86 ^b	1.23
Size of salary increases I receive	1.75	0.86	1.98	0.84	1.83	1.00
Obtaining money for travel to professional meetings	2.63	1.35	2.45	1.21	2.69	1.27
Securing the facilities or equipment I need for my research	2.81 ^a	1.09	2.85	0.93	3.19 ^a	1.07
Selecting new graduate students or residents/fellows	2.83 ^a	1.28	3.18	1.39	3.55 ^a	1.16
Selecting new faculty members to be hired	2.12 ^{ab}	1.01	2.79 ^a	1.15	3.09 ^b	1.28
Determining who gets tenure	1.19 ^{ab}	0.61	2.03 ^{ac}	1.18	2.65 ^{bc}	1.34
Selecting the next unit head	1.50 ^{ab}	0.88	1.78 ^{ac}	0.99	2.28 ^{bc}	1.14
Affecting the overall unit climate/culture	2.52 ^{ab}	1.00	2.84 ^a	1.11	2.96 ^b	1.12

Scores for all items range from 1 to 5 (1=no influence; 5=tremendous influence).

^{a,b,c} Matching symbols denote statistically significant difference, $p \leq .05$.

Table 98: Effort and Satisfaction with Resources by Track – Weighted Analysis

	Tenure (N=235)		Research (N=95)		Clinical (N=116)	
	mean	sd	mean	sd	mean	sd
Scales:						
Mean effort	2.79	0.99	2.72	0.87	2.69	1.02
Mean satisfaction	3.57 ^a	1.08	3.83 ^a	0.90	3.75	0.98
Effort to secure the following resources:*						
office space	2.38	1.48	2.70	1.41	2.39	1.54
research space	3.41 ^a	1.41	2.95 ^a	1.35	3.18	1.35
computer equipment	2.47	1.09	2.56	0.99	2.65	1.25
lab equipment	3.39 ^a	1.22	2.62 ^a	1.12	2.96	1.32
service from vendors (repairs, supplies, upgrades)	2.88	1.03	2.57	0.92	2.86	1.09
Satisfaction with the following resources:**						
office space	3.76	1.45	3.83	1.37	3.89	1.32
research space	3.23	1.51	3.48	1.36	3.34	1.34
computer equipment	3.74 ^a	1.23	4.33 ^{ab}	0.88	4.02 ^b	1.08
lab equipment	3.74	1.26	3.86	1.09	3.91	0.87
service from vendors (repairs, supplies, upgrades)	3.33 ^a	1.04	4.04 ^{ab}	1.03	3.52 ^b	1.15

* Scores on all items range from 1 to 5 (1=no effort; 5=tremendous effort).

** Scores on all items range from 1 to 5 (1=very dissatisfied; 5=very satisfied).

^{a,b} Matching symbols denote statistically significant differences, $p \leq .05$.

Table 99a: Number of Items in Contract Negotiation by Track – Weighted Analysis

	Tenure (N=117)		Research (N=66)		Clinical (N=75)	
	mean	sd	mean	sd	mean	sd
Initial contract negotiation (if hired in last 10 yrs):						
Number of items offered by UM	2.79 ^{ab}	2.41	0.59 ^{ac}	1.36	1.86 ^{bc}	1.85
Number of items bargained for	2.58 ^{ab}	2.74	0.36 ^a	1.06	0.73 ^b	1.29
Number of items promised in offer letter	2.79 ^{ab}	2.81	0.26 ^{ac}	0.92	0.91 ^{bc}	1.58
Total number of items received	4.07 ^{ab}	2.61	0.77 ^{ac}	1.56	1.83 ^{bc}	1.92
Contract renegotiation:						
	(N=205)		(N=57)		(N=76)	
Number of items offered by UM	1.64 ^a	2.00	0.92 ^a	1.52	1.31	1.43
Number of items bargained for	1.81 ^{ab}	1.99	0.81 ^a	1.22	0.96 ^b	1.41
Number of items received by terms of award	1.00 ^a	1.54	0.84	1.65	0.28 ^a	0.83
Total number of items received	4.44 ^{ab}	3.83	2.57 ^a	2.48	2.54 ^b	2.38

^{a,b,c} Matching symbols denote statistically significant differences, $p \leq .05$.

