

## Year 3 Annual Report

### Table of Contents

<b>I.</b>	<b>PERSONNEL AND FINANCIAL REPORT</b>	
A.	Budget Explanations by Area and Major Function .....	1
B.	Estimated Unobligated Funds .....	3
C.	Proposed Budget for the Fourth Project Year.....	5
D.	Current Other Support Information for Key Personnel.....	6
<b>II.</b>	<b>SUMMARY OF PROJECT ACTIVITIES, JULY 2005 – JUNE 2006</b>	
A.	Program Participants .....	11
	Leadership Team	
	Committee Membership	
	Partners and Collaborators	
B.	Program Activities .....	16
C.	Publications & Products .....	23
<b>III.</b>	<b>SUMMARY OF PROJECT FINDINGS, JULY 2005 – JUNE 2006</b>	
A.	Findings Summary .....	27
B.	Benchmark Report Year 3 .....	28
C.	Program Evaluation Report .....	50
D.	Contributions .....	61
<b>IV.</b>	<b>APPENDICES (under separate cover)</b>	
A.	Climate Survey Draft Summary & Analyses .....	A-1
B.	<i>Assessing Readiness for Advancing Women Using the</i> <i>Transtheoretical Model</i> .....	B-1
C.	Sample URI Faculty Advertisement Language .....	C-1
D.	Faculty Recruitment Handbook (draft) .....	D-1
E.	University of Rhode Island 2006-2009 Strategic Plan, Initiative 3	E-1
F.	2006 Incentive Fund Documents .....	F-1
G.	2005-2006 Topical Lunch Flyers .....	G-1
H.	Faculty Development Flyers .....	H-1
I.	Faculty Mentoring Materials .....	I-1
J.	Dual Career Hiring Guidelines (draft) .....	J-1
K.	Parental Leave Handbook (draft) .....	K-1
L.	Representative Press Releases .....	L-1
M.	Climate Workshop Administration Summit Meeting Notes .....	M-1
N.	Internal Advisory Action Council Meeting Notes .....	N-1
O.	ADVANCE Day of URI Research Week Program .....	O-1
P.	ADVANCE Newsletter, Volume 1 .....	P-1

## **SECTION I PERSONNEL AND FINANCIAL REPORT**

### **A. BUDGET EXPLANATIONS BY AREA**

#### **URI ADVANCE LEADERSHIP TEAM (alphabetical order)**

Faye Boudreaux-Bartels, Professor & Chair, Electrical Engineering  
Nancy Fey-Yensan, Associate Professor, Nutrition and Food Sciences.  
Lisa Harlow, Professor, Psychology (Co-PI)  
Helen Mederer, Professor & Chair, Sociology  
Lynn Pasquerella, Vice Provost for Academic Affairs (Lead PI)  
Joan Peckham, Professor, Computer Science & Statistics (Co-PI)  
Mercedes Rivero-Hudec, Associate Dean, Chemical Engineering.  
Barbara Silver, Assistant Research Professor & ADVANCE Program Director  
Judith Swift, Professor, Theater & Communication Studies  
Karen Wishner - Professor, Oceanography (Co-PI)

**SENIOR PERSONNEL:** Lynn Pasquerella, Interim Vice Provost for Graduate Studies, Research, and Outreach assumed the role of lead PI upon the departure from the University of Janett Trubatch, July 1, 2005. Dr. Pasquerella assumed responsibility for project oversight, and joined the ADVANCE Climate Change Committee and the Recruitment Committee. She is chair of the latter. For state fiscal year 2006 (7/1/05- 6/30/06), 10% of her salary was use as In-Kind match as part of the Year 3 university cost-share obligation. On July 1, 2007, Dr. Pasquerella assumed a new position, Vice Provost for Academic Affairs, at the University. She will continue to act as lead PI for the URI ADVANCE Program.

The Co-Principal Investigators, Lisa Harlow, Joan Peckham, and Karen Wishner, continued to direct and facilitate program activities as members of the Leadership Team and, as well, related to their subcommittees. Dr. Harlow is chair of the Evaluation Committee; Dr. Peckham is chair of the Faculty Development Committee. Dr. Wishner is a member of the Faculty Development Committee. Dr.s Harlow and Peckham were compensated one month of summer salary. 5% of their academic year salaries constitute part of the Year 3 In-Kind match (Dr. Wishner is a calendar year employee and is not eligible for summer salary; she was not compensated by the grant).

In Years 1 and 2, Program Director Barbara Silver was a 0.75 FTE employee. In Year 3, Dr. Silver reduced her work time to 0.57 FTE. 100% of her effort was devoted to ADVANCE Program management including oversight of support staff and students, development of project initiatives, implementation of program activities, and production and dissemination of information.

**OTHERS:** Other Leadership Team members Faye Boudreaux-Bartels, Helen Mederer, and Cathy Roheim participated in program activities and committee work. Dr.s Boudreaux-Bartels and Mederer were compensated one month of summer salary. Funds to cover this expense were rebudgeted from fringe benefits. 5% of their academic year salaries constitute part of the Year 3 In-Kind match. In July 2005, Judith Swift, Interim Vice Provost for Academic Affairs, joined the Leadership Team, serving on the Recruitment and Climate Change Committees and participating in leadership activities. 5% of her salary is part of the Year 3 In-Kind match. On July 1, 2006, Professor Swift rejoined her academic department, and assumed the title of Professor of Communication Studies and Professor of Theater. Dr. Roheim resigned in December 2005. Nancy Fey-Yensan, Associate Professor, Nutrition and Food Sciences and Mercedes Rivero-Hudec, Associate Dean, Chemical Engineering joined the Leadership Team in April 2006. The abovementioned faculty members (excluding Wishner and Silver) will continue to cost-share at the rate of 5% of their time, annually.

Additional project component committee members include Laura Beauvais, Professor, College of Business Administration; Roberta Koppel, Director, Career Services; Andrea Rusnock, Associate Professor of History; Jessica Sherwood, Executive Officer of Sociologists for Women in Society; Lisa DiPippo, Associate Professor of Computer Science and Statistics; Arthur Gold, Professor of Natural Resource Science; and Roger LeBrun, Professor of Plant Sciences.

Nancy Neff, hired in Year 2 to oversee budget management, assumed additional responsibilities as a program assistant in Year 3. She is a 0.71 FTE employee; 100% of her effort is directed toward the project. Funds originally budgeted for Wishner and some funds budgeted for Silver have been utilized to pay Ms. Neff. She will continue as a program assistant and budget manager in Year 4.

**GRADUATE STUDENTS:** Amy Woodard, graduate student in Physical Therapy, was employed by the program in Years 1, 2, and 3. She worked on the benchmark and indicator data. She left the program in December 2005. Laura Gostin, graduate student in Communications Studies; Ashima Singh, graduate student in Psychology; and Karen Stamm, graduate student in Psychology worked for the program in Year 3. Ms. Gostin has developed the Work-Life website. Ms. Stamm and Ms. Singh assist with benchmark data, indicator data, and evaluation. These students participate in committee work as well. These students were paid hourly in Year 3. They will continue with the project in Year 4.

**UNDERGRADUATE STUDENTS:** Jill Pastina, undergraduate Biology major, is employed by the program. She assists with website work and other activities related to project.

**OTHERS:** ADVANCE Assistant Professors (Faculty Fellows), Yana Reshetnyak, Physics; Mayrai Gindy, Civil Engineering; and Yan Sun, Electrical and Computer Engineering were paid 100% by the grant in the second year (year 3) of their appointments. In September 2005, Bethany Jenkins joined the Department of Cell and Molecular Biology. 89% of her salary was paid by the grant. Three women joined the faculty at the Graduate School of Oceanography (GSO) in the fall of 2005. The grant supported these positions with the amount of \$60,000 (92% of one FTE). Grant dollars were distributed between Rebecca Robinson and Tatiana Rynearson. The university supplemented their positions as well as that of Katherine Kelly. Kathleen Donohue has been appointed as an ADVANCE Associate Professor, effective 7/1/06. Her salary is supported by the university.

Dr.s Reshetnyak and Sun transitioned to tenure-line positions in their departments (state supported), effective 7/1/06. Dr. Gindy will continue to be supported by the grant in Year 4. Dr. Jenkins will be supported at 89% FTE in Year 4 along with the one funded position at GSO.

Because of the need to support the equivalent of 5 ADVANCE faculty positions in Year 3, salary budgeted for Year 4, in the amount of \$108,884, was approved for use in Year 3.

Salaries and wages paid from the grant, to date, in Year 3 total \$379,983. In order to meet salary costs in Year 3, \$23,000 originally budgeted for Participant Costs was approved for use for salary. In addition, \$14,141 was contributed to personnel costs by the cash portion of the match account (cost share). In-Kind (effort) cost share totaled \$76,506.

The Year 4 grant budget includes \$193,600 for salaries.

**FRINGE BENEFITS:** Fringe benefits for Year 3 (to date) total \$94,745. Rates vary by individual from 7.65% to 38%. The Year 4 budget includes \$109,465 for fringe benefits.

**TRAVEL:** Domestic travel expenses by the Program Director, Lead PI, and Co-PIs in Year 3 totaled \$11,783. Trips were made to conferences to present ADVANCE data as well as to NSF for the annual ADVANCE meeting. \$2500 is budgeted for Year 4 travel.

**MATERIAL AND SUPPLIES:** Funds totaling \$3909 were used for program operation and consumable supplies. \$4500 is budgeted for next year.

**PUBLICATION/DOCUMENTATION:** \$204 was incurred in publication costs. Some publication costs were covered by Materials and Supplies. \$1250 is budgeted for next year.

**CONSULTANT SERVICES:** \$500 has been spent for consulting services. Dr. Jennifer Rose, Assistant Professor of Medicine (Research), Brown University assisted the ADVANCE Evaluation Committee with assessment of statistical modeling techniques. \$19,500 of the funds budgeted for Consultant were rebudgeted to meet Start-Up costs in Year 3. \$20,000 is budgeted for Consultant Services in Year 4.

**SUBAWARDS:** In Year 1 of the project, URI ADVANCE contracted with ProChange in the amount of \$50,567. \$30,000 of the total contract amount was budgeted in Year 1, and \$10,000, in Year 3. The third installment of the total contract amount, \$10,000, is budgeted in Year 5.

**GENERAL OPERATING EXPENSES:** Funds totaling \$3225 were used for operation of program activities.

**INCENTIVE FUND:** \$6142 has been expensed, to date, from the grant in the category of "Incentive Fund Awards." \$13,858 is budgeted in the cash portion of the ADVANCE cost share account to cover the remainder of the \$20,000 allocated for this use (additionally, the University supported this initiative in Year 3 with \$40,000 from the Council for Research funds). \$30,000 was budgeted in the grant for Year 3; \$20,000 was rebudgeted to meet Start-Up costs in Year 3. \$30,000 is budgeted for Incentive Fund in Year 4.

**START-UP COSTS:** \$105,500 was committed in Start-Up costs in Year 3 as part of the compensation packages to the 5 Faculty Fellows positions. \$27,500 was budgeted in the grant for this purpose. To date, \$43,000 has been spent. Costs have been, and will continue to be, met by rebudgeting from Incentive Funds, Consulting Services, and Operating funds. University funds of \$57,000 spent on Start-Up comprise part of the cost share obligation for Year 3.

**SOCIAL NETWORKING:** \$4042 was spent on the Topical Lunch series and other gatherings in Year 3. These funds were expensed from the cash portion of the cost share account.

**TOTAL OTHER DIRECT COSTS:** \$132,171

**TOTAL DIRECT COSTS:** \$606,899

**INDIRECT COSTS:** Indirect costs are calculated at 44% of allowable direct costs. To date, \$233,231 has been incurred in indirect costs.

The Year 4 budget includes \$502,699 in direct funds and \$221,188 in indirect funds for a total of \$723,887 (\$108,884 of Year 4 salary will be spent in Year 3).

**COST SHARE:** The total cost share obligation for the project is \$700,526. Cost share includes both In-Kind match (effort) and cash match from the Provost (state funds). Year 3 cost share, to date, is \$202,032. At the University of Rhode Island, the cost share year corresponds to the state fiscal year (7/1/ to 6/30). Because the cost share was calculated on 5/31/06, one month of cost share expenses are not included in the total. Those expenses will be captured in next year's calculation. The 3-year total is \$435,654.

## **B. ESTIMATED UNOBLIGATED FUNDS**

The URI ADVANCE project year extends from 9/1 to 8/31. As such, there are two months remaining in this current project year. It is anticipated that there will be no unobligated funds remaining at the end of the year. As previously stated, a shortfall was anticipated in salary for the Faculty Fellows as well as in Start-Up. The salary deficit was covered by utilizing funds budgeted in Year 4 and a rebudget of Participant Costs. The Start-Up costs have been met by rebudgeting from other program areas. To date, \$1,473,670 has been spent in direct costs and

\$504,211 in indirect costs. Deficits in a given line item have been covered by rebudgets from another line item. For example, a deficit of \$23,002 in hourly student pay has been met by funds budgeted for Graduate Research Assistants. Budget projections over the 5-year life of the project result in an \$11,093 deficit, which will be covered by a transfer from the fringe benefit line.

### C. PROPOSED BUDGET FOR THE 4<sup>TH</sup> PROJECT YEAR

	NSF	URI	
		In-Kind	Cash
<b>Direct Costs</b>			
Pasquerella	\$0	\$0	
Peckham	\$10,995	\$4,881	
Wishner	\$9,969	\$0	
Harlow	\$9,313	\$4,397	
Silver	\$47,335	\$0	
Swift		\$4,308	
Mederer		\$4,270	
Boudreaux-Bartels		\$5,864	
Fey-Yensan		<i>pending</i>	
Rivero-Hudec		<i>pending</i>	
Graduate Students	\$20,303		\$3,745
Faculty Fellows*	\$86,685		
Other -workshop facil.	\$9,000		
Fringe Benefits	\$109,465	\$8,480	
Domestic Travel	\$2,500		
Materials and Supplies	\$4,500		
Publication costs	\$1,250		
Consultant	\$20,000		
Other (Operating, Incentive Fund, Start-Up)	\$62,500		\$20,780
<b>TOTAL DIRECT COSTS</b>	<b>\$393,815</b>	<b>\$32,200</b>	<b>\$24,525</b>
INDIRECT COSTS (44%)	\$221,188	\$14,168	\$10,791
<b>TOTAL DIRECT AND INDIRECT</b>	<b>\$615,003</b>	<b>\$46,368</b>	<b>\$35,316</b>
 * salary used in year 3	 \$108,884		

#### D. CURRENT OTHER SUPPORT INFORMATION FOR KEY PERSONNEL

##### **Faye Boudreaux-Bartels**

###### **(Pending)**

Principal Investigator: Helen Mederer (Faye Boudreaux-Bartels, co-PI)  
Title: URI – T.I.P.S. Climate Project: Putting Theory into Practices at the University of Rhode Island  
Sponsor: NSF  
Amount of Award: \$499,409  
Duration of Award: 9/1/06 – 8/31/09  
Time Devoted to Project: 1 summer month

###### **(Current)**

Principal Investigator: Lynn Pasquerella  
Title: ADVANCE Institutional Transformation Award: A Change in the Culture at the University of Rhode Island  
Sponsor: NSF  
Amount of Award: \$3.5 million  
Duration of Award: 9/1/03 – 8/31/08  
Time Devoted to Project: 0.75 calendar months

Principal Investigator:  
Title: Collaborative Research: CCLI-EMD; Development of On-line Laboratories for Networks  
Sponsor: NSF  
Amount of Award: \$29,451  
Duration of Award: 01/05 – 12/07  
Time Devoted to Project: 0.25 calendar months

##### **Lisa Harlow**

###### **(Current)**

Principal Investigator: Lynn Pasquerella (Lisa Harlow, co-PI)  
Title: ADVANCE Institutional Transformation Award: A Change in the Culture at the University of Rhode Island  
Sponsor: NSF  
Amount of Award: \$3.5 million  
Duration of Award: 9/1/03 – 8/31/08  
Time Devoted to Project: 1 summer month

##### **Helen Mederer**

###### **(Pending)**

Principal Investigator: Helen Mederer  
Title: URI – T.I.P.S. Climate Project: Putting Theory into Practices at the University of Rhode Island  
Sponsor: NSF  
Amount of Award: \$499,409  
Duration of Award: 9/1/06 – 8/31/09  
Time Devoted to Project: 1 academic & 1 summer month

