

## Benchmark Report Year 2 2004-2005

*Prepared by the URI ADVANCE Evaluation Committee*

This report contains information reported during AY 2004-2005. It should be noted that since last year, the Department of Biomedical Sciences within the College of Pharmacy has been added to the targeted ADVANCE departments and will be reported in this year's report.

Data for this year's report were acquired through the University of Rhode Island's Human Resources Department, a stable and reliable data source and a change from last year's data sources that comprised primarily of individual colleges and/or departments. Furthermore, data for Social and Behavioral Sciences (SBS) have been disaggregated from the Science, Technology, Engineering, and Math (STEM) disciplines. Because of recent disaggregating of data, the change in data source, and resultant adjustments in numbers, changes since last year have not been indicated.

### **1. Number and Percent of Women Faculty in Science/ Engineering by Department**

Women continue to be outnumbered by men across most ranks, departments, and colleges in the STEM and SBS disciplines. Of the total 280 tenured and tenure-track faculty in STEM and SBS departments, women number 54, or 19.3% (see Table 1). Similarly, of the 50 non-tenure-track faculty in STEM, women number 18; though superficially a much larger representation of 36%, it is amongst the least influential non-tenure track group of faculty. This latter non-tenure-track category includes researchers, marine research scientists, and lecturer positions.

Similar to last year, Biological Sciences (Full Professors = 50.0%, Associate Professors = 100.0%, and Assistant Professors = 33.3%) and Psychology (Full Professors = 26.3%, Associate Professors = 71.4%, and Assistant Professors = 33.3%) boast the highest percentages of female faculty. Sociology also has relatively higher percentages of female faculty (Full Professors = 30.0%, Associate Professors = 50.0%, and Assistant Professors = 100%) but is a moderately small department at URI, so is not an anchor in the ways that Biological Sciences and Psychology are (see Table 2).

Other departments across all other colleges do not house nearly the same numbers of women faculty as do those already mentioned. Of note are departments where women are absent in the higher ranks, such as Full Professors or Associate Professors. For example, women remain absent in Full Professor positions

in 5 out of 6 departments in the College of Engineering (COE) and 5 out of 7 departments in the College of Environmental & Life Sciences (CELS). Women Associate Professor ranks remain similarly sparse in those two colleges; they are absent in 4 out of 6 departments in COE and 3 out of 7 colleges in CELS (see Table 2). It should be noted that Biological Sciences, as a function of institutional restructuring, is going to be moved out of the College of Arts & Sciences and into CELS in the upcoming academic year, thereby boosting the latter college's ranks of women.

The department of Civil Engineering welcomed a new ADVANCE Fellow hire into its folds, thus boosting its representation of women faculty in the Assistant Professor ranks.

The faculty of the department of Biomedical Science, within the College of Pharmacy, is 33.3% female with 5 tenure-track positions held by women (see Table 2). These data will serve as baseline for this department in future reports.

Aggregated across all colleges, among all tenured and tenure-track positions, women remain outnumbered by men across all ranks, with the most striking differences in the higher Full Professor ranks (Full Professors = 12.6%, Associate Professors = 39.5%, and Assistant Professors = 31.6%) (see Table 2); if not for Psychology, Biological Sciences, and Sociology & Anthropology, those numbers would appear even more paltry. As noted below, ADVANCE is making strides to narrow that gap, starting from boosting recruitment in the lower ranks and working upwards to create and maintain a hospitable climate for all women faculty.

## **2. Number of Women in STEM who are in Non-Tenure Track Positions**

We have identified non-tenure track positions Researchers (research professors and Marine Research Scientist in the Graduate School of Oceanography), Lecturers, Instructors, and other adjunct or temporary positions for whom there is no union representation or tenure process. As noted earlier, women are underrepresented in all ranks, across all STEM and SBS departments. Interestingly, however, women comprise a bulk of the non-tenure track positions (see Table 1 for details). For example, in a number of departments -- such as Chemistry, Psychology, Sociology & Anthropology, Civil & Electric Engineering, and Plant Sciences -- women comprise the entire (100%) non-tenure-track workforce. In other departments, they comprise at least a majority of the non-tenure-track workforce (Cell & Molecular Biology 50%, and Biomedical Sciences 50%). A numeric majority in these ranks is meaningless; these women have no faculty-union representation in these ranks, let alone any decision-making voice in departmental or institutional policies.