Table 99b: Contract Negotiations by Track (Percentages) – Weighted Analysis

	Initial Negotiation (for those hired within last 10 years):			Later Renegotiations:		
	Tenure (N=116)	Research (N=54)	Clinical (N=72)	Tenure (N=1805)	Research (N=437)	Clinical (N=60)
Course release time						
Offered by UM	23.65 ^{ab}	3.15 ^a	5.18 ^b	16.06 ^a	3.47 ^a	9.34
Asked/bargained for	15.42 ^a	5.08 ^a	8.96	18.32 ^a	0.71 ^{ab}	11.87 ^b
Lab equipment						
Offered by UM	27.91 ^a	10.93	10.16 ^a	15.12 ^a	8.75 ^b	1.27 ^{ab}
Asked/bargained for	38.4 ^{ab}	5.26 ^a	8.21 ^b	27.32 ^a	18.87 ^b	2.89 ^{ab}
Lab space						
Offered by UM	32.76 ^{ab}	11.57 ^a	7.8 ^b	20.14 ^a	14.02	5.12 ^a
Asked/bargained for	35.14 ^{ab}	5.66 ^a	7.54 ^b	26.19 ^a	15.03	8.55 ^a
Renovation of lab space						
Offered by UM	15.86 ^{ab}	1.94 ^a	1.34 ^b	12.64	6.44	5.12
Asked/bargained for	16.72 ^{ab}	2.11 ^a	3.44 ^b	19.35 ^a	6.44	4.52 ^a
Research assistant						
Offered by UM	6.99	2.59	7.39	2.19	3.31	3.56
Asked/bargained for	15.82 ^a	2.50 ^a	6.05	17.62 ^a	0.71 ^{ab}	9.82 ^b
Clerical/administrative support						
Offered by UM	17.17 ^a	3.64 ^{ab}	31.08 ^b	19.01	19.40	16.56
Asked/bargained for	7.97	3.15	5.12	18.14	15.45	18.60
Discretionary funds						
Offered by UM	44.84 ^a	4.29 ^{ab}	32.56 ^b	26.81	29.96	30.42
Asked/bargained for	45.71 ^{ab}	7.54 ^a	17.74 ^b	23.29 ^a	8.66 ^a	19.87
Travel funding						
Offered by UM	21.99 ^a	6.79 ^{ab}	38.67 ^b	27.96	20.35	44.53
Asked/bargained for	20.31 ^a	7.93	5.33 ^a	20.71	20.45	16.57
Special bonus						
Offered by UM	2.32	0.65	0.67	12.39	5.99	20.49
Asked/bargained for	4.82	1.06	3.44	4.38 ^a	12.70	17.04 ^a
Summer salary						
Offered by UM	25.45 ^{ab}	6.72 ^{ac}	1.08 ^{bc}	9.31 ^a	0.71 ^a	4.04
Asked/bargained for	13.06 ^{ab}	2.76 ^{ac}	6.77 ^{bc}	9.63 ^a	1.88 ^a	3.56
Special timing of tenure clock						
Offered by UM	4.67	1.08	2.57	5.69 ^a	0.71 ^a	3.69
Asked/bargained for	12.06 ^a	5.73	0.00	9.22 ^a	1.57	6.16 ^a
Moving expenses						
Offered by UM	60.08 ^a	15.30 ^{ab}	54.98 ^b	19.08	12.22	25.90
Asked/bargained for	28.02	14.17	14.92	10.36	9.20	9.45
Housing subsidy						
Offered by UM	0.90	0.65	0.56	1.24	0.71	0.89
Asked/bargained for	0.28	0.41	0.26	0.00	0.00	0.00
Child care						
Offered by UM	3.03	0.97	0.00	3.56	0.78	0.00
Asked/bargained for	0.28	0.13	0.00	0.00	0.00	0.00
Partner/Spouse position						
Offered by UM	1.90	3.15	3.03	0.34 ^a	2.76 ^a	0.62
Asked/bargained for	9.69 ^{ab}	1.29 ^a	0.41 ^b	2.90	2.76	2.24

^{a, b, c} Matching symbols denote statistically significant differences, $p \leq .05$.

Table 100: Teaching by Track – Weighted Analysis

	Tenure (N=199)		Research (N=16*)		Clinical (N=85)	
	mean	sd	mean	sd	mean	sd
Typical yearly teaching load in department						
Number of undergraduate courses	1.25 ^a	1.12	1.50	1.31	0.58 ^a	0.94
Number of graduate courses	1.34	1.01	1.72	0.82	1.93	3.59
Number new courses developed in past 5 years	1.58 ^a	2.05	1.17	1.72	0.99	1.24
Number of courses released from teaching in past	1.52 ^{ab}	2.44	0.35 ^a	1.30	0.59 ^b	2.14
Teaching load winter and fall semesters 2001						
Number of undergraduate courses	0.90 ^a	1.44	1.88 ^b	2.01	0.13 ^{ab}	0.61
Number of graduate courses	0.92	1.23	1.23	1.60	0.70	1.74
Number of non-lab courses	1.54 ^a	1.58	1.86	1.50	0.69 ^a	1.68
Number of lab courses	0.27	0.77	1.26	1.91	0.13	0.49
Number of undergraduate students	59.65 ^a	99.11	12.08 ^a	22.11	26.71	110.20
Number of graduate students	39.54 ^a	76.24	15.96 ^a	33.17	78.17	280.87
Official Advising						
	(N=209)		(N=19)		(N=89)	
Number of undergraduates	1.68 ^a	4.60	1.82	3.54	0.41 ^a	2.01
Number of graduate students (masters, PhD, medical)	3.25 ^a	3.83	3.02	4.08	1.29 ^a	2.70
Number of postdocs or residents/fellows	1.42	2.57	0.82	1.14	1.93	4.77
Number of junior faculty	0.22	0.70	0.20	0.61	0.36	1.59

*Only 16 of 95 research faculty reported a formal teaching load.

^{a,b} Matching symbols denote statistically significant difference, $p \leq .05$.

Table 101a: Mentoring of Junior Faculty by Track – Weighted Analysis

	Tenure (N=74)		Research (N=71)		Clinical (N=64)	
	mean	sd	mean	sd	mean	sd
Number of areas of no mentoring by anyone anywhere	1.65	2.23	1.85	1.96	2.22	2.80
Number of mentors in same UM unit/department	4.58	4.15	4.02	4.08	2.22	3.32
Number of male mentors at UM	3.16	2.98	2.95	3.06	1.74	2.77

Table 101b : Percent With No Mentoring in Each Area, Junior Faculty by Track - Weighted Analysis

Percent who received no mentoring in each of the following area:	Tenure	Research	Clinical
	(N=65)	(N=55)	(N=38)
role model	13.1	17.1	16.5
networking	23.4	36.2	18.0
advancement	18.6	38.5	19.1
publishing	19.4	24.3	32.3
department politics	36.3	42.4	39.5
resources	33.8	39.2	27.5
advocacy	29.4	24.8	13.7
balancing work/family	65.0	62.5	48.6

Table 102: Service by Track – Weighted Analysis

	Tenure (N=117)		Research (N=66)		Clinical (N=75)	
	<u>mean</u>	<u>sd</u>	<u>mean</u>	<u>sd</u>	<u>mean</u>	<u>sd</u>
Average number of committees served on per year	0.78 ^{ab}	0.88	0.14 ^{ac}	0.36	0.47 ^{bc}	0.83
Average number of committees chaired per year	2.91	1.41	2.47 ^a	1.33	2.80 ^a	1.32
Importance of having dept/college leadership position *	3.28 ^a	2.55	0.80 ^{ab}	1.21	2.73 ^b	2.30

*Scale 1-5, 1=not at all important, 5=very important

^{a,b,c} Matching symbols denote statistically significant differences, $p \leq .05$.