###### **(Current)**

Principal Investigator: Lynn Pasquerella

Title: ADVANCE Institutional Transformation Award: A Change in the Culture at the University of Rhode Island  
Sponsor: NSF  
Amount of Award: \$3.5 million  
Duration of Award: 9/1/03 – 8/31/08  
Time Devoted to Project: 0.75 calendar months

**Lynn Pasquerella**  
**(Pending)**

Principal Investigator: Helen Mederer (Lynn Pasquerella, co-PI)  
Title: URI – T.I.P.S. Climate Project: Putting Theory into Practices at the University of Rhode Island  
Sponsor: NSF  
Amount of Award: \$499,409  
Duration of Award: 9/1/06 – 8/31/09  
Time Devoted to Project: 10%

**(Current)**

Principal Investigator: Lynn Pasquerella  
Title: ADVANCE Institutional Transformation Award: A Change in the Culture at the University of Rhode Island  
Sponsor: NSF  
Amount of Award: \$3.5 million  
Duration of Award: 9/1/03 – 8/31/08  
Time Devoted to Project:

Principal Investigator:  
Title: Northeast Alliance for Graduate Studies and the Professoriate  
Sponsor: NSF  
Amount of Award: \$750,000  
Duration of Award: 2/05 – 2/28/09  
Time Devoted to Project: 10%

**Joan Peckham**  
**(Pending)**

Principal Investigator: Joan Peckham  
Title: BCP-A: A Multi-Threaded and Interdisciplinary Approach to Increasing the Numbers  
Sponsor: NSF  
Amount of Award: \$750,000  
Duration of Award: 1/1/07 – 12/31/07  
Time Devoted to Project: 1 calendar month

**(Current)**

Principal Investigator: Lynn Pasquerella (Joan Peckham, co-PI)  
Title: ADVANCE Institutional Transformation Award: A Change in the Culture at the University of Rhode Island  
Sponsor: NSF  
Amount of Award: \$3,500,000  
Duration of Award: 9/1/03 – 8/31/08  
Time Devoted to Project: 1 summer month & 0.45 calendar month

Principal Investigator: Joan Peckham  
Title: RE for yoU, An REU Site for Graphics Research in Rhode Island  
Sponsor: NSF



Amount of Award: \$348,948  
Duration of Award: 6/1/04 – 5/31/07  
Time Devoted to Project: 1 academic month

Principal Investigator: (Joan Peckham, co-PI)  
Title: Behavioral Model of Pedestrian Dynamics Under Emergency Evacuation and Non-Emergency Scenarios using Cellular Automata  
Sponsor: NSF  
Amount of Award: \$3,500,000  
Duration of Award: 9/1/03 – 8/31/06  
Time Devoted to Project: 0.5 academic & 0.5 summer months

Principal Investigator: (Joan Peckham, co-PI)  
Title: INBRE Bioinformatics Core  
Sponsor: NIH  
Amount of Award: \$100,000  
Duration of Award: 9/1/04 – 8/31/07  
Time Devoted to Project: 0.5 academic & 0.5 summer months

**Mercedes Rivero-Hudec**

Principal Investigator: Manbir Sodhi (Mercedes Rivero-Hudec, Co-OPJoan Peckham, co-PI)  
Title: INBRE Bioinformatics Core  
Sponsor: NIH  
Amount of Award: \$100,000  
Duration of Award: 9/1/04 – 8/31/07  
Time Devoted to Project: 0.5 academic & 0.5 summer months

**Barbara Silver**  
**(Pending)**

Principal Investigator: Helen Mederer (Barb Silver, co-PI)  
Title: URI – T.I.P.S. Climate Project: Putting Theory into Practices at the University of Rhode Island  
Sponsor: NSF  
Amount of Award: \$499,409  
Duration of Award: 9/1/06 – 8/31/09  
Time Devoted to Project: 1.7 months (14%)

**(Current)**

Principal Investigator: Lynn Pasquerella  
Title: ADVANCE Institutional Transformation Award: A Change in the Culture at the University of Rhode Island  
Sponsor: NSF  
Amount of Award: \$3.5 million  
Duration of Award: 9/1/03 – 8/31/08  
Time Devoted to Project: 7 calendar months (57% FTE)

**Judith Swift**  
**(Pending)**

Principal Investigator: (Judith Swift, co-PI)  
Title: Achieving Institutional and Individual Cost Savings while Improving Educational Delivery in the Health and Life Sciences. WEB-Based Academic Roadmaps  
Sponsor: FIPSE

Amount of Award: \$600,000  
Duration of Award: 10/06 – 9/09  
Time Devoted to Project:

Principal Investigator: Judith Swift  
Title: URI – T.I.P.S. Climate Project: Putting Theory into Practices at the University of Rhode Island

Sponsor: NSF  
Amount of Award: \$499,409  
Duration of Award: 9/1/06 – 8/31/09  
Time Devoted to Project:

**(Current)**

Principal Investigator: (Judith Swift, co-PI)  
Title: Creation of a Minor Course of Study in Sustainability  
Sponsor: CSREES Higher Education Programs  
Amount of Award: \$95,000  
Duration of Award:  
Time Devoted to Project:

Principal Investigator: (Judith Swift, co-PI)  
Title: Improving Student Learning and Institutional Impact through Assessment  
Sponsor: Davis Educational Foundation  
Amount of Award: \$300,000  
Duration of Award: 5/04 – 6/07  
Time Devoted to Project: .5 calendar months

Principal Investigator: (Judith Swift, co-PI)  
Title: IGERT; Assessing Change In Coastal Ecosystems: Integrating Natural and Social Sciences  
Sponsor: NSF  
Amount of Award: \$599,757  
Duration of Award: 6/15/05 – 5/31/06  
Time Devoted to Project: 1 calendar month

Principal Investigator: Judith Swift  
Title: A Cabaret on Adaptive Management of Coastal Estuaries  
Sponsor: URI Foundation Competitive Grant  
Amount of Award: \$3,030  
Duration of Award: 11/30/05 – 8/31/06  
Time Devoted to Project: .48 summer months

Principal Investigator: (Judith Swift, co-PI)  
Title: Pathways to Careers in Science: Academic Roadmaps  
Sponsor: NSF  
Amount of Award: \$100,286  
Duration of Award: 2/15/05 – 1/31/07  
Time Devoted to Project: .36 calendar months

Principal Investigator:  
Title: ADVANCE Institutional Transformation Award: A Change in the Culture at the University of Rhode Island  
Sponsor: NSF  
Amount of Award: \$3,500,000  
Duration of Award: 9/1/03 – 8/31/08

Time Devoted to Project: 0.45 calendar month

**Karen Wishner**

**(Pending)**

Principal Investigator: Helen Mederer (Karen Wishner, co-PI)  
Title: URI – T.I.P.S. Climate Project: Putting Theory into Practices at the University of Rhode Island  
Sponsor: NSF  
Amount of Award: \$499,409  
Duration of Award: 9/1/06 – 8/31/09  
Time Devoted to Project:

**(Current)**

Principal Investigator: Lynn Pasquerella (Karen Wishner, co-PI)  
Title: ADVANCE Institutional Transformation Award: A Change in the Culture at the University of Rhode Island  
Sponsor: NSF  
Amount of Award: \$3,500,000  
Duration of Award: 9/1/03 – 8/31/08  
Time Devoted to Project: 1 calendar month

Principal Investigator: Karen Wishner  
Title: Zooplankton in the Redoxcline of the Cariaco Basin: Impact on Biogeochemical Cycling  
Sponsor: NSF  
Amount of Award: \$560,794  
Duration of Award: 8/1/06 – 7/31/09  
Time Devoted to Project:

**Nancy Fey-Yensan**

**(Current)**

Principal Investigator: Nancy Fey-Yensan  
Title: Food Stamp Nutrition Education Project  
Sponsor: Dept of Human Services, State of Rhode Island (USDA).  
Amount of Award: \$509,263  
Duration of Award: 10/1/05 – 9/30/06  
Time Devoted to Project: 30% academic year and 2.5 months in the summer.

Principal Investigator:  
Title: Presidents Food Hunger and Nutrition Partnership  
Sponsor: URI  
Amount of Award: \$150,000  
Duration of Award: 10/1/05 – 9/30/06

## SECTION II SUMMARY OF PROJECT ACTIVITIES, JULY 2005 – JUNE 2006

### A. PROGRAM PARTICIPANTS

#### LEADERSHIP TEAM

##### Principal Investigator

**Lynn Pasquerella** replaced **Janett Trubatch** in July 2005, who left for a Vice Provost position at Roosevelt University. Lynn Pasquerella served as Interim Vice Provost for Graduate Studies, Research and Outreach until July 2006 when she assumed the position of Vice Provost for Academic Affairs. As well as providing project oversight, she is the coordinator of the Recruitment Committee. She represents the ADVANCE project to the larger University community and is instrumental in ensuring close collaboration with the Provost's Office and the Research Office.

##### Co-Principal Investigators

**Lisa Harlow**, Professor of Quantitative Psychology, replaced **Jimmie Oxley**, who left the project due to time limitations, in 2004 as co-PI. Lisa Harlow coordinates the Evaluation Committee, which has focused on the climate survey and benchmark collection. She also coordinates the Writing Workshops and has presented numerous times on ADVANCE findings.

**Joan Peckham**, Professor of Computer Science and Statistics, coordinates the Faculty Development Committee, which manages the Incentive Fund, the Topical Lunches, career workshops, and the Mentor Training Program. She also represents ADVANCE on the Research Council, and is involved with several other projects that enable ADVANCE involvement, such as the broadening participation in computing initiative and outreach to local schools.

**Karen Wishner**, Professor of Oceanography, is a member of the Faculty Development Committee. She oversees the Topical Lunch series and participates in evaluating Incentive Fund proposals, workshop development, and mentor training. She is the primary ADVANCE representative on the Narragansett Bay campus.

##### Senior Personnel

**Faye Boudreaux-Bartels**, Professor and Chair, Electrical & Computer Engineering, is a member of the Faculty Development Committee and the Climate Committee. She participates in evaluating Incentive Fund proposals and workshop development. She is the coordinator of the mentor training program, and has facilitated both mentoring workshops. She also helps coordinate the Chair's Discussion Forum and represents ADVANCE on the President's Commission on the Status of Women (PCOSW). As a member of the College of Engineering (COE) Diversity Committee, she has helped increase the liaison between that committee and ADVANCE.

**Nancy Fey-Yensan**, Associate Professor, Nutrition & Food Sciences, joined the Leadership Team in March 2006. She is a member of the Faculty Development Committee, and will be a member of the Mentor Training Program Committee in CELS.

**Harry Knickle**, Professor, Chemical Engineering, left the Leadership Team in 2004 due to time constraints. He served on the Recruitment Committee and was instrumental in developing the Faculty Fellows program.

**Helen Mederer**, Professor and Chair, Sociology & Anthropology, coordinates the Work-Life Committee and is a member of the Climate Committee and the Evaluation Committee. She co-authored the Parental Leave Policy and the draft Dual Career Guidelines, and represents work-life balance issues to the wider university community, including facilitating several topical lunches on the subject. She also helps coordinate the Chair's Discussion Forum and represents ADVANCE on the President's Commission on the Status of Women (PCOSW).

**Nancy Neff**, Scientific Research Grant Assistant, is the ADVANCE Program Coordinator. In collaboration with the Program Director, she helps manage all aspects of the program, and oversees the project budget. She is a member of the Faculty Development and Recruitment Committee, and is the primary consultant for the administrative needs of the faculty fellows.

**Mercedes Rivero-Hudec**, Associate Dean for Student Affairs & Diversity, COE, joined the Leadership Team in March 2006. She is a member of the Recruitment Committee. As the coordinator of the COE Diversity Committee, she has helped

**Cathy Roheim**, Professor of Natural Resource Economics, left the program in the fall 2005 due to time constraints. She was a member of the Faculty Development Committee and will remain involved as a member of the Mentor Training Program Committee to be initiated in the College of the Environment and Life Sciences (CELS).

**Barbara Silver**, Assistant Research Professor of Psychology, is the ADVANCE Program Director. She coordinates and oversees all program initiatives, is the coordinator of the Climate Committee, and is a member of all other ADVANCE committees. She oversees the project web site development, develops reports, gives presentations, develops collaborations, offers consultation on ADVANCE-related topics, and represents ADVANCE to the University and outside communities. She represents ADVANCE on the COE Diversity Committee, the PCOSW, and the Multicultural Center's Diversity Week Committee. increase the liaison between that committee and ADVANCE.

**Judith Swift** just resumed her post as Professor of Communication Studies and Theater, having left the position of Interim Vice Provost for Academic Affairs in July 2006. She joined the Leadership Team in 2004. She is a member of the Climate Committee and the Recruitment Committee, and has been instrumental in representing ADVANCE to the Provost's Office and the Development Office. She participated significantly in ADVANCE Day of Research Week last October and is developing a theater component to add to our climate change workshops.

## COMMITTEE MEMBERSHIP

The ADVANCE program is organized under 5 committees, which include Leadership Team members, and usually outside participants and students. Table 1 below describes the 2006 committee structure.

Table 1. ADVANCE Committee Membership 2005-2006

	<b>Leadership Team</b>	<b>Other Faculty &amp; Staff</b>	<b>Students</b>
<b>Evaluation</b>	Lisa Harlow, coordinator Helen Mederer Barb Silver	Janice Prochaska, Pro-Change, Inc. Leanne Mauriello, Pro-Change, Inc.	Ashima Singh, Psychology PhD candidate Karen Stamm, Psychology PhD candidate Amy Woodard, MA candidate, Physical Therapy (July – Dec. 2005)
<b>Recruitment</b>	Lynn Pasquerella, coordinator Nancy Neff Mercedes Rivero-Hudec Barb Silver Judith Swift		Ashima Singh, Psychology PhD candidate
<b>Faculty Development</b>	Joan Peckham, coordinator Faye Boudreaux-Bartels Nancy Neff Barb Silver Karen Wishner	Lisa DiPippo, Associate Professor, Computer Science & Statistics Roger LeBrun, Professor & Chair, Plant Sciences	
<b>Work-Life-Family</b>	Helen Mederer, coordinator Barb Silver	Carolyn Sovet, Director, Women's Center Bobbi Koppel, Director, Career Services Jessica Sherwood, Women in Sociology Andrea Rusnock, Associate Professor, History Laura Beauvais, Professor, Business Administration	Laura Gostin, MA Candidate, Communication Studies
<b>Climate Change</b>	Barb Silver, coordinator Faye Boudreaux-Bartels Helen Mederer Lynn Pasquerella Judith Swift	Laura Beauvais, Professor, Business Administration Art Gold, Professor, Natural Resource Economics	Jillian Pastina, undergraduate Biology major

Former committee members include *Lisa Bowleg*, Associate Professor of Psychology, Evaluation Committee, who left in June 2004 due to time constraints; *Molly Hedrick*, PhD candidate, Psychology, Work-Life Committee, who left in June 2005 for an internship; *Amy Woodard*, MA candidate, Physical Therapy, who left in December 2006 for an internship, and *Kate Webster*, Evaluation Committee, who left in June 2005 for another position outside the University.

## PARTNERS AND COLLABORATORS

**Center for Human Science and Services.** ADVANCE has recently begun collaboration with this URI office in the development and implementation of an external program evaluation plan. *John Boulmetis*, Director, and *Deborah Mathews*, Project Director, will conduct the evaluation.

**Internal Advisory Action Council (IAAC).** The IACC is comprised of University leaders who are working to promote and sustain the efforts of ADVANCE. It includes:

*Peter August*, Director, Coastal Institute  
*Winifred Brownell*, Dean, College of Arts and Sciences  
*Shaw Chen*, Associate Dean, College of Business Administration  
*David Farmer*, Dean, Graduate School of Oceanography  
*Clifford Katz*, Assistant Provost  
*Bahram Nassersharif*, Dean, College of Engineering  
*Candace Oviatt*, Professor of Oceanography  
*Jeff Seemann*, Dean, College of the Environment and Life Sciences  
*Carolyn Sovet*, Director, Women's Center  
*M. Beverly Swan*, Provost and Vice President for Academic Affairs  
*Melvin Wade*, Director, Multicultural Center  
*Bob Weygand*, Vice President of Administration  
*Chip Young*, Communication Liaison Coastal Resources Center

**President's Commission on the Status of Women (PCOSW)** is actively collaborating with ADVANCE in many areas, especially work-life-family initiatives. Its co-chairs are *Grace Frenzel*, University Psychologist, and *Karen Stein*, Professor of English and Director of the Women's Studies Program.