## **3. Number and Percent of Women in Tenure-Line Positions by Rank and Department**

Of all ranks across all colleges, women are most densely populated in the lower ranks: Associate, Assistant, Lecturer, or other non-tenure-track positions such as Researcher (See Table 1). There remains unequal representation of women across each position in individual departments and colleges. Most of

the increases at the assistant level can be attributed to the hiring of ADVANCE fellows within the STEM departments.

#### **4. Promotion Outcomes in STEM Fields by Gender**

These data are not historically tracked in a systematic manner within a centralized office at URI. Promotion and tenure decisions are made through a process of peer evaluation, offering all departmental faculty members the opportunity to review a candidate's file and submit letters of evaluation to the chair, who then writes a recommendation to the dean:

*Article 15.7 Process of Department Peer Evaluation. Before preparing his/her written evaluations . . . the department chairperson shall consult with the department faculty by such procedure for peer evaluation as the faculty shall devise through annual department discussion and vote. Methods shall be at the discretion of the department, so long as each faculty member is given the right, without prejudice to any party involved, to abstain from participation . . . . No method of department peer evaluation may deny any faculty member the right to submit a written evaluation of any or all faculty which shall be included in the material forwarded to the Dean with the chairperson's written evaluation.*

*Article 15.8.2 Inclusion of Department Evaluation. In writing his/her evaluations, the department shall give full consideration to all opinions and evaluations obtained by consultation with the department faculty.*

Agreement between Rhode Island Board of Governors and University  
of Rhode Island Chapter American Association of University Professors

#### **5. Years in Rank and Years at Institution in STEM Fields by Gender**

These data are also not systematically tracked within a centralized office at URI. The institution implemented a tracking database in 2003 that provides partial data that are not reliable across all cases. Such data as were accessible are included in Tables 3a & b; however, because of data unreliability, any meaningful comparisons are not recommended.

#### **6. Voluntary, non-Retirement, non-Death Attrition by Gender for STEM Faculty**

Exiting faculty -- tenured, tenure-track, or otherwise -- are not required to divulge reasons for leaving. At present, there are no institutionalized systematic means of conducting exit interviews upon a faculty member's departure. Thus, the data available are sparse and probably not reliable for revealing meaningful exit patterns (see Table 4). ADVANCE is currently exploring the feasibility of conducting exit interviews with recently departed faculty.

#### **7. Number and Percent of New Hires in STEM and SBS**

The number and percent of new hires who are women has been steadily increasing since the advent of ADVANCE at URI (See Table 5). Two years prior to the start of ADVANCE (2000-01), women accounted for only 31% of new hires at the Assistant Professor level, although they comprised 80% of new hires at the

Associate Professor level. A year later (one year prior to ADVANCE) that figure dropped to 17% at the Assistant Professor level and 0% at the Associate Professor level. During the first year of ADVANCE (2002-03), those figures were resuscitated; women were 29% of new hires at the Assistant Professor level. Since then, the percent of women new hires at the Assistant Professor level has seen a steady increase, from 33% in 2003-04, to 60% in 2004-05. There have been no female new hires at the Associate or Full Professor levels since 2000-01. ADVANCE is continuing to explore the sustainability of female new hires in STEM and SBS without providing funding incentives to departments.

## **8. Number and Percent of Women in Faculty Leadership Positions**

Administrative leadership positions for the purpose of this evaluation were defined as department heads, deans, associate deans, assistant deans, vice provosts, and provosts/vice presidents. Overall, there was little change since the baseline report. Of the 244 positions identified, 100 (40.9%) were held by women (see Table 6). The positions with the highest percentage of women were Vice Provost (50%), and Assistant Dean (100%). Most notably, the position of Provost and Vice President of Academic Affairs is held by a woman, and she is the first woman to serve as Provost and Vice President for Academic Affairs of a New England land grant university.

Furthermore, each position was disaggregated into those held by an individual possessing a Master's degree or Ph.D. in STEM or SBS fields. Again, the position of Vice Provost had the highest percentage with only one individual having a STEM degree and being female. Of the six Associate Deans with a STEM background, one was female (5.9%). The one Assistant Dean with a STEM background was male.

Of STEM or SBS department heads, 5 out of 24 (20.8%) positions were held by women. This represents only a slight decrease (0.3%) since the baseline report.