Table 103: Stereotyping by Track – Weighted Analysis

	Tenure (N=117)		Research (N=66)		Clinical (N=75)	
	<u>mean</u>	<u>sd</u>	<u>mean</u>	<u>sd</u>	<u>mean</u>	<u>sd</u>
Scales:						
Gender stereotyping	1.56 ^a	0.65	1.55 ^b	0.62	1.82 ^{ab}	0.72
Ethnic or religious stereotyping	1.39	0.64	1.38	0.53	1.42	0.63
Items:						
<i>Heard insensitive or disparaging comment...</i>						
about women by faculty	1.65	0.79	1.55 ^a	0.66	1.80 ^a	0.82
about women by students	1.40	0.70	1.43	0.64	1.53	0.75
about men by faculty	1.73 ^a	0.97	1.66 ^b	0.81	2.04 ^{ab}	1.03
about men by students	1.37 ^a	0.67	1.51 ^b	0.85	1.77 ^{ab}	1.09
about racial/ethnic minorities by faculty	1.47	0.77	1.40	0.66	1.42	0.78
about racial/ethnic minorities by students	1.38	0.77	1.43	0.67	1.23	0.56
about a religious group by faculty	1.36 ^a	0.73	1.34 ^b	0.65	1.51 ^{ab}	0.76
about a religious group by students	1.23	0.61	1.31	0.64	1.37	0.74

*Scale 1-5, 1=never, 2=once or twice per year, 3=couple of times per year, 4= more than once per month, 5=weekly

^{a,b} Matching symbols denote statistically significant differences, $p \leq .05$.

Table 104a: Discrimination by Track (Percentages) – Weighted Analysis

	Tenure (N=235)	Research (N=95)	Clinical (N=116)
Discrimination at UM in past 5 years due to:			
Race/ethnicity	6.1	9.3	3.8
Gender	10.7	8.7	13.3
Sexual orientation	0.5	0.0	0.4
Physical disability	0.0	0.6	0.0
Religious affiliation	0.0	0.0	0.0

Table 104b : Gender Discrimination by Track (Percentages) – Weighted Analysis

Experienced gender discrimination at UM within past 5 years in:	Tenure (N=235)	Research (N=95)	Clinical (N=116)
Hiring	2.4	5.1	4.7
Promotion	2.9 ^a	6.1	7.3 ^a
Salary	7.2 ^a	10.7	14.5 ^a
Space/equipment, other resources	4.9	4.2	2.6
Access to administrative staff	2.2	2.3	3.6
Graduate student or resident/fellow assignments	1.8	1.0	1.1

^aMatching symbols identify groups that differ significantly from each other, $p \leq .05$

Table 105: Sexual Harassment* by Track (Percentages) – Weighted Analysis

In past 5 years at UM:	Tenure (N=235)	Research (N=95)	Clinical (N=116)
Individuals reporting sexual harassment	7.7	3.9	8.3
Individuals reporting others reported sexual harassment	22.3	17.2	26.1

* Defined as unwanted and uninvited sexual attention (sexual teasing, jokes, remarks or questions; unwanted pressure for dates; unwanted letters, phone calls, email; unwanted touching, leaning over, cornering, pinching; unwanted pressure for sexual favors; stalking; rape or assault.)

Table 106: Department Climate Scales by Track – Weighted Analysis

	Tenure (N=235)		Research (N=95)		Clinical (N=116)	
	<u>mean</u>	<u>sd</u>	<u>mean</u>	<u>sd</u>	<u>mean</u>	<u>sd</u>
Positive environment	3.45	0.92	3.42	0.75	3.57	0.86
Tolerant environment	3.79	0.76	3.88	0.71	3.97	0.75
Scholarly isolation	2.67 ^a	0.52	2.85	0.40	2.97 ^a	0.68
Felt surveillance	2.52	0.97	2.54	0.78	2.48	1.05
Egalitarian Atmosphere	3.73	0.83	3.82	0.69	3.83	0.86
Tokenism	1.97	1.25	1.87	1.01	1.96	1.25
Chair as fair	3.57	1.01	3.35	1.03	3.49	1.10
Chair as able to create a positive environment	3.43	1.07	3.32	1.04	3.50	1.10
Chair as committed to ethnic/racial diversity	3.74	1.08	3.47	1.05	3.92	0.87

*Scale 1-5, 1=strongly disagree, 5=strongly agree

^aMatching symbols denote statistically significant differences, $p \leq .05$.

Table 107: Institutional and Departmental Climate Ratings: Correlations With Overall Satisfaction with Position by Track – Weighted Analysis

	Overall Satisfaction with UM Position					
	Tenure (N=235)		Research (N=95)		Clinical (N=116)	
Institutional Factors:						
Gender stereotyping	-0.11		-0.26	*	-0.22	*
Ethnic/religious stereotyping	-0.07		-0.06		-0.04	
Gender discrimination	-0.22	***	-0.18		-0.07	
Unwanted sexual attention	-0.21	**	-0.22	*	-0.22	*
Departmental Factors:						
Positive climate	0.54	***	0.54	***	0.66	***
Tolerant climate	0.27	***	0.20		0.39	***
Gender egalitarian atmosphere	0.24	***	0.19		0.28	**
Scholarly isolation	-0.10		-0.26	*	0.18	
Felt surveillance	-0.33	***	-0.52	***	-0.60	***
Race/gender tokenism	-0.40	***	-0.41	***	-0.37	***
Rating of dept. chair as fair	0.41	***	0.37	***	0.59	***
Rating of depart. chair as able to create positive environment	0.43	***	0.35	***	0.54	***

* $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$

Table 108: Departmental Experiences Indicators: Correlations with Overall Satisfaction with Position by Track - Weighted Analysis