**Pro-Change Behavior Systems, Inc.** has subcontracted with ADVANCE to provide assessment and intervention guidance informed by the Transtheoretical Model for Change. Collaborators include *Janice Prochaska*, President and CEO, *Leanne Mauriello*, Director of Health Behavior Change Projects, and *Karen Sherman*, Project Assistant.

**South County Women's Network**, directed by *Sue Velicer*, has enabled many junior faculty to establish social and professional connections outside the University.

**URI Research Office** has collaborated with ADVANCE in sponsoring research workshops and in absorbing Incentive Fund activities into their own award program. *Mayrai Gindy*, Assistant Research Professor and ADVANCE Faculty Fellow, Civil Engineering, and *John Grandin*, Professor, German, and Director, International Engineering Program, co-facilitated a research workshop with Helen Mederer. Another research workshop was co-facilitated by *Gary Boden*, Senior Information Technologist, Institutional Research, *John Boulmetis*, Director, Center for Human Science and Services, and *Padma Venkatraman*, Coordinator, Graduate Diversity Affairs.

**Workshop and Lunch Facilitators.** Members of the ADVANCE Leadership Team regularly help facilitate lunches and workshops. In addition, many others are invited to participate. *Breck Peters*, Professor of Sociology, co-facilitated the December 2005 Mentor Training Workshop with Faye Boudreaux-Bartels and Karen Wishner. The writing workshops featured the following speakers: *Lisa Tenor*, professional writing consultant, *Linda Shamoan*, Professor, College Writing Program, *Wayne Velicer*, Professor and co-Director, Cancer Prevention Research Center, *Padma Venkatraman*, Coordinator, Graduate Diversity Affairs, and *Janice Prochaska* and *Leanne Mauriello*, of Pro-Change. Topical lunches featured several visiting speakers: *M. Beverly Swan*, Provost, *Lynn Derbyshire*, Chair of Communications Studies, *Laura Beauvais*, Professor of Business, *Bette Erickson*, Director of the Instructional Development Program, *Donna Meyer*, Associate Professor of Mechanical Engineering, *Vic Fay-Wolf*, Professor of Computer Science and Statistics, *Candace Oviatt*, Professor of Oceanography, *Peter Swaszek*, Professor of Electrical Engineering, *Winifred Brownell*, Dean of Arts and Sciences, *Jennifer Specker*, Professor of Oceanography, *Arun Shukla*, Chair of Mechanical Engineering, and *Wayne Velicer* again. Along with Leadership Team members, the Chair's Discussion Forum has been facilitated by *Jerry Shaffron*, Professor, Human Development & Social Services, and *Dom Valentino*, Professor of Psychology, *Al Killilea*, Professor of Political Science, and *Cathy Roheim*, former Leadership Team member and Professor of Natural Resource Economics.

## B. PROGRAM ACTIVITIES

### **ACTIVITIES**

#### **Evaluation**

The Evaluation Committee during Year 3 focused on the climate survey, benchmark data, and working with Pro-Change, Inc. Missing climate survey analyses have been completed and a draft executive summary is being finalized. The analyses and summary are included as Appendix A. Several brief presentations highlighting key findings have been given throughout the year, including one during ADVANCE Day of Research Week in October, a Broadening Participation in Computing conference in April, and at the ADVANCE PI meeting in May. A full report will be finalized and distributed with a general presentation and presentations tailored by college in Year 4. The Evaluation Committee will be focusing on increasing its membership in order to more efficiently collect and analyze data and produce reports.

Benchmark data for Year 3 follows in Section III. The committee has also been working on improving the mechanisms by which these data are collected. In the past there have been problems acquiring reliable data from the Provost's office and Human Resources, whose data bases are not consistent. Finding a means to compare salary data, for example, has been difficult, as has collecting space data. The old data for Year 2 has been reviewed and revised using a more complete data set, and Years 2 and 3 are now consistent. It has been agreed in the ADVANCE Internal Advisory Action Council as well as the President's Commission on the Status of Women (PCOSW) that much of the benchmark data we are collecting should become institutionalized and reported regularly by the University. We will be promoting this in Year 4.

This year, Pro-Change, Inc., and some members of ADVANCE, authored a paper describing the development of a measure, based on the Transtheoretical Model for Change, to assess readiness to promote the careers of women faculty. It was accepted for publication in *Sex Roles*, and is included as Appendix B. The Evaluation Committee has also collaborated with Pro-Change in the development of a theoretically-based paper describing the climate change efforts based on 3 theoretical models: the Transtheoretical Model for Change, Appreciative Inquiry, and a 3-level model for understanding gendered communications: individual, interactional, and institutional. ADVANCE is developing an integrated model for understanding climate change based on the intersection of these 3 models. We hope to submit the paper for publication in the fall, and pilot this integrated approach in Year 4. This will include a continuation of the department climate workshops, begun in Year 2, with a better understanding of how AI and TTM can work together, and a strategic plan that includes intervention at all 3 levels of gender interactions.

In May, ADVANCE met with Pro-Change Behavior Systems to review progress to date. It was agreed that a more elaborate intervention plan would be provided to ADVANCE this summer. More guidance will be given in terms of message delivery and a more formal report will be developed that can be shared with the university. It was agreed that a mid-project climate survey would not be conducted, due to the cost and efforts required to accomplish the initial version. Instead, two surveys will be delivered, one which was done early in Year 2 and a follow-up in Year 5.

ADVANCE has been meeting with Deborah Mathews and John Boulmetis, Program Evaluators from the URI Center for Human Services to develop an overall external evaluation plan. To date, program evaluation activities have occurred internally. ADVANCE will be advised by the Center on how to expand our program data collection efforts to map to their evaluation criteria. They have helped develop an external evaluation plan (available in the Findings section of this report) and will assist by analyzing data submitted, potentially conducting additional interviews, and providing annual reports in Years 4 and 5.



## Recruitment

In June 2005, following approval from Affirmative Action and URI legal counsel, ADVANCE requested that the President approve new wording to appear in all faculty and academic administrative position advertisements. The President approved the following statement, which now appears in all advertised faculty positions (as exemplified in Appendix C):

*URI is an NSF ADVANCE institutional transformation university, working to advance the careers of women faculty, especially in the science and engineering disciplines.*

This year 5 ADVANCE Faculty Fellows were hired (one of whom has a start date November 2006), bringing the total to 9 over the past 2 years. Along with another hire who received a start-up supplement, this fulfills our 5-year hiring goal of 10 women STEM faculty (see Table 2).

Table 2. Female Tenure-Line URI STEM Hires 2000 – 2007 (as of July 2006)

Year	# Female Hires	# Total Hires	% Total Female Hires	3-Year Average %	# ADVANCE Hires	# ADVANCE Influenced Hires	% ADVANCE Related Hires of Total
00-01	7	18	39%	} 26%	--	--	--
01-02	1	7	14%		--	--	--
02-03	2	8	25%		--	--	--
03-04	1	3	33%	} 54%	--	--	--
04-05	6	11	55%		4	--	36%
05-06	6	8	75%		5	1	75%
06-07*	5	6	83%		1	4	83%*
<b>Total</b>	<b>28</b>	<b>61</b>			<b>10</b>	<b>5</b>	

\* as of July 2006

The Faculty Fellows program originally proposed to fund two searches and one fellowship per STEM college, at the discretion of the Provost. This was to be followed by a second round later in the program. However, there were so many exceptional candidates that 9 fellows were hired in Years 2 and 3, four of whom were funded by University sources. Although this has created budgetary challenges for ADVANCE and the University, the high profile of these hires has had a broad positive impact on the perceptions about women in STEM at the University. The Provost's office has offered tremendous support for this program. To date, the Provost's office has supplemented the Faculty Fellows program by over \$2 million. Because of the early cost of the fellows program, ADVANCE has been able to offer start-up supplements to just one hire in Psychology to date. Table 3 below reviews the ADVANCE-supported hires and the funding sources.

Table 3. ADVANCE-Supported Hires and Funding Sources

College/Dept./Name		Funding Start Date	Transition to Tenure Track	Starting Salary	Salary Contribution from ADVANCE	Start-up Contribution from ADVANCE	University Contribution
<b>ENGINEERING</b>							
1	Yan Sun, Elect. & Computer Eng.	7/1/04	6/30/06	\$73,000	\$146,000	\$20,000	
2	Mayrai Gindy, Civil Eng.	7/1/04	6/30/07	\$73,000	\$219,000	\$20,000	
<b>ARTS &amp; SCIENCES</b>							
3	Yana Reshetnyak, Physics	7/1/04	6/30/06	\$53,000	\$106,000	\$20,000	
4	Ellen Flannery-Schroeder, Psychology	7/1/04	na	na	\$0	\$25,000	na
<b>ENVIRONMENT &amp; LIFE SCIENCES</b>							

5	Bethany Jenkins, Cell & Molec. Bio.	7/1/05	6/30/08	\$67,000	\$60,000	\$20,000	
6	Rebecca Nelson- Brown, Plant Sciences	1/1/05	6/30/07	\$69,500	\$0	\$0	
<b>GRADUATE SCHOOL OF OCEANOGRAPHY</b>							
7	K. Kelley	9/01/05	8/31/08	\$65,000	\$0	\$0	
8	R. Robinson- Graham	10/1/05	9/30/08	\$65,000	\$20,000	\$0	
9	T. Rynearson	11/1/05	10/31/08	\$65,000	\$40,000	\$0	
10	K. Donohue	7/01/06	6/30/09		\$0	\$0	
<b>Total</b>					<b>\$319,000</b>		

The Faculty Fellows Program has been successful for several reasons. There were *financial and expediency incentives* for departments to hire Fellows. Those not interested in exploring climate or diversity issues were nevertheless interested in acquiring an immediate new faculty line in their department. The affiliation of the Fellows program with *the prestige of NSF attracted a strong applicant pool*. The exceptional quality of the hires has had major positive impacts at URI on attitudes about the capabilities of women in STEM and has helped dispel the notion that there are too few women from which to choose. ADVANCE requested that all *departments who received a fellow participate in a department climate workshop*. Following the success of initial workshops, other departments have willingly participated. ADVANCE also *ensured best search practices* by placing an ADVANCE member on each Fellow search committee. During the search, each *candidate met separately with a group of URI women faculty* to discuss networks of support on campus, negotiation strategies and other issues of concern.

The focus of the effort of the Recruitment Committee is now turned toward retention and sustainability. Two of the first round fellows, Yana Reshetnyak, Physics, and Yan Sun, Electrical and Computer Engineering, have transitioned into tenure lines. Goals include pursuing alternative sources of funding to supplement female STEM hires and developing a comprehensive Best Practices Workshop to deliver to departments embarking on a search. The Faculty Recruitment Handbook has been revised and will be published this summer. The draft can be found as Appendix D. The deans of the College of Engineering and the College of the Environment & Life Sciences have recently agreed that all searches will be required to have a Best Practices workshop through the ADVANCE office.

ADVANCE collaborated with the College of Engineering Diversity Committee in constructing a model Recruitment & Retention plan, required by Affirmative Action for all departments. Last July, this plan was completed and submitted to the COE Dean for approval. We plan to work with Affirmative Action to follow up on the progress of the plans and offer assistance where needed in Year 4.

In looking forward, ADVANCE has met with Robert Beagle Vice President, Division of University Advancement (Alumni Giving), and the Board of the Women's Fund, a targeted fund in the URI Development Office, to develop strategies for developing donors to the cause of hiring and supporting female STEM faculty. In addition, the Internal Advisory Action Council, convened in March 2006, is specifically focusing on future strategies to diversify the faculty. Perhaps the most significant indication of sustainability is the University of Rhode Island 2006-2009 Strategic Plan, approved by the President and Rhode Island Board of Governors in January 2006, and just released to the URI community in June. Initiative 3 of this 4-initiative plan is to *"create a more inclusive environment."* Goal 2 of Initiative 3 is to *"increase the hiring and retention of faculty and staff from underrepresented groups. . ."* The other goals for this initiative all speak to improving conditions for women and underrepresented groups. Initiative 3 of the Strategic Plan can be found as Appendix E.

### **Faculty Development and Support**

ADVANCE has continued the Incentive Fund for the third year, and has made progress toward institutionalizing this initiative. This year, the funding was augmented by the Provost's Office, through the University of Rhode Island Council for Research. The Council committed \$40,000 to the Year 3 awards and has included new permanent language in their submission guidelines to promote ADVANCE-principled submissions that support underrepresented faculty. This language can be found on the page from the Council for Research Call for Proposals in Appendix F

The ADVANCE grant supported 5 of 9 proposal submissions, awarding \$20,000. The Council for Research funded 4 ADVANCE-principled proposals totaling \$40,000. To date, the Incentive Fund has received 43 proposals, and has made 24 awards totaling \$140,000. The Call for Proposals, the list of 2006 awardees and their proposal abstracts, and a summary of products from past awards are also included in Appendix F.

The Topical Lunch Series enjoyed two successful series, with attendance usually between 20-28, representing a significant portion of the women STEM faculty. Increasingly, ADVANCE is inviting both men and women outside the program arena to speak on familiar topics. We hope these efforts will help spread awareness about ADVANCE and enlarge our basis of support. Speakers have been eager to participate and lunches always feature a complimentary lunch, engaging conversation, faculty development, and opportunities for social and professional networking. The fall and spring series flyers are included as Appendix G. Briefly, they included:

- September: *ADVANCE Potpourri and Bias Avoidance*, ADVANCE Leadership Team
- October: *Myths, Legends, and Scary Stories – Provost Tips on Succeeding at URI*, Speaker: M. Beverly Swan, Provost
- November: *Gender-Sensitive Teaching*, Speakers: Lynn Derbyshire, Chair of Communications Studies, Laura Beauvais, Professor of Business
- December: *How to Find the Best Students*, Speakers: Donna Meyer, Assistant Professor of Mechanical Engineering, Vic Fay-Wolf, Professor of Computer Science and Statistics, and Candace Oviatt, Professor of Oceanography
- February: *Getting Those Papers Out the Door: Tips on Getting Published*, Speakers: Lisa Harlow, Professor of Psychology and Wayne Velicer, Professor of Psychology at the Cancer Prevention Research Center
- March: *Get a Life! How to Have a Life and Succeed at Your Job*, Speakers: Helen Mederer, Professor and Chair of Sociology and Anthropology Department, and Peter Swaszek, Professor of Electrical Engineering
- April: *Didn't I Just Say That ?!? Strategies for Being Heard*  
Speaker: Judith Swift, Interim Vice Provost for Academic Affairs (and a theatre director), and Jennifer Specker, Professor of Oceanography
- May: *When to Say Yes and How to Say No: Prioritizing Research, Teaching, and Service*, Speakers: Department Chairs, Faye Boudreaux-Bartels, Electrical & Computer Engineering, and Arun Shukla, Mechanical Engineering

Career Workshops. Workshops this year included several Writing Workshops, 2 Research Workshops, co-sponsored with the Research Office, and a Mentor Training Workshop. ADVANCE began the writing workshops with an all-day event facilitated by a professional writing consultant, Lisa Tener. This workshop was well attended and received positive evaluations, and ADVANCE has since hosted 6 others in a computer-equipped meeting room. Experienced URI faculty writers have offered writing advice in brief presentations, followed by a 2-3 hours of focused writing time. Presentations are listed below:

- July: *Tips on Getting Published*. Lisa Harlow, Professor, Quantitative Psychology
- November: Janice Prochaska and Leanne Mauriello, Pro-Change, Inc.
- January: *Writing Scientific Papers and Editing and Revising*. Marian Goldsmith, Professor and Chair, Biological Sciences
- February: *Why and How to Get a Grant*. Wayne Velicer, Professor and Co-Director, Cancer Prevention Research Center

- March: *Writing on a Specific Topic*. Linda Shamoon, Professor, College of Writing Program
- May: *Thirteen Tips on Becoming a Prolific Writer*. Padma Venkatraman, Graduate School

A sample flyer is included in Appendix H. Attendance has slowed for these workshops and we will be re-focusing on better advertising in Year 4.