Of the program/center directors, 63 positions were identified. Women held 27, or 52.9%, of these positions. The analysis was not divided by STEM status due to difficulties in determining the background of these individuals.

This is the first year of reporting data on the membership on powerful committees, including the Faculty Senate and an aggregated count for other powerful committees (Council for Research, Graduate Council, Curricular Affairs, and General Education). Of these committee positions, 47 of 115, or 40.9%, were held by women. This percentage is identical to the overall percentage of administrative positions occupied by women. When disaggregated by STEM/SBS status, 7 out of 42 faculty with STEM or SBS backgrounds were women. This equates to approximately 16.7% of those in STEM disciplines. The count includes individuals who held multiple positions. Four administrators also served on 2 committees, 8 administrators also served on 1 committee, and 10 individuals served on 2 committees. Therefore, the count reflects the total number of administrative and committee positions rather than the total number of individuals.

It should also be noted that for the purposes of this evaluation, a Masters degree or Ph.D. in a STEM field included all departments identified by the ADVANCE grant and in addition several departments identified as STEM due to the scientific background and experience required for their field. These included: Nursing, Nutrition and Food Science, Pharmacy, and Physical Therapy.

**9. Salary of STEM Faculty by Gender ( controlling for department, rank, years in rank)**

Salary data will be reported next year, as per the Proposed Toolkit for Reporting Progress Toward NSF ADVANCE-IT Goals prepared by the ADVANCE-IT Indicators Working Group (2005). Data gathering and analysis is currently being conducted in collaboration with the Office of the Assistant Provost and Human Resources.

**10. Start-up Packages of newly hired STEM Faculty by Gender**

We are currently assessing the feasibility of gathering passive indicators of start-up packages granted to newly hired STEM faculty. An active indicator, a satisfaction survey, was distributed to all STEM faculty hired during AY 2004-2005, to obtain information regarding start-up funding and space accommodations offered to the new faculty. The survey was based on a similar study release by Kansas State regarding start-up packages. A total of 23 surveys were sent out, with three returned to date (13%).

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**Table 1. STEM and SBS Departmental Faculty Gender Composition (2004-05)**

	Tenured & Tenure Track			Non-Tenure Track			Non-Tenure Track as % All Women
	All	Women	% Women	All	Women	% Women	
College of Arts & Sciences (STEM)							
Biological Sciences	13	7	53.8	1	-	0	0
Chemistry	13	1	7.7	1	1	100.0	50.0
Computer Science & Statistics	11	3	27.3	1	-	0	0
Mathematics	18	4	22.2	4	1	25.0	20.0
Physics	11	1	9.1	6	2	33.3	66.7
College of Engineering							
Chemical	9	1	11.1	1	-	0	0
Civil	8	1	12.5	1	1	100.0	50.0
Electrical	18	1	5.6	1	1	100.0	50.0
Industrial	5	1	20.0	-	-	0	0
Mechanical	14	1	7.1	-	-	0	0
Ocean	8	1	12.5	1	-	0	0
Environment & Life Sciences							
Cell & Molecular Biology	8	2	25.0	2	1	50.0	33.3
Environmental & Natural Resource Economics	9	1	11.1	-	-	0	0
Fisheries, Animal, & Veterinary Sciences	7	2	28.6	1	-	0	0
Geosciences	7	1	14.3	-	-	0	0
Marine Affairs	8	1	12.5	-	-	0	0
Natural Resource Science	9	1	11.1	1	-	0	0
Plant Sciences	12	-	0.0	1	1	100.0	100.0
College of Pharmacy							
Biomedical Sciences	20	5	25.0	2	1	50.0	16.7
Graduate School of Oceanography							
GSO	30	3	10.0	22	5	22.7	62.5
College of Arts & Sciences (SBS)							
Psychology	29	11	37.9	3	3	100.0	21.4
Sociology & Anthropology	13	5	38.5	1	1	100.0	16.7
Total	280	54	19.3	50	18	36.0	25.0

Source: URI Human Resources Data

**Table 2. Number and Percent of Women Tenured and Tenure Track Faculty in STEM and SBS by Rank and Department (2004-05)**