	Overall Satisfaction with UM Position		
	Tenure (N=235)	Research (N=95)	Clinical (N=116)
Career satisfactions	0.66 ***	0.74 ***	0.67 ***
Influence over educational decisions	0.31 ***	0.20	0.30 **
Influence over unit resources	0.26 ***	0.39 ***	0.42 ***
Effort to obtain resources	-0.25 ***	-0.09	-0.42 ***
Satisfaction with resources	0.32 ***	0.26 *	0.26 **
N areas of non-mentoring	-0.16 *	-0.10	-0.30 **
N mentors in same department	0.07	0.38 ***	0.16
N male mentors in same dept	0.02	0.40 ***	0.21 *
Committee service	0.10	0.05	0.00
Committee chair	0.13	0.18	0.17
Failure to nominate for award	-0.18 **	-0.11	-0.24 *
Productivity—self view	0.12	-0.08	0.34 ***
Productivity—department view	0.48 ***	0.22 *	0.20

*p_≤.05, **p_≤.01, ***p_≤.001

Table 109: Personal and Position Indicators and Household Characteristics: Correlations with Overall Satisfaction with Position by Track – Weighted Analysis

	Overall Satisfaction with UM Position		
	Tenure (N=235)	Research (N=95)	Clinical (N=116)
Age	0.10	-0.15	0.36 ***
Ethnicity (white/non-white)	-0.08	-0.31 **	-0.10
Years at UM	0.01	0.01	0.10
Years since Ph.D.	0.16 *	-0.02	0.29 **
Joint appointment	0.08	0.14	-0.01
Rank	0.07	0.11	0.21 *
Small college	-0.07	0.18	-0.06
Single, no children	-0.02	-0.10	0.04
Partner and children	-0.01	0.00	-0.07

*p_≤.05, **p_≤.01, ***p_≤.001

Table 110: Harassment by Track–Relationship with Satisfaction and Climate Ratings -Weighted Analysis

	Tenure Faculty					Research Faculty					Clinical Faculty				
	experienced harassment (N=31)		experienced no harassment (N=204)			experienced harassment (N=3)		experienced no harassment (N=92)			experienced harassment (N=17)		experienced no harassment (N=100)		
	mean	sd	mean	sd	sig.	mean	sd	mean	sd	sig.	mean	sd	mean	sd	sig.
Satisfaction with position	3.0	1.1	3.8	1.0	**	2.3	1.1	3.6	1.1	*	2.8	1.5	3.7	1.0	
Climate Scales:															
Gender stereotyping	2.4	0.9	1.5	0.6	***	1.7	0.3	1.6	0.7		2.4	0.9	1.7	0.6	*
Racial stereotyping	1.8	1.1	1.3	0.6		1.3	0.6	1.4	0.6		1.8	0.7	1.4	0.6	*
Positive climate	3.2	0.8	3.4	0.9		3.3	0.3	3.4	0.8		3.0	1.0	3.6	0.8	
Tolerant climate	3.3	1.0	3.8	0.7	*	3.3	0.5	3.9	0.7	***	3.5	0.7	4.0	0.8	*
Gender egalitarian atmosphere	3.1	1.1	3.8	0.8	*	3.1	0.2	3.8	0.7	***	3.3	1.2	3.8	0.8	
Scholarly isolation	2.9	0.6	2.6	0.5		3.2	0.3	2.9	0.4	**	2.9	0.8	3.0	0.7	
Felt surveillance	2.6	1.0	2.5	1.0		2.9	0.3	2.6	0.8	*	3.3	1.5	2.4	1.0	
Tokenism	2.5	1.3	1.9	1.2		2.0	0.8	1.8	1.0		2.7	1.4	1.8	1.2	
Dept chair as fair	3.6	1.0	3.6	1.0		3.5	0.4	3.3	1.0		3.3	1.0	3.5	1.1	
Dept chair creates positive environment	3.3	1.0	3.4	1.1		3.6	0.2	3.2	1.1		3.1	1.0	3.5	1.1	

*p<.05, **p<.01, ***p<.001

Table 111: Gender Discrimination by Track–Relationship with Satisfaction and Climate Ratings - Weighted Analysis

	Tenure Faculty					Research Faculty					Clinical Faculty				
	experienced harassment (N=60)		experienced no harassment (N=175)			experienced harassment (N=18)		experienced no harassment (N=77)			experienced harassment (N=35)		experienced no harassment (N=82)		
	mean	sd	mean	sd	sig.	mean	sd	mean	sd	sig.	mean	sd	mean	sd	sig.
Satisfaction with position	3.1	1.1	3.8	1.0	***	2.9	1.2	3.6	1.1		3.4	1.0	3.6	1.1	
Climate Scales:															
Gender stereotyping	2.0	0.7	1.5	0.7	**	2.1	0.6	1.5	0.7	**	1.9	0.6	1.8	0.7	
Racial stereotyping	1.5	0.6	1.4	0.6		1.4	0.5	1.4	0.6		1.6	0.8	1.4	0.6	
Positive climate	3.1	1.0	3.5	0.9		3.0	0.7	3.4	0.8		3.3	0.7	3.6	0.9	
Tolerant climate	3.5	0.8	3.8	0.8	*	3.8	0.9	3.8	0.7		3.4	0.8	4.0	0.7	***
Gender egalitarian atmosphere	3.0	1.0	3.8	0.8	***	3.5	1.1	3.8	0.6		2.8	0.8	3.9	0.8	***
Scholarly isolation	2.7	0.5	2.7	0.5		2.8	0.6	2.9	0.4		3.2	0.7	3.0	0.7	
Felt surveillance	3.3	1.0	2.4	0.9	***	3.4	0.9	2.5	0.8	**	3.0	1.3	2.4	1.0	
Tokenism	3.0	1.2	1.8	1.1	***	2.7	1.0	1.7	1.0	***	3.0	1.5	1.8	1.2	*
Dept chair as fair	3.4	1.2	3.6	1.0		2.8	1.1	3.4	1.0		3.2	1.0	3.5	1.1	
Dept chair creates positive environment	3.3	1.1	3.5	1.0		3.1	1.1	3.3	1.1		3.4	1.0	3.5	1.1	

*p<.05, **p<.01, ***p<.001

Table 112: Professional Experience by Gender - Weighted Analysis

	men scientists/engineers (N=187)		women scientists/engineers (N=259)	
	<u>mean</u>	<u>sd</u>	<u>mean</u>	<u>sd</u>
Age	48.39 ^a	10.29	45.23 ^a	8.22
Time since highest degree*	4.10 ^a	2.15	3.25 ^a	1.59
Time since first UM appointment*	2.89 ^a	2.01	2.34 ^a	1.47
	<u>percentages</u>		<u>percentages</u>	
Faculty of color	11 ^a		21 ^a	
Hired in last ten years	50 ^a		64 ^a	
Joint appointment	12 ^a		21 ^a	
Small college	14 ^a		29 ^a	
Full professor/ research scientist (includes sr. res. sci.)	38 ^a		19 ^a	
Assoc. professor/ assoc. res scientist (includes sr. assoc. res. sci.)	20 ^a		31 ^a	
Asst. prof./ asst. research scientist (includes res. invest.)	42		50	

*1=1995-2001;2=1990-1994, 3=1985-1989; 4=1980-1984; 5=1975-1979; 6=1970-1974; 7=1965-1969; 8=1960-1964.