Two collaborative research workshops, hosted jointly by ADVANCE and the Research Office, were held in May. The flyer can also be found in Appendix H. They were:

- *Institutional Collaborations*. "How to collaborate with others and achieve a common goal on multi-institution projects." Panelists: Mayrai Gindy, Assistant Professor of Research, ADVANCE Fellow, Dept. of Civil Engineering; John Grandin, Professor of German, Executive Director of the International Engineering Program; Helen Mederer, Professor and Department Chair, Sociology and Anthropology, ADVANCE Leadership Team member.
- *Utilizing Available Resources and Expertise at URI*. "How to access institutional data, how to design and perform project evaluations, how to address diversity requirements of funding agencies." Panelists: Gary Boden, Senior Information Technologist; John Boulmetis, Director, Center for Human Science and Services; Padma Venkatraman, Coordinator, Graduate Diversity Affairs, Graduate School.

A *Post-Award Grant Workshop* (how to navigate university grant accounting responsibilities, establishing spending authority if there are multi-investigators, successful subcontracting) has been developed but was unable to be scheduled because of scheduling difficulties between the panelists. It is now slated for Fall 2006.

In December 2005, ADVANCE sponsored a successful and very well-attended Mentor Training Workshop for STEM mentors, junior faculty, and chairs, facilitated by ADVANCE Leadership Team members Faye Boudreaux-Bartels, Karen Wishner, as well as C. Breck Peters, Professor of Sociology. A Faculty Mentoring Handbook was developed by the ADVANCE office to be introduced at this workshop, and can be found in Appendix I, along with a summary of the workshop. In preparation for the workshop, the mentor assignments for all junior STEM faculty, men and women, were reviewed, and assistance was given by ADVANCE in the assignment of new or additional mentors. Based on input from attendees, ADVANCE plans to fine-tune the workshop and repeat it for a larger audience. The ultimate goal of this program is to implement more formal and accountable mentoring procedures in each department and college, hopefully to establish a university-wide mentoring policy.

Mentor Training Program. The College of Environment and Life Sciences (CELS) is the target college for the development of the ADVANCE pilot mentoring program. This program is intended to lead to a formalized, institution-wide policy. In October 2005, ADVANCE met the Dean and Associate Dean of CELS to discuss this initiative. This program will serve as a prototype and a model to use in other colleges, and eventually University-wide. Mentor relationships were reviewed for all new CELS faculty, and new mentors were assigned where they were needed. Since this time, a committee in CELS has been formed to begin establishing the CELS mentoring program, which is slated for a Fall 2006 start date. To expedite the mentoring program university-wide, which has evolved slowly, ADVANCE will initiate a separate mentoring committee in the fall.

Faculty Support Issues. The Faculty Development Committee has increasingly been faced with individual faculty issues that are presented to the ADVANCE office. These include difficulties acquiring contractual start-up items, conflicts with co-workers, conflicts with chairs, dual career requests, advice about requesting leave, requests for support for soft-money female researchers, and part-time employment negotiations, among other issues. We grapple with issues individually, but are currently communicating with the Provost's office to determine the most effective means of addressing these various issues in a formalized, institutionally endorsed manner. The University of

Rhode Island Strategic Plan (Appendix E) will offer formal support for the need to accomplish this institutionally.

## **Work-Life-Family**

This committee has focused on producing a Parental Leave handbook that describes the new policy and offer guidelines to faculty, administrators, and peers as to its use. In addition, dual career guidelines have been revised, a new website was launched, and a task force was established on flexible work options. Robert Drago visited URI in October and spoke to the campus community on "bias avoidance" behaviors by caregivers in academe. A Philosophical Framework has been adopted and is the basis for all future work-life policy efforts. It's usefulness lies in the fact that it can be referred to as a fundamental starting place when objections arise to specific initiatives toward the creation a family-friendly, effective workplace.

The Work-Life Committee intends to have a broad reach across campus and includes the Director of Career Services, Bobbi Koppel and the Director of the Women's Center, Carolyn Sovet. In the interest of increasing collaborations on campus and more actively promoting the adoption of family friendly policies, representatives from Affirmative Action and Human Resources will be invited to join the committee in the fall 2006. Also this summer, the PCOSW is presenting a 2006-2007 Strategic Plan to the President that includes consultation with ADVANCE on their work-life initiatives, and we will be re-organizing the committee as a joint PCOSW-ADVANCE committee. This, along with the University of Rhode Island 2006-2009 Strategic Plan (Appendix E) which specifically requires the development of a dual career hiring program and other family-friendly work policies, are encouraging signs of sustainability of ADVANCE efforts.

Dual Career Guidelines. In June 2005 the policy, endorsed by the President's Commission on the Status of Women, Human Resources, Affirmative Action, and the AAUP Faculty Union, was taken to the President's team for review. In spite of background materials provided prior to the meeting that addressed many of the issues, several concerns were raised, including concerns about reverse discrimination, legal concerns, perception concerns that the policy offered placement guarantee, a request for information regarding what other peer institutions were doing, and separating actual policy from implementation procedures. Revisions have been made and will be presented by the PCOSW and ADVANCE to the President by late summer 2006. The draft document is included as Appendix J.

Work-Life-Family Website. In December, the URI Work-Life-Family website was activated ([www.uri.edu/wlfc](http://www.uri.edu/wlfc)). The site is evolving and will grow over time to include a wealth of information for URI employees. ADVANCE will advertise the availability of the website to all URI employees, emphasizing that the activities of ADVANCE ultimately benefit everyone. This is conceived as a virtual work-life center, and a first step toward the hopeful creation of an actual center at some point in the future. The website will function as a portal to URI, community, and national resources for issues related to Work, Family, Education, Community, Health & Wellbeing, and Housing & Relocation. The Work-life Committee will be exploring grant opportunities to fund a Work-Life Center at URI, which we hope will absorb the activities of ADVANCE post-award, and which will hopefully occupy the physical space the ADVANCE office now holds.

Parental Leave Handbook. The Provost's office had concerns that the draft handbook is misleading by confusing policy with suggested best practices. The document has been revised and approved and plans are underway for publication and distribution this summer. The draft can be found as Appendix K.

Task Force on Flexible Work Policies. In May an ad hoc task force convened to explore how to expand and formalize existing mechanisms to offer flexible work options to employees, faculty and staff alike. Members included 3 administrators from the ADVANCE Leadership Team (Judith Swift, Lynn Pasquerella, and Helen Mederer) and a representative from the PCOSW (Carolyn Sovet). This

task force will likely be given support and increase its activities as the President's Strategic Plan is activated.

## **Climate Change**

There is much anecdotal evidence of climate change at URI, including the efforts to hire women without monetary support from ADVANCE, and use of the Parental Leave policy without repercussions. Press releases such as the ones included in Appendix L have helped visibility. One faculty member's remarks echo many others:

*"I have seen encouraging progress due to the work of the ADVANCE program here at URI and feel that much in the way of positive results are already occurring from the awareness that this grant has brought to the campus community. From my own experience in the College of Engineering, I have seen a very positive improvement in the manner in which mentoring of women faculty and increased collaborations have resulted directly from the ADVANCE program. Additionally, had it not been for the ADVANCE program, I most likely would not have had the pleasure of meeting several women from the Science, Technology, Engineering and Mathematics (STEM) areas with whom I am currently discussing research topics of mutual interest."*

More concrete evidence can be found in the commitments administrators have already made during their participation on the IAAC, and the focus on diversity in the President's 2006-2009 Strategic Plan. ADVANCE will be working with Academic Affairs to help implement the goals outlined in this plan. During Year 4 the Academic Work Environment Survey will be prepared for redistribution, hopefully capturing quantitative evidence of climate change from the initial survey findings. Also during the following 2 years, the Department Climate Workshops will continue and will be accompanied by department evaluations, and qualitative evaluations of climate change will be developed.

This year the Climate Committee focused specifically on participating in a day-long event open to the campus community, convening the Internal Advisory Action Council (IAAC), emphasizing the importance of mentoring, and launching the Chairs' Discussion Forum.

Administration Summit Meeting 2005. In reviewing the goals established by the 10 departments who participated in ADVANCE Department Climate Workshops during Years 1 and 2, a common set of concerns issues became evident. In response to these, ADVANCE convened a summit meeting with the President, Provost, Vice President for Administration, deans and chairs, and other interested department representatives. Two specific topics were addressed: the development and implementation of *effective work/life policies*, and resolving continuing difficulties with the *management of grants and contracts*. This meeting resulted in initiatives to streamline administrative processes at URI by the Vice President of Administration, and the inclusion of a dual career hiring program in the President's 2006-2009 Strategic Plan. The notes for this meeting are included as Appendix M.

Internal Advisory Action Council (IAAC). The IAAC was convened this year and has met twice. Initially scheduled to begin earlier in the program, waiting until ADVANCE was firmly established and respected had the happy outcome of enabling the Council to embrace their mission eagerly: *to actively promote the principles and practices of ADVANCE within the URI community, help assess its impact, and provide assistance in effectively institutionalizing, and thus sustaining, the goals and activities of ADVANCE at URI.* In combination with the ADVANCE Leadership Team this group of 13 consists of all high-level administrators at URI, with the exception of the President. The title embodies the mission of the council, which is to take a hands-on, task-oriented approach to identifying objectives and driving them forward. Several action items have been identified, including requiring a Best Practices workshop for every faculty search in at least two colleges, developing a Work-Life Honors Colloquium, and a Distinguished Professorship to attract senior faculty to URI. The enthusiasm of this group to convene and take on responsibilities is affirming and, along with the

2006-2009 Strategic Plan, the most significant step toward sustainable change we have seen to date. The notes for the first meeting are included as Appendix N.

Chair's Discussion Forum. During this year it was determined to effect departmental climate change through a regular lunch discussion series for chairs, modeled on the University of Washington program. We have established a partnership with the Provost's office, as a similar plan was evolving there, and have shared in the planning and the funding. The objectives of the discussions are to:

- Identify the challenges of a Department Chair and provide support
- Enhance mentoring and leadership development opportunities for Department Chairs, including new and aspiring Chairs
- Address issues relating to the challenges inherent in that role
- Provide support and networking opportunities

Three lunch meetings have been held: *Managing Up and Down: Pressures of the Role of Chairpersons – Allegiances, Authority, & Rights, Ethics Workshop*, and *Lunch with Your Lawyer*. Another day-long workshop, *Nuts & Bolts for New and Seasoned Chairs* was cancelled due to lack of enrollment. We are considering how to proceed next year, as this program has much potential.

ADVANCE Day of URI Research Week. ADVANCE received much visibility during URI Research Week in October 2005, as the program was invited to showcase its work during a day-long event, fully funded by the Council for Research. Activities included presentations by ADVANCE hires and Pro-Change, Inc., a lunch presentation on women in STEM, a short presentation of the climate survey findings, a musical cabaret on women in STEM, and featured visiting speaker Robert Drago, who spoke on "*Making work and Family Compatible for Faculty: Challenges and Strategies for Change.*" The program is available in Appendix O.

South County Women's Networking Social. The networking socials occur monthly or bi-monthly, and are typically attended by over 100 women leaders from the South County, Rhode Island region. Over the past year, ADVANCE has sponsored 12 junior faculty to attend these events. Also, this year Lisa Harlow, Professor of Psychology and ADVANCE Co-PI, spoke on "Women and Science – Balancing the Equation." Also, Dr. Winnie Brownell spoke on *Taking Strategic Risks to Achieve Success*.

ADVANCE Newsletter. Our first newsletter was issued in December and was distributed to all STEM faculty. It is included as Appendix P. We plan to issue bi-annual newsletters, as a means of increasing awareness of ADVANCE initiatives and educating the STEM community about issues surrounding women in STEM. The next issue will be published this summer.

Campus Collaborations. ADVANCE aims to nurture relationships and networks with other organizations on campus. Collaborations with Affirmative Action and Human Resources will be increased in Years 4 and 5. Also, ADVANCE maintains active collaborative relationship with the PCOSW, the Women in Science lunch group, the Women's Center, the Multicultural Center, and the Engineering Diversity Committee. ADVANCE will be partnering with the state-wide NSF-EPSCOR program, as well as the Office of Student Affairs and Academic Affairs in the attainment of the goals in the 2006-2009 Strategic Plan.

## D. PUBLICATIONS AND PRODUCTS

### **Papers and Presentations**

In addition to participation in the 2006 annual ADVANCE PI meeting, ADVANCE members spoke about the program at 2 professional conferences. Several additional local presentations were also given, including at a regional conference on broadening participation in computing held at URI. Two papers were accepted for publication, and two papers, on focus group findings, and on describing our integrated climate change model, are in final stages of development and should be submitted this fall for publication. Also in the fall, an ADVANCE presentation will be given at another national conference.

### **Other Products**

This year, a new website was launched, the Virtual Work-Life-Family Center website. A Faculty Mentoring Handbook was published, and a Family Leave Handbook and revised Faculty Recruitment Handbook are being published this summer. A Chairs' Listserv was established.

### **2004 Incentive Award Products**

Final reports have been submitted for all 8 projects funded by ADVANCE from the first round. They include:

Tracey Morin Dalton, Assistant Professor, Marine Affairs

Type of Project: Summer Salary & Research

Title of Project: *Multidisciplinary Evaluation of Marine Protected Area Performance*

The PI used the funds to assemble a team of researchers and practitioners with expertise in both social and natural sciences. The PI served as contact person, coordinator of information, and lead proposal writer for the team.

As a result of this grant, the PI was provided with the opportunity to develop stronger working relationships with Coastal Resources Center practitioners and other URI researchers. She contacted various potential funding organizations and wrote a 2-page summary of her project and submitted it to five program coordinators in social and natural science programs at NSF. The PI's research team used the majority of their time and funds to develop a research proposal, which was submitted to NSF in February of 2005.

Nancy Eaton, Professor, Mathematics

Type of Project: Summer Salary & Travel

Title of Project: *Edge Coverings for Complete Bipartite Graphs*

The PI used the funds for summer salary and a trip to the SIAM Conference on Discrete Mathematics on June 13-16, 2004 at the Loews Vanderbilt Plaza Hotel, in Nashville, TN, where she met with one of her colleagues on the project.

As a result of her efforts over this grant period, the PI revised one research paper: N. Eaton, Z. Furedi, A. Kostochka, and J. Skokan, *Tree Representations of  $K_{n,n}$* , European Journal of Combinatorics (2004). The PI also submitted a proposal for a sabbatical leave for Spring 2006 based on this work, which has been approved. In addition, the PI plans to visit with her colleagues and prepare and give talks related to this work. Furthermore, the PI submitted a research proposal to NSF in October 2005 on this project and began writing a second paper.

John Gates, Professor, Environmental & Natural Resource Economics

Type of Project: Seminar Series

Title of Project: *Perspectives for Women in Natural Resource Economics*



The PI used the funds for bringing distinguished academic women to URI as role models for untenured assistant professors in related fields and for women graduate students thinking about a career in the academic world.

The series was entitled "Outstanding Women in Resource Economics" and included three speakers from diverse universities. This grant has allowed the PI to provide examples of outstanding women faculty in resource economics to his male colleagues as well as others from URI, and to provide good role models for women in both resource economics and marine affairs departments. The seminars have been educational and have benefited the stature of the department within the College of Environmental and Life Science as well as the women and men who attended them.

Roberta King, Assistant Professor, Biomedical Sciences

Type of Project: Partial Summer Salary & Research

Title of Project: *Endocrine Effects of 17-Beta-Estradiol Modulation in a Marine Organism*

The PI used the funds provided by this grant entirely on partial summer faculty research salary. She prepared a research grant proposal entitled "Estrogen Sulfotransferase Inhibition and Breast Cancer" and submitted it to NIH in September of 2004.

This proposal was approved and replaced her previously intended proposal to NSF. The grant supported the development of the PI's research program and scholarly professional development. She made four presentations on her research at various conferences and meetings, has had one collaborative paper published, and has submitted one research article for peer review.

Valerie Maier-Sperdelozzi, Assistant Professor, Engineering

Type of Project: Summer Salary, Research & Travel

Title of Project: *Uncertainty in Analytic Hierarchy Process Decisions for Manufacturing Systems*

The PI used the funds to support one graduate student during the summer of 2004. A complete literature review was performed for topics related to this project by both the PI and her graduate student.