	Women			Men			Percent Women	
	Full	Associate	Assistant	Full	Associate	Assistant	Full	Assistant
<b>College of Arts &amp; Sciences (STEM)</b>								
Biological Sciences	4	2	1	4	-	2	50.0	33.3
Chemistry	1	-	-	10	1	1	9.1	0
Computer Science & Statistics	1	2	-	5	1	2	16.7	0
Mathematics	2	1	1	9	2	3	18.2	33.3
Physics	-	-	1	10	-	-	0	100.0
<b>College of Engineering</b>								
Chemical	-	1	-	6	2	-	0	33.3
Civil	-	-	1	4	2	1	0	50.0
Electrical	1	-	-	15	-	2	6.3	0
Industrial	-	-	1	3	1	-	0	100.0
Mechanical	-	-	1	11	1	1	0	50.0
Ocean	-	1	-	6	-	1	0	100.0
<b>Environment &amp; Life Sciences</b>								
Cell & Molecular Biology	1	1	-	4	2	-	20.0	33.3
Environmental & Natural Resource Economics	1	-	-	6	-	2	14.3	0
Fisheries, Animal, & Veterinary Sciences	-	1	1	5	-	-	0	100.0
Geosciences	-	1	-	5	1	-	0	50.0
Marine Affairs	-	-	1	4	1	2	0	33.3
Natural Resource Science	-	-	-	5	4	-	0	0
Plant Sciences	-	1	-	8	1	2	0	50.0
<b>College of Pharmacy</b>								
Biomedical Sciences	3	-	2	10	2	3	23.1	0
<b>Graduate School of Oceanography</b>								
GSO	3	-	-	23	2	2	11.5	0
<b>College of Arts &amp; Sciences (SBS)</b>								
Psychology	5	5	1	14	2	2	26.3	33.3
Sociology & Anthropology	3	1	1	7	1	-	30.0	100.0
<b>Total</b>	<b>25</b>	<b>17</b>	<b>12</b>	<b>174</b>	<b>26</b>	<b>26</b>	<b>12.6</b>	<b>39.5</b>

Source: URI Human Resources Data

**Table 3a. Years in Rank at the for STEM and SBS Faculty (2004-05)**

STEM & SBS	Number		Yrs in Rank *		Difference (F-M)
	F	M	F	M	
Full	9	24	5.34 (3.28)	7.80 (4.97)	-2.46
Associate	10	13	5.25 (1.35)	4.86 (1.28)	0.39
Assistant	1	4	5.02	1.44 (1.03)	3.58
Non-Tenure Track	6	18	0 (.00)	.24 (1.01)	-0.24
<b>Total</b>	<b>26</b>	<b>59</b>			

Note: \* Only including cases for whom date of previous rank was available.

Source: URI Human Resources

**Table 3b. Years at Institution for STEM and SBS Faculty (2004-05)**

STEM & SBS	Number		Time @ Institution *		Difference (F-M)
	F	M	F	M	
Full	22	176	12.0 (3.27)	11.03 (5.70)	0.97
Associate	19	28	5.19 (2.37)	4.42 (2.41)	0.77
Assistant	18	28	.28 (1.18)	.50 (1.34)	-0.22
Non-Tenure Track (Lecturer)	12	15	.37 (1.30)	3.29 (7.23)	-2.92
<b>Total</b>	<b>71</b>	<b>247</b>			

Note: \* Start date not consistently available, thus comparisons are unreliable.

Source: URI Human Resources

**Table 4. Voluntary, Non-Retirement, Non-Death Attrition, by Rank and Gender (Cumulative till 2004-05)**

	Assistant		Associate		Full Professor	
	Women	Men	Women	Men	Women	Men
College of Arts & Sciences	-	1	-	1	1	-
College of Engineering	-	1	-	2	-	-
Environment & Life Sciences	1	-	1	1	-	1
College of Pharmacy	1	-	-	-	-	-
Graduate School of Oceanography	-	-	-	-	-	1
<b>Total</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>4</b>	<b>1</b>	<b>2</b>

Source: URI Human Resources

Table 5. New-Hires in STEM and SBS by year (2004-05)