^aMatching symbols identify groups that differ significantly from each other, $p \leq .05$

Table 113: Household and Partner Employment Characteristics by Gender (Percentages) – Weighted Analysis

	men scientists/ engineers (N=187)	women scientists/ engineers (N=259)
Household Composition:		
Single (no partner nor children)	4.2	7.0
Children, no partner	1.0 ^a	7.3 ^a
Partner and children	85.1 ^a	69.1 ^a
Partner, no children	9.7	16.5
	4.2	
Partner Employment:	(N=172)	(N=216)
Partner works fulltime	40.5 ^a	87.4 ^a
Partner employed at UM	31.1 ^a	42.7 ^a
If partner employed at UM, employed as faculty	42.8 ^a	75.6 ^a
Considered leaving UM to improve partner's career	32.2 ^a	50.6 ^a

^aMatching symbols identify groups that differ significantly from each other, $p \leq .05$

Table 114: Productivity* by Gender – Weighted Analysis

by Gender:	men scientists/ engineers (N=187)		women scientists/ engineers (N=259)	
	<u>mean</u>	<u>sd</u>	<u>mean</u>	<u>sd</u>
Perception of own productivity	6.83	1.93	6.74	2.07
Perception of department's view of own productivity	6.34	1.96	5.84	2.32

*Scores on all items ranged from 1 to 10 (1=much less productive; 10=much more productive).

Table 115: Indicators of Productivity by Gender (Percentages) - Weighted Analysis

	men scientists/ engineers (N=187)	women scientists/ engineers (N=259)
Number of external grant proposals (PI or co-PI)	55 ^a	73 ^a
Total dollar amount of external grants (PI or co-PI)	67	70
Number of external fellowships	2	4
Number of articles published in refereed academic or professional journals	94	97
Number of monographs written	11 ^a	5 ^a
Number of books edited	6	6
Number of book chapters	18	14
Number of dissertations chaired	22	19
Number of presentations at national/international conferences	62	71
Number of patents	8	4

^a Matching symbols identify groups that differ significantly from each other, $p \leq .05$

Table 116: Recognition by Gender (Percentages) – Weighted Analysis

	men scientists/ engineers (N=187)	women scientists/ engineers (N=259)
Nominated for teaching award*	30 ^a	17 ^a
Nominated for research award	23	19
Nominated for clinical award	5	2
Nominated for service award	10	10
Nominated for at least one award*	46 ^a	34 ^a
Failed to be nominated for award for which one is qualified	12	12

*Gender differences are not statistically significant when controlling for rank.

^a Matching symbols identify groups that differ significantly from each other, $p \leq .05$

Table 117: Mean Scores of Career Satisfaction Item Ratings by Gender - Weighted Analysis

	men scientists/engineers (N=187)		women scientists/engineers (N=259)	
	mean	sd	mean	sd
Scale:				
Satisfaction with unit/department	3.69	0.78	3.45	0.76
Individual items:*				
Sense of being valued as a mentor or advisor by students	4.29	0.99	4.41	0.96
Sense of being valued as a teacher by students	4.10	1.07	4.17	1.09
Sense of contributing to theoretical developments in my discipline	3.86	1.10	3.68	1.17
Opportunity to collaborate with other faculty	3.99	1.17	3.77	1.32
Ability to attract students to work with	3.53	1.29	3.68	1.27
Level of funding for research or creative efforts	3.68 ^a	1.20	3.23 ^a	1.33
Sense of being valued for my teaching by members of unit/dept	3.52	1.30	3.27	1.36
Level of intellectual stimulation in day-to-day contacts with faculty colleagues	3.70	1.21	3.60	1.39
Amount of social interaction with members of unit/department	3.55	1.26	3.46	1.41
Sense of being valued for research, scholarship, or creativity by members of unit/department	3.50 ^a	1.31	3.12 ^a	1.38
Current salary in comparison with the salaries of UM colleagues	3.36 ^a	1.24	2.92 ^a	1.26
Balance between professional and personal life	3.32	1.23	3.01	1.33

*Scores on all items ranged from 1 to 5 (1=very dissatisfied; 5=very satisfied).

^a Matching symbols identify groups that differ significantly from each other, $p \leq .05$

Table 118: Influence over Educational Decisions & Unit Resources by Gender -- Weighted Analysis

	men scientists/engineers (N=187)		women scientists/engineers (N=259)	
	mean	sd	mean	sd
Scales:				
Unit educational decisions	2.35	0.94	2.47	0.96
Unit resources (salary, money for travel, facilities/equipment)	2.35	0.89	2.25	0.91
Individual items:*				
Unit curriculum decisions	2.59	1.26	2.53	1.20
Size of salary increases I receive	1.80	0.87	1.83	0.98
Obtaining money for travel to professional meetings	2.60 ^a	1.33	2.30 ^a	1.26
Securing the facilities or equipment I need for my research	2.97	1.03	2.74	1.14
Selecting new graduate students or residents/fellows	3.14	1.30	3.15	1.35
Selecting new faculty members to be hired	2.56	1.22	2.67	1.16
Determining who gets tenure	1.87	1.19	1.78	1.11
Selecting the next unit head	1.74 ^a	0.98	1.95 ^a	1.11
Affecting the overall unit climate/culture	2.75	1.11	2.65	1.05

*Scores for all items range from 1 to 5 (1=no influence; 5=tremendous influence).