According to the PI, the greatest benefit of this grant and research was the ability to obtain an additional graduate student and be given the chance to pursue research that extends her own dissertation research. The travel funds allowed the PI to attend a conference she had never been to before, with a professional society she was not previously affiliated with, but that directly related to her research areas. She is now able to learn about new opportunities for funding and publication in this area of research due to her newly developed networks of communication.

Alison Roberts, Professor, Biological Sciences

Type of Project: Research

Title of Project: *Software purchase to increase productivity with current seed funding*

The PI used the funds to purchase software and a computer to analyze genomic sequence data and edit and assemble over 370 sequences, representing 23 previously undescribed members of the *Physcomitrella Cesa* gene super-family.

Data found from this project have been submitted for publication to the journal *Plant Physiology* and the manuscript is now in revision. The data was also presented at an international meeting on plant cell wall biosynthesis. Collaborations were initiated at that meeting leading to the submission of a multi-institutional grant proposal to NSF in January of 2006. The PI intends to submit another in June of 2007. During the course of this project, the PI submitted five proposals and had three articles published on her research.

Li Wu, Associate Professor, Mathematics

Type of Project: Summer Research & Travel

Title of Project: *Domain Decomposition ELLAM Method for Advection-Diffusion Equations*

The PI used the funds for taking a four-day research trip to the Department of Mathematics at the University of South Carolina, and for doing research in the summer of 2004. Prior to receiving this grant the PI could only communicate via email and phone, which was inconvenient and unproductive.

The PI was able to work with a colleague of hers at the University of South Carolina, which provided an environment in which detailed framework related to the ELLAM methods for differential equations was setup and a discussion of various comprehensive techniques could take place. She has also spent time programming a computer program to test her theoretical work by running numerical examples. The PI will continue tuning the computer program and making precise connections in her data in the near future.

Mirang Yoon, Assistant Professor, Physics

Type of Project: Research & Travel

Title of Project: *Synchrotron X-ray Diffraction Study of Faceted Semiconductor Surfaces*

The PI used the funds to make three trips to an off-campus experimental site. Traveling to such a facility would have been impossible without this grant and was an outstanding opportunity for the graduate student for both scientific education and networking reasons.

The PI achieved two goals with the completion of this project: (1) the scientific goal to examine the role of strain in the stability of faceted silicon and silicon/germanium surfaces by means of synchrotron x-ray scattering and (2) the educational goal to train two female graduate students in a research area where women have been highly underrepresented even by the standards of physics. The PI plans on publishing the results of her project in a leading physics journal in the upcoming months.

### **2005 Incentive Award Products**

Final reports are due one year and one month following the awarding of funds. Thus, some second round project reports have not been completed. Following are the 4 out of 7 reports submitted to date.

Araceli Medina Bonifant, Assistant Professor, Mathematics

Type of Project: Travel & Paper Publication

Title of Project: *Dynamics of Self-Maps of Complex Projective Spaces*

The PI used the funds to finish up and submit for publication the paper entitled *Elliptic Curves as Attractors in  $P^2$*  to the journal of Experimental Mathematics. This paper is still under review.

The PI was also able to attend the meeting "Conformal Dynamics, Hyperbolic Geometry, and Continued Fractions". This meeting was held at the Centre International de Rencontres Mathematiques in France, from June 13-17<sup>th</sup>, 2005. Attendance to this meeting was very beneficial to the PI, since she had the opportunity to listen and learn from distinguished personalities in her research area about new results and problems in the field. During the conference she was also able to discuss and consult mathematics with the speakers and with other participants.

Rebecca Nelson Brown, ADVANCE Assistant Research Professor, Plant Sciences

Type of Project: Travel

Title of Project: *Successful Networking as a Tool for Success*

The PI used the funds to attend two international meetings in her field in July of 2005. One was the meeting of the Molecular Breeders of Forage and Turf (MBFT) and the other was a meeting at the Institute for Grasslands Environment Research (IGER).

As the only URI faculty member at these meetings, she took advantage of the opportunity to remind the turf grass science community that URI has an active turf grass research program and that they are interested in research. As a result of these meetings she was able to identify fine leaf fescues as a species to focus on in future work and was invited to give a talk at the prestigious Plant and Animal Genome conference in San Diego in January of 2006. The PI has also been asked by several researchers at IGER to participate in an international collaboration on stress tolerance in cool-season grasses. She is now known among the industry breeders, which is instrumental in enabling her to organize the 2006 URI Kentucky Bluegrass Trial. This trial is expected to bring in about \$18,000 to support her research over the next three years. This grant has allowed her to become much more integrated into the turf grass research community and has assisted her in obtaining information, plant materials, and genetic material she needs for her research.

Mayrai Gindy, ADVANCE Assistant Research Professor, Civil & Environmental Engineering

Type of Project: Summer Salary & Travel

Title of Project: *Integration of GIS and Infrastructure Sensing Technologies for Bridge Condition Assessment and Management*

The PI used the funds to purchase computer equipment and software, pay for travel expenses, and pay three undergraduate students.

During this project she presented her research on three different occasions and submitted five proposals. This grant was critical in kick-starting the PI's research program by providing her with the opportunity to conduct preliminary research on a relatively new topic. This work ultimately led to the award of a research grant funded by the Rhode Island Department of Transportation (RIDOT). This is of primary significance since, for her research area of bridge engineering; RIDOT is an important collaborator and a major funding source for future work.

Donna Meyer, Assistant Professor, Mechanical Engineering

Type of Project: Summer Salary & Proposal Development

Title of Project: *Development of a Proposal for Research on Biosensors for Detection of Contaminants in Rhode Island Waters*

The PI used the funds entirely as a portion of faculty summer salary support. Originally the funds were awarded in order to facilitate the writing of a proposal to NSF. After speaking to the NSF Program Manager, it was determined that the scope of the project needed broadening and a federal agency would be a more appropriate for funding.

The proposal was researched, subsequently completed, and submitted in October of 2005 to the Army Research Office (ARO). The proposal was ultimately not funded but the support to write this proposal (provided by this grant) offered opportunities for future collaborative projects. Soon after, the PI actually became a co-principle investigator on a five-year \$2.35 million research grant from NSF to investigate micro fluidic/sensor development. This grant provides a solid foundation on which to resubmit the original ARO grant written with the support of the ADVANCE Incentive Funds. Much of the work of the NSF grant will be used as preliminary data which was not available when the original proposal was submitted to the ARO.

### **SECTION III**

## **SUMMARY OF PROJECT FINDINGS, JULY 2005 – JUNE 2006**

### **A. FINDINGS SUMMARY**

The influence of the ADVANCE Program is observed most notably in the hiring statistics since academic year 2004-2005. From 2000-2004, female tenure-track STEM hires accounted for no more than 44% of the total. In years 2004-2005 and 2005-2006, female hires comprised 58% and 71% of STEM hires, respectively. With the 9<sup>th</sup> hire starting this fall, the Faculty Fellows Program is now over, to be replaced with a focus on support of our fellows. Two of our fellows have transitioned into tenure lines, and the others are highly productive and well-respected members of their departments. Increasingly, search committees are approaching ADVANCE for search consultation. We assume that, because of ADVANCE and the Affirmative Action Recruitment and Retention plans, that all other search committees now have some awareness of the need to engage in best practices to recruit for diversity. In fact, the President's 2006-2009 Strategic Plan is satisfying evidence that the recruitment of women and minorities has become a formally stated goal of the University.

In addition to recruitment success, the Benchmark Report that follows offers other insights into the status of women faculty. In general, faculty development activities have met with excellent success, as they have in the past, and solid progress has been made in institutionalizing some of our initiatives. Indications of climate change have also been very good, especially from a myriad of anecdotal reports. Focus has been on administrative involvement, which has been very successful, and not on the department climate workshops, which have been postponed until 2006-2007.

Work has proceeded in developing our theoretically-grounded climate change model, and an NSF-PAID proposal was submitted that further articulates our thinking in this area, along with a promise to collaborate widely to disseminate this approach.

In the work-life area, use of the Parental Leave policy has been good, but the Dual Career hiring program has been slow to evolve, in spite of wide general enthusiasm. There are many indications that awareness of work-life balance has increased, and it is a primary objective for the PCOSW and ADVANCE in Year 4, and in fact, for the entire University, as witnessed in the President's 2006-2009 Strategic Plan.

The Evaluation Report that follows summarizes the status of the major components of the program. Detailed findings have been reported in the quarterly reports for 2005-2006.

**University of Rhode Island**

**NSF ADVANCE Institutional Transformation Benchmarks 2005-2006**

*Prepared by the URI ADVANCE Evaluation Committee*

This report contains information reported during AY 2005-2006. Since last year, the College of Environmental and Life Sciences (CELS) has been restructured to include the Department of Biological Sciences.

Data for this year's report, similar to last year, were acquired through the University of Rhode Island's (URI) Human Resources Department. Furthermore, data for Social and Behavioral Sciences (SBS) have been disaggregated from the Science, Technology, Engineering, and Math (STEM) disciplines.

**1. Number and Percent of Women Faculty in STEM & SBS by Department**

Of the 290 tenured and tenure-track faculty in Science, Technology, Engineering, & Mathematics, including the SBS departments, women number 63, or 21.7 % (see **Table 1, Figure 1a**). Without counting SBS, the percentage is now 18.9%. Similarly, of the 55 non-tenure-track faculty in STEM, women number 17, a minor group of 30.9% (see **Table 1, Figure 1b**). The 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 and Anthropology also has comparatively higher percentages of female faculty (Full Professors = 30.0%, Associate Professors = 50.0%, and Assistant Professors = 100%) but is a relatively small department at URI, so is not an anchor in the ways that Biological Sciences and Psychology are (see **Table 2, Figure 2**).

Other departments across all other colleges do not house nearly the same numbers of women faculty as 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 8 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 8 colleges in CELS (see **Table 1**). It should be noted that Biological Sciences, as a function of institutional restructuring, was moved out of the College of

Arts & Sciences and into CELS, boosting the latter college's ranks of women. Thus, any increases in representation of women in CELS cannot be attributed to institutional hiring or promotions.

Two departments within COE -- Civil and Electrical Engineering -- saw an increased representation of women faculty in the Assistant Professor ranks, due to hiring of 2 ADVANCE fellows (2004-05) in the Civil and Electrical Engineering departments.

The faculty in Biomedical Sciences, within the College of Pharmacy, is 23.1% 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 = 43.8%). The recent ADVANCE STEM hires in the Assistant Professor ranks have improved this percentage. Additionally, disciplines such as Psychology, Biological Sciences, and Sociology & Anthropology, also help boost the numbers of women in STEM.

This year, because we acquired data from Human Resources, we were able to get a snapshot of faculty demographics at URI by gender, rank, and race. Though unsurprising, this image was nevertheless discouraging. While White women ( $n = 52$ , 18%), though certainly underrepresented compared to White men ( $n = 191$ , 66%), are present across all ranks in the STEM disciplines, there are no women faculty of color in the Full Professor rank in any of the STEM disciplines (see **Table 3, Figure 3**). Cumulatively, women faculty of color comprise 4% ( $n = 11$ , 4%) of the entire STEM faculty at URI. The implications of this multiple marginalization -- i.e. woman of color in STEM -- remain even more obscure than the implications of being a White woman in STEM.

Comparing 2006 data to 2003 baseline data offers a useful means of measuring progress since ADVANCE. As **Table 4** indicates, the percent of women overall in STEM and SBS disciplines has risen from 16.5% to 21.7% overall since the beginning of the grant period, an increase apparent across all colleges. In the STEM fields alone, the average percentage increase is 5.3%. Within STEM, Engineering (6.2% increase) and the Graduate School of Oceanography (6.8% increase) have shown the greatest increases, due largely to ADVANCE.

## **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 which there are no union representation or tenure process. As noted earlier, women are largely underrepresented ( $n = 63$ , 21.7%) across all ranks, across all STEM departments. Interestingly however, women comprise 30% of the non-tenure track positions. For example, in a number of departments -- such as Psychology, Sociology & Anthropology, Civil Engineering, Electrical & Computer 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 (Chemistry 66.7%, Cell & Molecular Biology 50%, and Biomedical Sciences 50%). However, relative numeric parity in these ranks is misleading because these ranks carry little political influence in the University; these women have no faculty-union representation in these ranks, and often have a reduced decision-making voice in departmental or institutional policies (See **Table 1**, and **Figures 1 a & b** for details).

### **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** and **Figures 1 a & b** for details). 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. 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. Despite the sophistication of the database, it remains unable to keep historical data, such as years in rank and years at institution. Such data as were accessible are included in **Tables 5a & b**; however, because of data unreliability, any meaningful comparisons are not recommended.

### **5. 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 6**). ADVANCE is currently exploring the feasibility of conducting exit interviews with recently departed faculty.

## 6. 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. Two years prior to the start of ADVANCE, in an uncharacteristically heavy hiring year, women accounted for only 25% of new hires at the Assistant Professor level, although they comprised 80% of new hires at the Associate Professor level (See **Table 7** and **Figure 4**). A year later (two years prior to ADVANCE) that figure dropped to 16.7% at the Assistant Professor level and 0% at the Associate Professor level. During the year prior to ADVANCE (2002-03), those figures began to be resuscitated; women were 29% of new hires at the Assistant Professor level. Since ADVANCE began in September 2003, 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, and 75% in 2005-06. There have been no female new hires at the Associate or Full Professor levels since 2000-01. However, starting in 2006-07, CELS has hired a female at the Full Professor level; her hiring was influenced by ADVANCE involvement in the search, as verified by the department chair. ADVANCE is continuing to explore the feasibility of female new hires in STEM and SBS without providing funding incentives to departments.

## 7. 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. Compared to previous reports, which counted all chairs, only STEM and SBS department chairs were included, and membership on powerful committees was added. Overall, however, there was little change in percentage since the baseline report. Of the 244 positions identified, 100 (40.9%) were held by women (see **Table 8**). 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 or SBS 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.

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

A standard multiple regression was performed with salary -- converted to a base of 9 month contract and 1.0 full time equivalent (FTE) -- as the dependent variable and gender, race/ethnicity, departmental affiliation, current rank, and time at institution as independent variables. Only those faculty who were currently (as of 2005-06) employed (i.e. not retired or otherwise terminated), were in a tenured or tenure-track position, and for whom ADVANCE had salary data, were included in the analysis.

An evaluation of assumptions associated with multiple regression included checks for multicollinearity, outliers, normality, linearity, homoscedasticity, and independence of residuals. All checks were relatively satisfactory. With the use of  $p < .001$  criterion for Mahalanobis distance, three outliers among the cases were found. However, because there was a large sample size ( $n = 279$ ) and none of the outlier cases had extreme scores, all three cases were retained for analyses.

Correlations between the variables are displayed in **Table 9**. The unstandardized regression coefficients ( $B$ ), standard error ( $SE$ ), standardized regression coefficients ( $\beta$ ), semipartial

correlations ( $sr_i^2$ ), and significance test are displayed in Table 9. The model  $R$  for regression ( $R = .75$ ,  $R^2 = .57$ ,  $\Delta R^2 = .56$ ) was significantly different from zero,  $F(5, 273) = 71.84$ ,  $p = .00$ .

Three of the predictor variables contributed significantly to prediction of salary: current rank ( $\beta = .76$ ,  $sr_i^2 = .67$ ,  $p = .00$ ), gender ( $\beta = .13$ ,  $sr_i^2 = .18$ ,  $p = .00$ ), and departmental affiliation ( $\beta = -.12$ ,  $sr_i^2 = .17$ ,  $p = .00$ ). Altogether, 57% (56% adjusted) of the variability in salary was predicted by knowing a tenured or tenure-track faculty member's current rank, gender, and departmental affiliation; such that full professors' salaries ( $M = 98799.37$ ,  $SD = 14315.50$ ) are higher than associate professors' ( $M = 69486.67$ ,  $SD = 10007.85$ ) or assistant professors' ( $M = 62184.46$ ,  $SD = 8032.09$ ), men's salaries ( $M = 92185.31$ ,  $SD = 18977.30$ ) are higher than women's ( $M = 76277.66$ ,  $SD = 18737.55$ ), and professors in the Graduate School of Oceanography ( $M = 105430.20$ ,  $SD = 19543.39$ ) have the highest average salary while those in Geosciences ( $M = 75767.00$ ,  $SD = 18863.87$ ) have the lowest.