	Assistant			Associate			Full Professor		
	Men	Women	% Women	Men	Women	% Women	Men	Women	% Women
<b>Pre-ADVANCE Year: 2000-01</b>									
College of Arts & Sciences (STEM)	2	1	33.3	-	1	100.0	-	-	0.0
College of Engineering	1	-	0.0	-	1	50.0	-	-	0.0
Environment & Life Sciences	3	2	40.0	-	1	100.0	-	-	0.0
College of Pharmacy	1	1	50.0	-	-	0.0	-	-	0.0
Graduate School of Oceanography	1	-	0.0	-	-	0.0	1	-	0.0
College of Arts & Sciences (SBS)	1	-	0.0	-	1	100.0	-	-	0.0
<b>Total</b>	<b>9</b>	<b>4</b>	<b>30.8</b>	<b>1</b>	<b>4</b>	<b>80.0</b>	<b>-</b>	<b>-</b>	<b>0.0</b>
<b>Pre-ADVANCE Year: 2001-02</b>									
College of Arts & Sciences (STEM)	1	-	0.0	-	-	0.0	-	-	0.0
College of Engineering	1	-	50.0	1	-	0.0	-	-	0.0
Environment & Life Sciences	2	-	0.0	-	-	0.0	-	-	0.0
College of Pharmacy	1	-	0.0	-	-	0.0	-	-	0.0
Graduate School of Oceanography	-	-	0.0	-	-	0.0	-	-	0.0
College of Arts & Sciences (SBS)	-	-	0.0	-	-	0.0	-	-	0.0
<b>Total</b>	<b>5</b>	<b>1</b>	<b>16.7</b>	<b>1</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>
<b>ADVANCE Year: 2002-03</b>									
College of Arts & Sciences (STEM)	3	-	0.0	-	-	0.0	-	-	0.0
College of Engineering	1	1	50.0	-	-	0.0	-	-	0.0
Environment & Life Sciences	1	1	50.0	-	-	0.0	-	-	0.0
College of Pharmacy	-	-	0.0	-	-	0.0	-	-	0.0
Graduate School of Oceanography	-	-	0.0	-	-	0.0	1	-	0.0
College of Arts & Sciences (SBS)	-	-	0.0	-	-	0.0	-	-	0.0
<b>Total</b>	<b>5</b>	<b>2</b>	<b>28.6</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	<b>1</b>	<b>0</b>	<b>0.0</b>
<b>ADVANCE Year: 2003-04</b>									
College of Arts & Sciences (STEM)	-	-	0.0	-	-	0.0	-	-	0.0
College of Engineering	-	1	100.0	-	-	0.0	-	-	0.0
Environment & Life Sciences	2	-	0.0	-	-	0.0	-	-	0.0
College of Pharmacy	-	-	0.0	-	-	0.0	-	-	0.0
Graduate School of Oceanography	-	-	0.0	-	-	0.0	-	-	0.0

Table 5. New-Hires in STEM and SBS by year (CON'T)										
College of Arts & Sciences (SBS)										
Total	2	1	0	0	0	0.0	-	-	-	0.0
ADVANCE Year 2004-05										
College of Arts & Sciences (STEM)	-	2	-	-	-	100.0	-	-	-	0.0
College of Engineering	1	2	-	-	-	66.7	-	-	-	0.0
Environment & Life Sciences	1	1	-	-	-	50.0	-	1	-	0.0
College of Pharmacy	-	-	-	-	-	0.0	-	-	-	0.0
Graduate School of Oceanography	1	-	-	-	-	0.0	-	-	-	0.0
College of Arts & Sciences (SBS)	1	1	-	-	-	50.0	-	-	-	0.0
Total	4	6	0	0	0	60.0	0	1	0	0.0

Source: URI Human Resources

**Table 6. Faculty Leadership Positions (2004-05)**

	All Faculty	Number of Women Faculty		
		All (%)	STEM	SBS
STEM Department Heads	22	4	4	na
SBS Department Heads	2	1	na	1
Deans	13	5	0	0
Associate Deans	17	6	1	0
Assistant Deans	4	4	0	0
Center Directors	63	30	*	*
Vice-Provosts	4	2	0	0
Vice-Presidents, Provost	4	1	0	0
Faculty Senate †	59	20	2	2
Other Powerful Committees †	56	27	3	0
<b>TOTAL</b>	<b>244</b>	<b>100(49%)</b>	<b>10</b>	<b>3</b>

† includes those who hold multiple positions (10 individuals who each serve on 2 committees, 4 administrators who also serve on 2 committees, and 8 administrators who also serve on 1 committee)

\* not tabulated due to difficulties in determining field

Source: URI directory