Note: Statistically significant effects on *rank* (junior, middle, senior) were found for curriculum decisions, securing equipment, selecting new graduate students, selecting new unit head and tenure decisions. Statistically significant effects on *Hired in last 10 years* (yes/no) were found for influence over educational matters scale, selecting new unit head, and influence over curriculum decisions.

^a Matching symbols denote statistically significant difference, $p \leq .05$.

Table 119: Effort and Satisfaction with Resources by Gender – Weighted Analysis

	men scientists/ engineers (N=187)		women scientists/ engineers (N=259)	
	mean	sd	mean	sd
Scales				
Mean effort	2.73	0.96	2.80	1.01
Mean satisfaction	3.71	1.01	3.49	1.07
Effort to secure the following resources*:				
office space	2.44	1.50	2.46	1.44
research space	3.27	1.39	3.18	1.42
computer equipment	2.49 ^a	1.07	2.78 ^a	1.31
lab equipment	3.13	1.25	3.10	1.27
service from vendors (repairs, supplies, upgrades)	2.81	1.02	2.76	1.05
Satisfaction with the following resources**:				
office space	3.84	1.40	3.65	1.37
research space	3.31	1.45	3.31	1.46
computer equipment	3.99 ^a	1.11	3.65 ^a	1.32
lab equipment	3.85	1.14	3.55	1.30
service from vendors (repairs, supplies, upgrades)	3.57 ^a	1.10	3.39 ^a	1.10

* Scores on all items range from 1 to 5 (1=no effort; 5=tremendous effort).

** Scores on all items range from 1 to 5 (1=very dissatisfied; 5=very satisfied).

^aMatching symbols denote statistically significant differences, $p \leq 0.05$.

Table 120a: Number of Items in Contract Negotiation by Gender – Weighted Analysis

	men scientists/ engineers (N=96)		women scientists/ engineers (N=161)	
	mean	sd	mean	sd
Initial Contract Negotiation (if hired in last 10 yrs)				
Number of items offered by UM	1.95	2.18	2.04	2.29
Number of items bargained for	1.41	2.28	1.62	2.24
Number of items promised in offer letter	1.62	2.45	1.48	2.20
Total number of items received	2.51	2.60	2.78	2.54
Contract Renegotiation	(N=140)		(N=197)	
Number of items offered by UM	1.50	1.88	1.18	1.55
Number of items bargained for	1.40	1.80	1.60	1.85
Number of items received by terms of award	0.78	1.41	0.88	1.62
Total number of items received	3.68	3.46	3.67	3.47

Table 120b: Contract Negotiations by Gender (Percentages) – Weighted Analysis

	Initial Negotiation (those hired within last 10 yrs)		Later Renegotiations:	
	men scientists/ engineers (N=90)	women scientists/ engineers (N=213)	men scientists/ engineers (N=115)	women scientists/ engineers (N=235)
Course release time				
Offered by UM	12.5	20.1	13.7	14.9
Asked/bargained for	8.5	13.0	12.7 ^a	23.8 ^a
Lab equipment				
Offered by UM	20.2	15.4	12.2	6.7
Asked/bargained for	20.7	24.7	21.1	17.0
Lab space				
Offered by UM	17.7	22.5	17.0 ^a	9.2 ^a
Asked/bargained for	18.1	24.3	20.0	20.5
Renovation of lab space				
Offered by UM	7.0	6.8	10.7	5.0
Asked/bargained for	8.4	8.5	14.6	9.1
Research assistant				
Offered by UM	6.4	6.0	1.9	5.4
Asked/bargained for	9.7	11.6	13.1	15.9
Clerical/administrative support				
Offered by UM	17.9	20.9	20.0	12.7
Asked/bargained for	5.2	7.0	18.0	15.7
Discretionary funds				
Offered by UM	33.4	35.8	29.2	25.9
Asked/bargained for	28.3	28.9	18.3 ^a	28.9 ^a
Travel funding				
Offered by UM	23.1	27.3	32.7	24.4
Asked/bargained for	12.2	15.7	18.7	23.3
Special bonus				
Offered by UM	1.6	1.2	12.6	15.3
Asked/bargained for	3.8	2.1	8.3	7.0
Summer salary				
Offered by UM	13.8	24.0	6.8	11.5
Asked/bargained for	5.1 ^a	14.7 ^a	7.3	10.0
Special timing of tenure clock				
Offered by UM	2.2	5.2	2.9	7.2
Asked/bargained for	6.4	3.9	4.9	10.6
Moving expenses				
Offered by UM	52.7	48.6	20.5	18.2
Asked/bargained for	20.6	17.3	11.2	6.4
Housing subsidy				
Offered by UM	1.7 ^a	0.5 ^a	1.0	0.4
Asked/bargained for	0.8 ^a	0.2 ^a	0.0	0.0
Child care				
Offered by UM	1.3	0.9	1.0	0.7
Asked/bargained for	0.8 ^a	0.2 ^a	0.6	0.2
Partner/Spouse position				
Offered by UM	2.6	4.8	0.5 ^a	3.4 ^a
Asked/bargained for	5.8	11.9	2.0	5.4

^a Matching symbols denote statistically significant differences, $p \leq 0.05$.