The role of gender as a predictor for salary should be interpreted with caution. First, some of its contribution to predicting salary may partially be explained by the disparity in the sheer numbers of tenure and tenure-track female ( $n = 63$ , 21.7%) or male ( $n = 227$ , 78.3%) faculty members (see **Table 1**). Put simply, all faculty ranks are populated by far more males than females [ $\chi^2(2, 279) = 24.56$ ,  $p = .00$ ], with the most glaring disparity apparent at the Full Professor rank where females ( $n = 25$ , 12.6%) are grossly outnumbered by males ( $n = 174$ , 87.4%).

Secondly, gender, current rank, and time at institution are related. This may be because URI, like other universities, has employed males in faculty positions longer than females, despite how it may appear from the figures in Table 4b; start dates for all faculty were not consistently available, thus the figures, though provided, do not necessarily represent reality. This is clear from the correlations between gender and current rank ( $r^2 = .25$ ,  $p < .05$ ), gender and time at institution ( $r^2 = .11$ ,  $p < .05$ ), and current rank at time at institution ( $r^2 = .60$ ,  $p < .05$ ). At the very least, these relationships indicate that none of these variables -- gender, current rank, or time at institution -- can independently predict salary. ADVANCE is currently negotiating with a statistical consultant to help us analyze salary equity data while considering these inherently confounding relationships.

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

We continue to assess the feasibility of gathering passive indicators of start-up packages granted to newly hired STEM faculty. As with time in rank and time at institution, URI has no formal, centralized means of tracking start-up package offers, except within the text of an offer letter. ADVANCE with its limited staff has not had the means to gather these data for a thorough, meaningful analysis.

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. Twenty-three surveys were sent out, with three returned to date (13%).

## List of Tables

1. STEM and SBS Departmental Faculty Gender Composition (Spring 2006)
2. Number and Percent of Women Tenured and Tenure Track Faculty in STEM and SBS by Rank and Department (Spring 2006)
3. Number of STEM Tenured and Tenure-Track faculty by Rank, Gender, and Racial Group (Spring 2006)
4. Number of Women by Rank and Percent Total Faculty in URI STEM & SBS Disciplines – Comparison 2003-2006
5. (a) Years at Institution for Tenured and Tenure-Track STEM and SBS Faculty (Spring 2006), and (b) Years in Rank for Tenured and Tenure-Track STEM and SBS Faculty (Spring 2006)
6. Voluntary, Non-Retirement, Non-Death Attrition, by Rank and Gender (cumulative till Spring 2006)
7. New-Hires in STEM and SBS by year (till 2006-07 partial)
8. Faculty Leadership Positions (2005-06)
9. Correlations between Variables for a Standard Multiple Regression Predicting Salary for STEM Tenured and Tenure-Track Faculty (n = 279)
10. Summary of Standard Regression Analysis for Variables Predicting Salary for STEM Tenured and Tenure-Track Faculty (n = 279)s

## List of Figures

1. (a) STEM Tenure-Track Female Faculty(Spring 2006) (as a subset of all tenure-track faculty)  
(b) STEM non-Tenure-Track Female Faculty (Spring 2006) (as a subset of all non-tenure track faculty)
2. STEM Tenured & Tenure-Track Faculty by Rank & Department (Spring 2006)
3. STEM Faculty Composition as of Spring 2006 (Rank x Gender x Racial Group)
4. STEM New Hires AY 2000-01 to 2006-07 (partial) (Tenured or Tenure-Track Faculty only)

**Table 1. Tenured & Tenure-Track Faculty Gender Composition in STEM and SBS Departments (Spring 2006)**

	Tenured & Tenure Track			Non-Tenure Track			Non-Tenure Track as % All Women
	All	Women	% Women	All	Women	% Women	
<b>College of Arts &amp; Sciences (STEM)</b>	<b>55</b>	<b>10</b>	<b>18.2%</b>	<b>14</b>	<b>4</b>	<b>28.6%</b>	<b>28.6%</b>
Chemistry	14	1	7.1%	3	2	66.7%	66.7%
Computer Science & Statistics	11	3	27.3%	1	-	-	-
Mathematics	18	4	22.2%	4	1	25.0%	20.0%
Physics	12	2	16.7%	6	1	16.7%	33.3%
<b>College of Engineering</b>	<b>64</b>	<b>8</b>	<b>12.5%</b>	<b>3</b>	<b>1</b>	<b>33.3%</b>	<b>11.1%</b>
Chemical	9	1	11.1%	1	-	-	-
Civil	9	2	22.2%	-	-	-	-
Electrical	19	2	10.5%	-	-	-	-
Industrial	5	1	20.0%	-	-	-	-
Mechanical	14	1	7.1%	-	-	-	-
Ocean	8	1	12.5%	2	1	50.0%	50.0%
<b>Environment &amp; Life Sciences</b>	<b>76</b>	<b>18</b>	<b>23.7%</b>	<b>10</b>	<b>2</b>	<b>20.0%</b>	<b>10.0%</b>
Biological Sciences	13	7	53.8%	2	-	-	-
Cell & Molecular Biology	9	3	33.3%	2	1	50.0%	25.0%
Environmental & Natural Resource Economics	9	1	11.1%	-	-	-	-
Fisheries, Animal, & Veterinary Sciences	7	2	28.6%	3	1	33.3%	33.3%
Geosciences	7	1	14.3%	1	-	-	-
Marine Affairs	8	1	12.5%	-	-	-	-
Natural Resource Science	10	1	10.0%	2	-	-	-
Plant Sciences	13	2	15.4%	-	-	-	-
<b>College of Pharmacy</b>	<b>20</b>	<b>5</b>	<b>25.0%</b>	<b>2</b>	<b>1</b>	<b>50.0%</b>	<b>16.7%</b>
Biomedical Sciences	20	5	25.0%	2	1	50.0%	16.7%
<b>Graduate School of Oceanography</b>	<b>33</b>	<b>6</b>	<b>18.2%</b>	<b>22</b>	<b>5</b>	<b>22.7%</b>	<b>45.5%</b>
<b>Total STEM only</b>	<b>248</b>	<b>47</b>	<b>18.9%</b>	<b>51</b>	<b>13</b>	<b>25.4%</b>	<b>21.6%</b>
<b>College of Arts &amp; Sciences (SBS)</b>	<b>42</b>	<b>16</b>	<b>38.1%</b>	<b>4</b>	<b>4</b>	<b>100%</b>	<b>20.0%</b>
Psychology	29	11	37.9%	3	3	100%	21.4%
Sociology & Anthropology	13	5	38.5%	1	1	100%	16.7%
<b>Total STEM &amp; SBS</b>	<b>290</b>	<b>63</b>	<b>21.7%</b>	<b>55</b>	<b>17</b>	<b>30.9%</b>	<b>21.3%</b>

Source: URI Human Resources Data

**Table 2. Number and Percent of Tenured and Tenure Track Faculty in STEM and SBS by Rank and Department (Spring 2006)**

	Women			Men			Percent Women		
	Full	Asso- ciate	Assis- tant	Full	Asso- ciate	Assis- tant	Full	Asso- ciate	Assis- tant
<b>College of Arts &amp; Sciences (STEM)</b>	<b>4</b>	<b>3</b>	<b>3</b>	<b>34</b>	<b>4</b>	<b>7</b>	<b>10.5</b>	<b>42.9</b>	<b>30.0</b>
Chemistry	1	-	-	10	1	2	9.1	-	-
Computer Science & Statistics	1	2	-	5	1	2	16.7	66.7	-
Mathematics	2	1	1	9	2	3	18.2	33.3	25.0
Physics	-	-	2	10	-	-	-	-	100.0
<b>College of Engineering</b>	<b>1</b>	<b>2</b>	<b>5</b>	<b>45</b>	<b>6</b>	<b>5</b>	<b>2.2</b>	<b>25.0</b>	<b>50.0</b>
Chemical	-	1	-	6	2	-	-	33.3	-
Civil	-	-	2	4	2	1	-	-	66.7
Electrical	1	-	1	15	-	2	6.3	-	33.3
Industrial	-	-	1	3	1	-	-	-	100.0
Mechanical	-	-	1	11	1	1	-	-	50.0
Ocean	-	1	-	6	-	1	-	100.0	-
<b>Environment &amp; Life Sciences</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>41</b>	<b>9</b>	<b>8</b>	<b>12.8</b>	<b>40.0</b>	<b>42.9</b>
Biological Sciences	4	2	1	4	-	2	50.0	100.0	33.3
Cell & Molecular Biology	1	1	1	4	2	-	20.0	33.3	100.0
Environmental & Natural Resource									
Economics	1	-	-	6	-	2	14.3	-	-
Fisheries, Animal, & Veterinary Sciences	-	1	1	5	-	-	-	100.0	100.0
Geosciences	-	1	-	5	1	-	-	50.0	-
Marine Affairs	-	-	1	4	1	2	-	-	33.3
Natural Resource Science	-	-	1	5	4	-	-	-	100.0
Plant Sciences	-	1	1	8	1	2	-	50.0	33.3
<b>College of Pharmacy</b>	<b>3</b>	<b>-</b>	<b>2</b>	<b>10</b>	<b>2</b>	<b>3</b>	<b>23.1</b>	<b>-</b>	<b>40.0</b>
Biomedical Sciences	3	-	2	10	2	3	23.1	-	40.0
<b>Graduate School of Oceanography</b>	<b>3</b>	<b>-</b>	<b>3</b>	<b>23</b>	<b>2</b>	<b>2</b>	<b>11.5</b>	<b>-</b>	<b>60.0</b>
<b>College of Arts &amp; Sciences (SBS)</b>	<b>8</b>	<b>6</b>	<b>2</b>	<b>21</b>	<b>3</b>	<b>2</b>	<b>27.6</b>	<b>66.7</b>	<b>50.0</b>
Psychology	5	5	1	14	2	2	26.3	71.4	33.3
Sociology & Anthropology	3	1	1	7	1	-	30.0	50.0	100.0
<b>Grand Total</b>	<b>25</b>	<b>17</b>	<b>21</b>	<b>174</b>	<b>26</b>	<b>27</b>	<b>12.6</b>	<b>39.5</b>	<b>43.8</b>

Source: URI Human Resources Data

Table 3: Number of STEM Tenured and Tenure-Track faculty by Rank, Gender, and Racial Group (Spring 2006)

	Females		Males	
	White	Minority	White	Minority
Assistant Professor	16	5	22	5
Associate Professor	11	6	21	5
Full Professor	25	0	148	26
<b>Totals</b>	<b>52 (18%)</b>	<b>11 (4.0%)</b>	<b>191 (66%)</b>	<b>36 (12%)</b>

Source: URI Human Resources Data

Table 4. Number of Women by Rank & Percent of Total Faculty in URI STEM & SBS Disciplines – Comparison 2003-2006

	2002-2003				2005-2006				
	Female		% Female of total faculty		Female		% Female of total faculty		% change (Fall 03 - Fall 05)
	Total faculty	Ass't	Assoc.	Full	Ass't	Assoc.	Full		
College of Arts & Sciences (STEM)*	54	1	4	3	3	3	4	18.2%	+3.4%
College of Engineering	63	2	1	1	5	2	1	12.5%	+6.2%
Environment & Life Sciences*	63	4	4	4	6	6	6	23.7%	+4.7%
College of Pharmacy	19	0	2	2	2	0	3	25.0%	+3.9%
Graduate School of Oceanography	35	0	0	4	3	0	3	18.2%	+6.8%
<b>Total STEM only</b>	<b>234</b>	<b>7</b>	<b>11</b>	<b>14</b>	<b>19</b>	<b>11</b>	<b>17</b>	<b>19.0%</b>	<b>+5.3%</b>
College of Arts & Sciences (SBS)	39	2	5	6	2	6	8	38.1%	+4.8%
<b>Total STEM and SBS</b>	<b>273</b>	<b>9</b>	<b>16</b>	<b>20</b>	<b>21</b>	<b>17</b>	<b>25</b>	<b>21.7%</b>	<b>+5.2%</b>

\* Biological Sciences has been counted in CELS for both time periods

**Table 5a. Years in Rank for STEM and SBS Tenured & Tenure-Track Faculty (cumulative till Spring 2006)**

STEM & SBS	#	Female		Yrs in Rank *		Difference in Years in Rank (F-M)
		# Female	# Male	M	(SD)	
Full	9	5.34	3.28	7.8	4.97	-2.46
Associate	10	5.25	1.35	4.86	1.28	0.39
Assistant	1	5.02	-	1.44	1.03	3.58
<b>Total</b>	<b>20</b>		<b>41</b>			

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

**Table 5b. Years at Institution for STEM and SBS Tenured & Tenure-Track Faculty (cumulative till Spring 2006)**

STEM & SBS	#	Female		Time @ Institution *		Difference in Time @ Inst (F-M)
		# Female	# Male	M	(SD)	
Full	22	12	3.27	10.92	5.63	1.08
Associate	17	5.54	2.12	4.6	2.34	0.94
Assistant	21	0.24	1.1	0.38	1.19	-0.14
<b>Total</b>	<b>60</b>		<b>227</b>			

Note: \* Start date not consistently available, thus comparisons are unreliable.  
Source: URI Human Resources



Table 6. Voluntary, Non-Retirement, Non-Death Attrition, by Rank and Gender (Tenured & Tenure-Track Faculty only, Cumulative from Fall 2000 till Spring 2006)

	Women			Men		
	Assistant	Associate	Full	Assistant	Associate	Full
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
Total	1	2	1	2	4	2

Source: URI Human Resources

Table 7. New-Hires in STEM and SBS by year

	Assistant			Associate			Full Professor		
	Men	Women	%	Men	Women	%	Men	Women	%
<b>Pre-ADVANCE Year: 2000-01</b>									
College of Arts & Sciences (STEM)	2	1	33.3%	-	1	100%	-	-	-
College of Engineering	1	-	-	1	1	50.0%	-	-	-
Environment & Life Sciences	3	1	25.0%	-	1	100%	-	-	-
College of Pharmacy	1	1	50.0%	-	-	-	-	-	-
Graduate School of Oceanography	1	-	-	-	-	-	1	-	0%
College of Arts & Sciences (SBS)	1	-	-	-	1	100%	-	-	-
<b>Total</b>	<b>9</b>	<b>3</b>	<b>25.0%</b>	<b>1</b>	<b>4</b>	<b>80.0%</b>	<b>1</b>	<b>-</b>	<b>0%</b>
<b>Pre-ADVANCE Year: 2001-02</b>									
College of Arts & Sciences (STEM)	1	-	-	-	-	-	-	-	-
College of Engineering	1	1	50.0%	1	-	-	-	-	-
Environment & Life Sciences	2	-	-	-	-	-	-	-	-
College of Pharmacy	1	-	-	-	-	-	-	-	-
Graduate School of Oceanography	-	-	-	-	-	-	-	-	-
College of Arts & Sciences (SBS)	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>5</b>	<b>1</b>	<b>16.7%</b>	<b>1</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Pre-ADVANCE Year: 2002-03</b>									
College of Arts & Sciences (STEM)	3	-	-	-	-	-	-	-	-
College of Engineering	1	1	50.0%	-	-	-	-	-	-
Environment & Life Sciences	1	1	50.0%	-	-	-	-	-	-
College of Pharmacy	-	-	-	-	-	-	-	-	-
Graduate School of Oceanography	-	-	-	-	-	-	1	-	0%
College of Arts & Sciences (SBS)	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>5</b>	<b>2</b>	<b>28.6%</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1</b>	<b>-</b>	<b>0%</b>
<b>ADVANCE Year 1: 2003-04</b>									
College of Arts & Sciences (STEM)	-	-	-	-	-	-	-	-	-
College of Engineering	-	1	100%	-	-	-	-	-	-
Environment & Life Sciences	2	-	-	-	-	-	-	-	-
College of Pharmacy	-	-	-	-	-	-	-	-	-
Graduate School of Oceanography	-	-	-	-	-	-	-	-	-
College of Arts & Sciences (SBS)	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>2</b>	<b>1</b>	<b>33.3%</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>ADVANCE Year 2: 2004-05</b>									
College of Arts & Sciences (STEM)	-	-	-	-	-	-	-	-	-
College of Engineering	-	-	-	-	-	-	-	-	-
Environment & Life Sciences	-	-	-	-	-	-	-	-	-
College of Pharmacy	-	-	-	-	-	-	-	-	-
Graduate School of Oceanography	-	-	-	-	-	-	-	-	-
College of Arts & Sciences (SBS)	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0</b>	<b>0%</b>

College of Arts & Sciences (STEM)	-	2	-	-	-	-	-	-	-	-	-	-
College of Engineering	1	2	-	-	-	-	-	-	-	-	-	-
Environment & Life Sciences	1	1	-	-	-	-	1	-	-	-	-	0%
College of Pharmacy	-	-	-	-	-	-	-	-	-	-	-	-
Graduate School of Oceanography	1	-	-	-	-	-	-	-	-	-	-	-
College of Arts & Sciences (SBS)	1	1	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>4</b>	<b>6</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0%</b>
<b>ADVANCE Year 3: 2005-06</b>												
College of Arts & Sciences (STEM)	1	-	-	-	-	-	-	-	-	-	-	-
College of Engineering	-	-	-	-	-	-	-	-	-	-	-	-
Environment & Life Sciences	-	3	-	-	-	-	-	-	-	-	-	-
College of Pharmacy	1	-	-	-	-	-	-	-	-	-	-	-
Graduate School of Oceanography	-	3	-	-	-	-	-	-	-	-	-	-
College of Arts & Sciences (SBS)	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>2</b>	<b>6</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>ADVANCE Year 4: 2006-07*</b>												
College of Arts & Sciences (STEM)	-	-	-	-	-	-	-	-	-	-	-	-
College of Engineering	-	-	-	-	-	-	-	-	-	-	-	-
Environment & Life Sciences	-	2	-	-	-	-	-	-	-	1	-	100%
College of Pharmacy	1	1	-	-	-	-	-	-	-	-	-	-
Graduate School of Oceanography	-	1	-	-	-	-	-	-	-	-	-	-
College of Arts & Sciences (SBS)	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>1</b>	<b>4</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1</b>	<b>-</b>	<b>100%</b>

Source: URI Human Resources

\*Note: As of July 2006

Table 8. Faculty Leadership Positions

	All Faculty	All (%)	Number of Women Faculty	
			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

Table 9. Correlations between Variables for a Standard Multiple Regression Predicting Salary for STEM Tenured and Tenure-Track Faculty (n = 279)

	Gender	Race / Ethnicity	Department	Rank Current	Time at Institution
Salary 1FTE 9Month					
Gender	.30*	-.15*	-0.022	-.73*	.39*
Race/Ethnicity		-.12*	0.09	-.25*	.11*
Department			-0.07	.17*	-.15*
Rank Current				-.11*	0
					-.60*

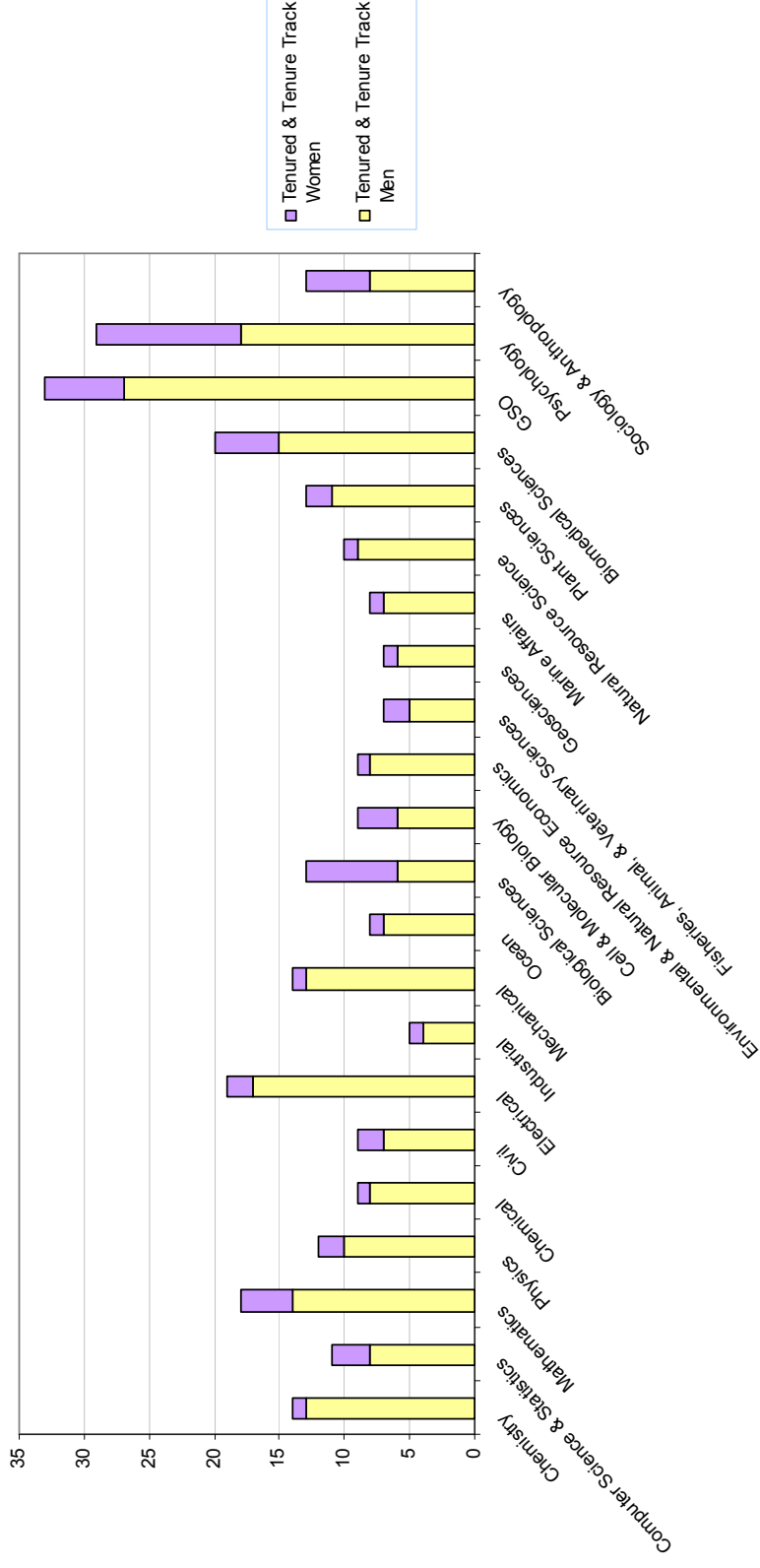
Note: \* Significant at  $p < .05$ .

Table 10. Summary of Standard Regression Analysis for Variables Predicting Salary STEM Tenured and Tenure-Track Faculty (n = 279)

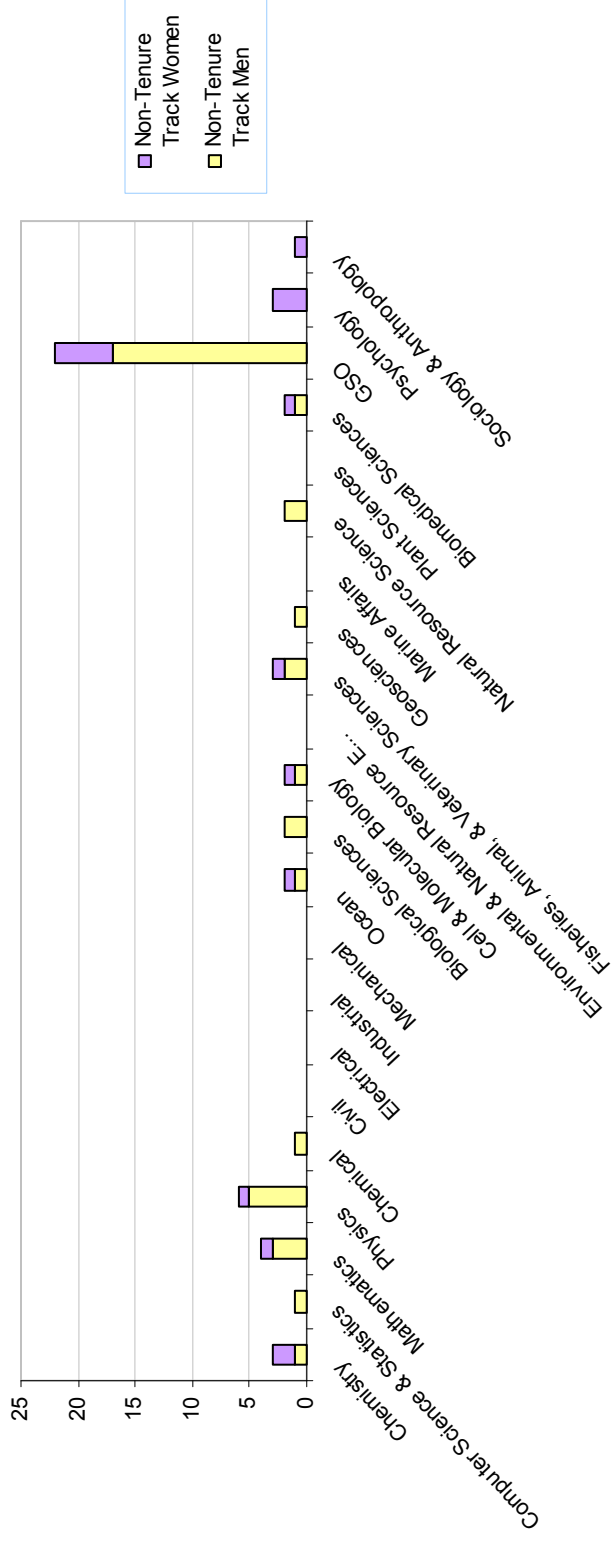
	B	SE B	$\beta$	$sr_i^2$	p
Gender	5803.71	1918.51	0.13	0.18	0
Race/Ethnicity	-628.45	1033.81	-0.03	-0.037	0.54
Department	-4.49	1.54	-0.12	-0.174	0
Rank Current	-1877.5	127.56	-0.76	-0.665	0
Time at Institution	-1436.81	867.97	-0.08	-0.1	0.1

$R^2 = .57$ ;  $\Delta R^2 = .56$ .

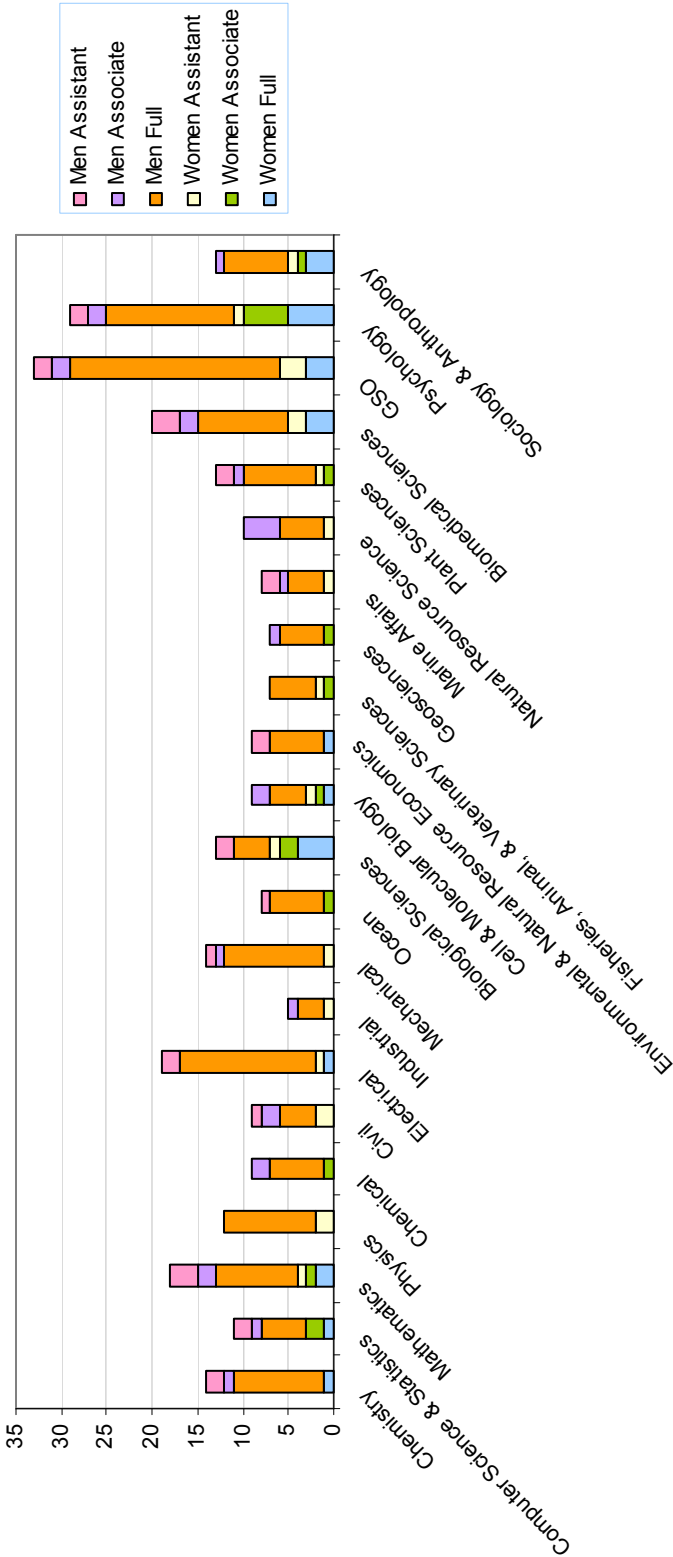
**Figure 1a: STEM Tenure-Track Female Faculty (Spring 2006)**  
(as a subset of all tenure-track faculty)