Table 121: Teaching by Gender – Weighted Analysis

	men scientists/ engineers (N=117)		women scientists/ engineers (N=183)	
	<u>mean</u>	<u>sd</u>	<u>mean</u>	<u>sd</u>
Typical yearly teach load in department				
Number of undergraduate courses	1.09	1.12	1.19	1.17
Number of graduate courses	1.52	2.22	1.47	1.14
Number new courses developed in past 5 years	1.35	1.86	1.69	1.93
Number of courses released from teaching in past 5 years	1.15	2.15	1.73	3.13
Teaching load winter and fall .Semesters 2001				
Number of undergraduate courses	0.70	1.24	0.80	1.72
Number of graduate courses	0.88	1.44	0.84	1.29
Number of non-lab courses	1.34	1.67	1.23	1.57
Number of lab courses	0.23	0.67	0.40	1.11
Number of undergraduate students	52.64	106.87	34.71	80.86
Number of graduate students	51.59	176.04	41.74	86.88
Official advising				
Number of undergraduates	1.24	4.02	1.71	4.04
Number of graduate students (masters, PhD, medical)	2.60	3.57	3.05	4.03
Number of postdocs or residents/fellows	1.59	3.54	1.32	2.26
Number of junior faculty	0.25	1.11	0.30	0.71

Table 122a: Mentoring of Junior Faculty by Gender – Weighted Analysis

	men scientists/ engineers (N=80)		women scientists/ engineers (N=128)	
	<u>mean</u>	<u>sd</u>	<u>mean</u>	<u>sd</u>
Number of areas of no mentoring by anyone anywhere	1.78	2.29	2.44	2.62
Number of mentors in same UM unit/department	3.47	4.02	3.75	3.78
Number of male mentors at UM	2.60	3.03	2.50	2.89

**Table 122b: Percent With No Mentoring in Each Area
Junior Faculty by Gender – Weighted Analysis**

	men scientists/engineers (N=53)	women scientists/engineers (N=125)
Percent who received no mentoring in each of the following area:		
role model	13.1	21.3
networking	26.3	30.6
advancement	26.3	22.9
publishing	23.0	25.8
department politics	38.2	40.7
resources	31.7	42.8
advocacy	23.0	30.2
balancing work/family	61.6	58.5

Table 123: Service by Gender – Weighted Analysis

	men scientists/engineers (N=187)		women scientists/engineers (N=259)	
	<u>mean</u>	<u>sd</u>	<u>mean</u>	<u>sd</u>
Average number of committees served on per year	2.52 ^a	2.45	3.14 ^a	2.44
Average number of committees chaired per year	0.49 ^a	0.78	0.62 ^a	0.85
Importance of having dept/college leadership position *	2.74	1.38	3.03	1.36

*Scale 1-5, 1=not at all important, 5=very important

^a Matching symbols denote statistically significant differences, $p \leq 0.05$.

Table 124: Stereotyping by Gender – Weighted Analysis

	men scientists/engineers (N=187)		women scientists/engineers (N=259)	
Scales*	<u>mean</u>	<u>sd</u>	<u>mean</u>	<u>sd</u>
Gender stereotyping	1.59 ^a	0.65	1.85 ^a	0.73
Racial or religious stereotyping	1.37	0.61	1.50	0.63
Items*				
about women by faculty	1.58 ^a	0.69	2.06 ^a	0.99
about women by students	1.40 ^a	0.66	1.65 ^a	0.83
about men by faculty	1.78	0.97	1.90	0.93
about men by students	1.48	0.85	1.62	0.82
about racial/ethnic minorities by faculty	1.39 ^a	0.72	1.65 ^a	0.86
about racial/ethnic minorities by students	1.32	0.68	1.47	0.80
about a religious group by faculty	1.38	0.71	1.48	0.77
about a religious group by students	1.28	0.65	1.31	0.64

*Scale 1-5, 1=never, 2=once or twice per year, 3=couple of times per year, 4= more than once per month, 5=weekly

^a Matching symbols denote statistically significant differences, $p \leq 0.05$.

Table 125a: Discrimination by Gender (Percentages) – Weighted Analysis

	men scientists/engineers (N=187)	women scientists/engineers (N=259)
Discrimination due to:		
Race/ethnicity	6.3	5.2
Gender	4.1 ^a	40.0 ^a
Sexual orientation	0.4 ^a	1.8 ^a
Physical disability	0.1 ^a	0.7 ^a
Religious affiliation	0.6	0.6

^a Matching symbols identify groups that differ significantly from each other, $p \leq .05$

Table 125b: Gender Discrimination by Gender (Percentages) – Weighted Analysis

	men scientists/engineers (N=187)	women scientists/engineers (N=259)
Experienced gender discrimination in:		
Hiring	2.8	6.9
Promotion	1.9 ^a	15.9 ^a
Salary	3.2 ^a	37.0 ^a
Space/equipment, other resources	0.7 ^a	18.0 ^a
Access to administrative staff	0.4 ^a	11.5 ^a
Graduate student or resident/fellow assignments	0.4 ^a	5.7 ^a

^a Matching symbols identify groups that differ significantly from each other, $p \leq .05$

Table 126: Sexual Harassment* by Gender (Percentages) – Weighted Analysis

	men scientists/engineers (N=187)	women scientists/engineers (N=259)
Experienced sexual harassment at UM in past five years	5.0 ^a	15.4 ^a
Knows someone who experienced sexual harassment at UM in past five years	20.1 ^a	32.0 ^a

* Defined as unwanted and uninvited sexual attention (sexual teasing, jokes, remarks or questions; unwanted pressure for dates; unwanted letters, phone calls, email; unwanted touching, leaning over, cornering, pinching; unwanted pressure for sexual favors; stalking; rape or assault.)

^a Matching symbols identify groups that differ significantly from each other, $p \leq .05$

Table 127: Department Climate Scales* by Gender – Weighted Analysis

	men scientists/engineers (N=187)		women scientists/engineers (N=259)	
	<u>mean</u>	<u>sd</u>	<u>mean</u>	<u>sd</u>
Positive environment	3.53 ^a	0.85	3.26 ^a	0.94
Tolerant environment	3.93 ^a	0.70	3.52 ^a	0.87
Scholarly isolation	2.79	0.57	2.80	0.54
Felt surveillance	2.44 ^a	0.93	2.86 ^a	1.01
Egalitarian Atmosphere	3.93 ^a	0.71	3.13 ^a	0.92
Tokenism	1.75 ^a	1.10	2.72 ^a	1.27
Chair as fair	3.55 ^a	1.02	3.27 ^a	1.14
Chair as able to create a positive environment	3.46	1.05	3.27	1.14
Chair as committed to ethnic/racial diversity	3.77	0.99	3.60	1.15

*Scores range from 1(low) to 5 (high) on all items that make up the scales.

^a Matching symbols denote statistically significant differences, $p \leq .05$.

Table 128: Institutional and Departmental Climate Ratings by Gender: Correlations with Overall Satisfaction with Position – Weighted Analysis

	Overall satisfaction with UM position	
	men scientists/engineers (N=187)	women scientists/engineers (N=259)
Institutional Factors:		
Gender stereotyping	-0.15	-0.19 **
Ethnic/religious stereotyping	-0.05	-0.06 *
Gender discrimination	-0.10 **	-0.16 **
Unwanted sexual attention	-0.20 **	-0.17 **
Departmental Factors:		
Positive climate	0.57 ***	0.52 ***
Tolerant climate	0.22 **	0.40 ***
Gender egalitarian atmosphere	0.15 *	0.35 ***
Scholarly isolation	-0.04	-0.05
Felt surveillance	-0.42 ***	-0.45 ***
Race/gender tokenism	-0.38 ***	-0.30 ***
Rating of department chair as fair	0.45 ***	0.44 ***
Rating of department chair as able to create positive environment	0.45 ***	0.41 ***

* $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$

**Table 129: Departmental Experiences Indicators by Gender:
Correlations with Overall Satisfaction with Position – Weighted Analysis**

	Overall satisfaction with UM position	
	men scientists/engineers (N=116)	women scientists/engineers (N=235)
Career satisfactions	0.67 ***	0.66 ***
Influence over educational decisions	0.30 ***	0.31 ***
Influence over resources	0.28 ***	0.43 ***
Effort to obtain resources	-0.23 **	-0.37 ***
Satisfaction with resources	0.25 **	0.39 ***
N areas of non-mentoring	-0.14	-0.34 ***
N mentors in same department	0.12	0.34 ***
N male mentors in same dept	0.12	0.29 ***
Committee service	0.13	-0.03
Committee chair	0.20 *	-0.01
Failure to nominate for award	-0.20 **	-0.11
Productivity—self view	0.13	0.14 *
Productivity—department view	0.32 ***	0.45 ***

* p<.05, **p<.01, ***p<.001

**Table 130: Personal and Position Indicators by Gender: Correlations with
Overall Satisfaction with Position – Weighted Analysis**

	Overall satisfaction with UM position	
	men scientists/engineers (N=116)	women scientists/engineers (N=235)
Age	0.14 ***	-0.08 ***
Ethnicity	-0.11 ***	-0.13 ***
Years at UM	0.03 ***	-0.03 ***
Years since Ph.D.	0.18 ***	-0.01 ***
Joint Appointment	0.12 ***	0.02 ***
Rank	0.14 ***	-0.01 ***
Small college	0.05 ***	-0.07 ***
Single, no children	0.02 ***	-0.10 ***
Partner and children	-0.07 ***	0.02 ***

***p<.001

Table 131: Harassment by Gender–Relationship with Satisfaction and Climate Ratings – Weighted Analysis

	men scientists/engineers					women scientists/engineers				
	experienced harassment (N=9)		experienced no harassment (N=178)			experienced harassment (N=103)		experienced no harassment (N=156)		
	mean	sd	mean	sd	sig.	mean	sd	mean	sd	sig.
Satisfaction with position	2.84	1.25	3.77	0.98	*	2.84	1.30	3.39	1.12	*
Climate Scales:										
Gender stereotyping	2.28	0.89	1.56	0.64	*	2.40	0.87	1.71	0.67	***
Racial stereotyping	1.70	1.08	1.35	0.57		1.80	0.83	1.44	0.60	**
Positive climate	3.24	0.66	3.51	0.86		2.97	0.98	3.27	0.91	
Tolerant climate	3.38	0.86	3.94	0.69	*	3.33	0.87	3.53	0.88	
Gender egalitarian atmosphere	3.53	1.10	3.94	0.67		2.74	0.87	3.19	0.94	**
Scholarly isolation	2.92	0.59	2.78	0.56		2.93	0.65	2.80	0.54	
Felt surveillance	2.52	1.20	2.41	0.93		3.37	0.99	2.84	1.03	**
Tokenism	1.95	1.16	1.67	1.02		3.29	1.17	2.65	1.25	**
Dept chair as fair	3.82	0.48	3.53	1.02		3.01	1.25	3.25	1.11	
Dept chair creates positive environment	3.47	0.60	3.45	1.07		2.94	1.26	3.27	1.11	

*p<.05, **p<.01, ***p<.001

Table 132: Discrimination –Relationship with Satisfaction and Climate Ratings - Weighted Analysis

	men scientists/engineers					women scientists/engineers				
	experienced harassment (N=9)		experienced no harassment (N=178)			experienced harassment (N=103)		experienced no harassment (N=156)		
	mean	sd	mean	sd	sig.	mean	sd	mean	sd	sig.
Satisfaction with position	3.26	1.03	3.74	1.01		3.10	1.16	3.47	1.13	*
Climate Scales:										
Gender stereotyping	2.00	0.56	1.58	0.68	*	2.00	0.76	1.71	0.72	**
Racial stereotyping	1.55	0.77	1.36	0.59		1.49	0.59	1.50	0.68	
Positive climate	3.38	0.72	3.51	0.86		3.06	0.91	3.35	0.91	*
Tolerant climate	4.04	0.55	3.91	0.72		3.26	0.79	3.64	0.91	***
Gender egalitarian atmosphere	3.95	0.72	3.92	0.70		2.65	0.84	3.42	0.88	***
Scholarly isolation	3.18	0.57	2.78	0.56	*	2.72	0.57	2.89	0.54	*
Felt surveillance	3.13	1.37	2.39	0.92		3.28	1.02	2.68	0.97	***
Tokenism	2.62	1.32	1.66	1.04	*	3.05	1.22	2.54	1.24	**
Dept chair as fair	3.60	0.93	3.56	1.01		3.04	1.17	3.33	1.08	
Dept chair creates positive environment	3.75	0.78	3.45	1.06		3.13	1.15	3.28	1.11	

*p<.05, **p<.01, ***p<.001