**Figure 1b: STEM non-Tenure-Track Female Faculty (Spring 2006)**  
(as a subset of all non-tenure track faculty)

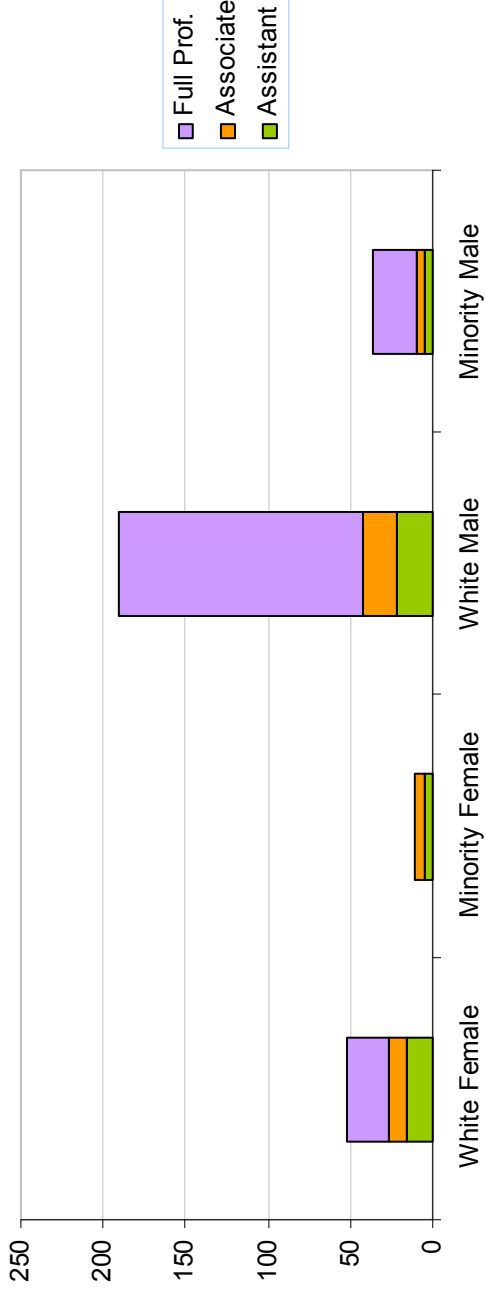


**Figure 2: STEM Tenured & Tenure-Track Faculty By Rank & Department (Spring 2006)**

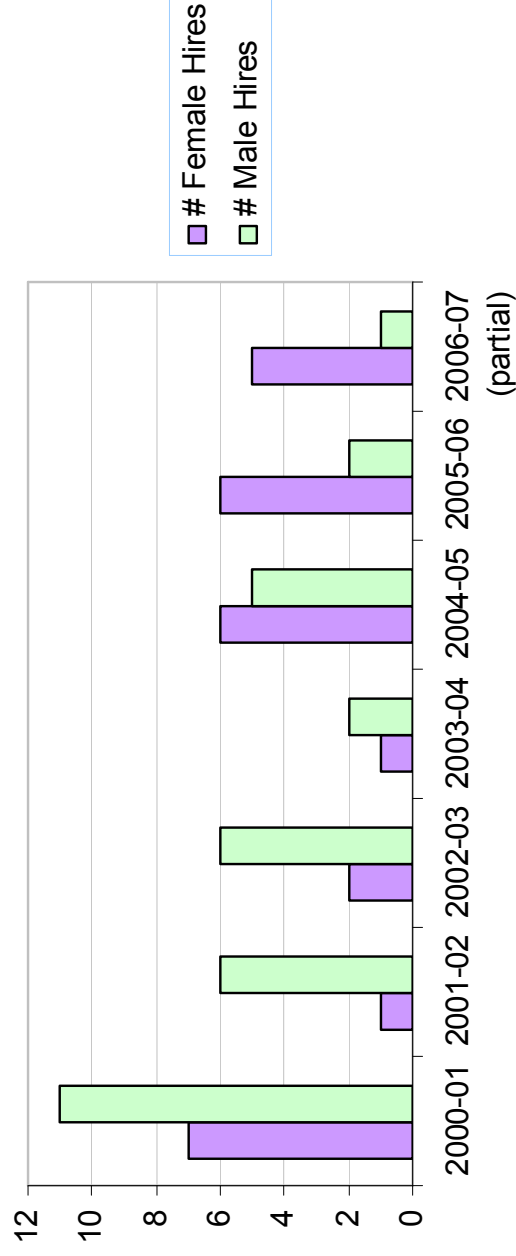




**Figure 3: STEM Faculty Composition as of Spring 2006**  
(Rank x Gender x Racial Group)



**Figure 4: STEM New Hires AY 2000-01 to 2006-07 (partial)**  
(Tenured or Tenure-Track Faculty Only)



## C. PROGRAM EVALUATION REPORT

### Evaluation Report –July 2006 Progress at the Conclusion of Year 3

Prepared by: L. Harlow, B. Silver, A. Singh, & K. Stamm

Contents	
Evaluation Overview	
Internal Evaluation	
▪ Goal 1: Develop a Comprehensive Understanding of the Status of Women STEM Faculty	
▪ Goal 2: Increase the Numbers of Ranked Women STEM Faculty	
▪ Goal 3: Advance the Career of Women STEM Faculty	
▪ Goal 4: Improve Available Support Networks for STEM Women Faculty	
▪ Goal 5: Plan and Implement Organizational Climate Change Efforts with URI Leaders	
External Evaluation: Plan for Years 4 & 5	

This report summarizes internal evaluation of the ADVANCE program at the University of Rhode Island from Year 1 to Year 3 of a 5-year National Science Foundation ADVANCE Institutional Transformation grant. Following is an overview of how project components and data sources address the five goals of the program. Detailed descriptions of findings can be found in the quarterly reports available on the URI ADVANCE website ([www.uri.edu/advance](http://www.uri.edu/advance)). An informal rating system is used to track the progress to date for each goal, with internal ratings highlighting excellent success, some success, or that further work is needed. Tables 1-5 provide a summary of the internal evaluation using a format suggested by external reviewers who will be hired to evaluate Years 4-5 of the project, at that time fully addressing all aspects of the tables.

#### Objective 1: Evaluation

##### Developing a Comprehensive Understanding of the Status of Women STEM Faculty

This objective is internally evaluated as having good success. Many ADVANCE institutions have wrestled with the challenging question of how to adequately define and measure the status of women. It is a difficult objective to measure because it addresses long-term outcomes, and subtle climate factors. The ratings given in Table 1 are moderate for this objective partly because, although many of the components are progressing successfully, the components are not at an easily measurable point. One component that is evaluated with excellent success is **visibility**. Multiple activities have contributed to the visibility of ADVANCE, such as the ADVANCE Resource Center, press releases, an active website, campus colloquia, and campus events. The ADVANCE program garnered attention within the STEM community from the very beginning with the Faculty Fellows program. Five of seven departments in the College of the Environment and Life Sciences requested a fellow position, as did every STEM department in the College of Arts & Sciences. In

Oceanography, 4 disciplines competed for a fellow position. Ongoing events, such as those featuring invited speakers, continue to shine the spotlight on ADVANCE.

Components with some success include the **climate survey**. The initial climate survey was distributed during Year 2 and was completed by 39% of URI faculty; a second follow-up survey is planned for Year 5. In combination, the two surveys will be a means of assessing the status of women over time. The initial climate survey illuminates some of the key aspects of the status of women, including career satisfaction, positive work environment, and inclusivity. Although there were few differences in comparing STEM and non-STEM faculty or in comparing colleges, key gender differences emerged in several areas. For example, men report greater career satisfaction and influence over their careers, whereas women report more discrimination and less interpersonal support and respect. Further, almost a third of the junior faculty (29%) indicated that they did not have a mentor. In general, the climate survey found that gender stereotypes continue to play a large role in attitudes and perceptions. The benchmarks indirectly measure climate by providing information about such topics as salary, longevity, and committee memberships. The benchmark indicators will be used to measure change over time.

**Dissemination** activities have been ongoing and have had some success but require more attention. Dissemination activities include conference presentations, reports, publications, campus events at URI, such as Research Week and Diversity Week, newsletters, best practices recommendations and brochures, and change model reports. While these activities have been important to ADVANCE from the beginning of the project, a continued and deeper focus will occur in the remaining two years, as many of our initiatives come to fruition. For example, the climate survey results will be delivered to each college this fall in tailored presentations, something that has been delayed due to a focus on other initiatives.

Progress on assessing the satisfaction of women through **interviews** and collecting other **qualitative measures** is moderate to good. Over 30 interviews have been conducted on issues regarding dual career partners, parental leave, faculty fellows' experiences, and others, as well as initial focus groups. However, these remain to be analyzed and reports written. A goal of the Work-Life Committee for Year 4 is to develop and implement a qualitative analysis plan.

The collection of annual **benchmark data** has provided important insights into the status of women at URI and how their presence has increased since ADVANCE. This data provides information on numbers of women in tenure-track and non-tenure-track positions, women in administrative positions, women in endowed chairs, tenure promotion outcomes, time in rank and at the institution, and non-retirement attrition. Progress on collecting data effectively is now good, as we have worked to improve this process each year, and still have some indicators that remain elusive. As well, the parameters about what data should be collected have evolved somewhat, based on Lisa Frehill's useful toolkit. Initial data collected in Year One was somewhat unreliable, and we have improved our access to solid data since then. The most fundamentally important data is measuring the numbers of women faculty in STEM tenure lines at URI. As the Year 3 Benchmark Report shows, over the past three years, this percentage has increased at URI from 16.5% to 21.7%. Indications are that 2006-2007 will also further increases, as over 85% of new hires so far have been women.

Future efforts are needed in the dissemination of ADVANCE publications and the placement of ADVANCE within the larger context of climate change at the University. A complete assessment of the status of women STEM faculty will take place at the conclusion of the program, and a formal report developed for distribution to all URI faculty.

## **Objective 2: Recruitment**

### **Increasing the number of ranked women STEM faculty**

The second objective of increasing the number of women STEM faculty has had excellent success overall (see Table 2). As noted, benchmark data is effectively monitoring several key markers of recruitment and promotion success. A component that has met with excellent success is the **Faculty Fellows Program**, one of ADVANCE's centerpiece activities. It is unique in that it allows junior women faculty to focus on research early in their careers. In three years, the 5 year recruitment goal has been exceeded, with 10 (4 in GSO, 2 in CELS, 2 in Engineering, and 2 in A&S) new STEM faculty being hired directly through ADVANCE efforts (9 fellows, 1 supplemental funding), as well as several more **ADVANCE influenced hires** as reported by search and department chairs.

Further effort is needed in tracking new hires that are influenced but not funded by ADVANCE. Anecdotal, there are at least 6 such women STEM new hires. However, a formal method of recording such new faculty members will be a goal for the future.

Components with some success include **supplemental funding** for newly hired faculty, and **best practices guidelines** on recruitment. Due to the expense of the Faculty Fellows program, the supplemental funding has been limited. More information should be collected about the usefulness of supplemental start-up funding as an increased incentive to draw exceptional faculty to URI. The Best Practices handbook will be published this summer, and included in presentations given to STEM search committees in Years 4 and 5, as well as distributed to other departments.

Progress on an **administrative emphasis on diversification** has been excellent, and provides evidence of institutionalization of the goal of balancing the faculty pool. The Administration has long been a proponent of hiring diverse faculty, but the President's recently announced 2006-2009 Strategic Plan contains a formal commitment through an entire initiative devoted to increasing diversity on campus, including recruitment and support efforts for faculty. In a letter dated July 2006, the President acknowledged the influence ADVANCE has had in promoting this agenda at URI. In addition, several college policies now contain inclusive recruitment procedures, and at least 2 colleges will require best practice workshops in all upcoming searches.

## **Objective 3: Faculty Development and Support**

### **Advancing the careers of all women faculty, especially STEM Faculty**

This objective has had very good success as a whole (see Table 3). Three components with excellent success stand out: monthly topical lunches, mentor training workshops, and the Incentive Fund. **Monthly topical lunches** have been consistently well-attended by 22-28 STEM women faculty each. They have become part of the cultural fabric of STEM women at URI, along the lines of, "will I see you at the lunch next Tuesday?" Although survey data indicate an approval rating of 3.7 out of 4, in the future we will focus on gathering more concrete evidence that these lunches have a solidly positive impact.

Our two **Mentor Training Workshops** have been well attended and rated highly by participants. Mentoring workshops were well attended (37 participants in a full-day mentor and mentee workshop, and 28 participants at a 2-hour mentor workshop). The attendance represents about 59% of junior faculty members and about 58% of STEM faculty mentors. Since the climate survey indicated that 29% of assistant professors did not have a mentor, ADVANCE ensured that 100% of new STEM hires were assigned to a mentor for this second workshop. The 28 attendees at the first workshop rated the overall value of the workshop as 9 out of 10. The second group rated the overall workshop at about 7.3. We will be exploring how the expectations for each workshop may have impacted the overall evaluation ratings.

Over three years, the **Incentive Fund** has awarded 24 out of 37 proposals totaling over \$139,000. In Year 3, \$40,000 in additional funding was provided by the Council for Research (along with \$20,000 from ADVANCE), and the Provost has committed to continue that funding through the foreseeable future, indicating a strong step toward sustainability. This has been a highly successful program initiative.

Components with some success include **women in leadership positions** and **career workshops**. There are several high-ranking women at the University, including the Provost and Vice Provost for Academic Affairs, and the Dean of Arts & Sciences, but overall, the percentage of women in leadership positions (20% of STEM/SBS chairs) have remained stable. The Advisory Council's plan to implement the Distinguished Professorship program should further this goal. Career workshops have been held on a variety of topics, including negotiations and several workshops held in conjunction with the Research Office. A grant management workshop is planned for fall 2006. **Writing workshops** were an unplanned activity that provided welcome tips on the writing process, feedback from others, and a dedicated time for writing. Further efforts are needed in increasing the visibility of and attendance of these workshops.

Important steps are to promote collaborative research initiatives and to work with URI offices in order to secure continued funding for faculty development activities. Also, plans are underway in Year 4 to develop distinguished professorships with tiers for all levels of faculty, in order to reward excellence and also to attract senior women leaders to URI.

#### **Objective 4: Work-Life-Family**

##### **Improving the available networks of support for all women faculty, especially STEM Faculty**

Overall, this goal is evaluated with good success (see Table 4). Three components have had excellent success: the **Parental Leave Policy**, the Work-Life-Family website, and the mentoring training workshops. Due in large part to efforts from ADVANCE, a new Paid Parental Leave policy has been formally approved. At least 11 faculty, including men, have used this policy. In addition, ADVANCE is having a larger impact on the entire campus community, as other non-faculty unions have adopted the paid policy component. To date, 1760 University employees in 4 unions, representing approximately 60% of all employees, are covered by parental leave. Use of the policy has been received well at the department level, though we are still working with administrative offices to proactively promote and advertise the availability of the policy.

The **Virtual Work, Life, & Family Center website** serves as a bank for information about URI and its surrounding community. Major sections include family, work, education, community, health and wellbeing, and housing and relocation. In Year 4, as the website becomes more developed, we will produce a promotional brochure and begin tracking website visits. It has been developed as a permanent URI website; who will maintain it post-ADVANCE will be determined as the feasibility for an actual Work-Life Center is explored.

Components with some success include the **Dual Career Policy** and feedback on networking from the **monthly topical lunches**. ADVANCE has authored a set of dual career hiring guidelines, which is currently being reviewed by the Administration. Although there is much enthusiasm for this document, its development has been slow. With the inclusion of a requirement to establish a dual career hiring program in the President's 2006-2009 Strategic Plan, which the President acknowledges was influenced by the presence of ADVANCE on campus, we believe adoption of the plan is imminent. This will be a first step in the institutionalization and further development of an expanded dual career program that includes University funding and the development of a regional network.

A survey of members of the Women in Science listserv provided feedback regarding topical lunches. We will continue to collect comments, which will be analyzed to determine formally how beneficial the lunches are in developing social networks. Further effort will be put toward building links between faculty, administration, and the broader URI community. More efforts will be put into arranging social gatherings. In qualitative comments, junior faculty have indicated that they would like more **social gatherings**.

## **Objective 5: Climate Change**

### **Plan and Implement Organizational Climate Change In Collaboration with University Leaders**

This objective is internally evaluated as having good success (see Table 5). Like the first objective, the fifth objective deals with long-term goals and commitment to ADVANCE principles. Three components have met with excellent success: the **climate survey**, the Internal Advisory Action Council, and invited speakers. The first climate survey was distributed in Year 2; a second climate survey will be distributed in Year 5. We are hopeful that the pre-post comparison will show evidence of improvement in conditions for women in STEM. Additionally, the survey sent to the Women in Science listserv produced comments that will help to gauge climate change. We intend to continue surveys and interviews in the final 2 years of the program.

The **Internal Advisory Action Council**, although only recently formed, presents a unique opportunity for climate change. It allows for discussion in a positive and energizing environment in which concrete actions are identified. Several action steps have already been adopted, including the planning of an honors colloquium on work-life balance, and agreement to institutionalize data collection efforts. Another encouraging indication of climate is that two STEM colleges have adopted ADVANCE recruitment policies (the other two STEM deans were unable to attend that particular meeting, but we feel confident they will endorse this, as well). This group marks a strong step toward institutionalization of ADVANCE's goals.

The two **invited speaker** events were well attended and brought much public attention to ADVANCE. Virginia Valian spent an intensive day educating the URI about the psychosocial mechanisms that create barriers to women in academia. Over 100 people met with her, from administrators to graduate students. Robert Drago spoke on bias against caregivers in the workplace as part of a day showcasing ADVANCE initiatives; over 60 people attended throughout the day. More information should be collected about the impact of both Valian's visit and the ADVANCE Day of Research Week.

Components with some success include **department climate workshops**, and the chairs' discussion forum. Further analysis is necessary on department workshop action plans to determine whether steps to promote climate change have been implemented in departments, and follow-up surveys need to be administered. ADVANCE needs to follow-up on workshops held in the past, and also hold initial workshops in remaining departments. A very good indication of success of the climate workshops are the results of the Climate Workshop Administration Summit Meeting in 2005. This meeting reviewed the major common concerns faculty addressed in the climate workshops, which were taken seriously by the Administration, and subsequently acted on. The initial meetings of the **chairs' discussion forum** were evaluated favorably by chairs; all 29 of whom (62% of all URI chairs) in the first gathering were in favor of continuing the series. More proactive efforts to continue it regularly need to occur.

Continued efforts are needed to sponsor **campus-wide events**, promote campus collaborations, develop an **integrated change model**, and increase **collaboration with ProChange**, Inc. Further progress will occur in the development of an integrated change model as we refine and test our model in interventions such as department climate

workshops. Our goal is to encourage more depth in change at URI and beyond, and determine how to effectively measure this theoretically-grounded model. ProChange is important in this endeavor, and we need to increase collaborations as the model evolves. A plan for disseminating the results and distributing the model to other institutions will be developed in Years 4 and 5. An ultimate goal is to place ADVANCE within the larger context of worker satisfaction at URI as well as beyond URI.

During Year 4, the program will actively pursue increased ***campus collaborations***, especially with the administrative offices of Human Resources and Affirmative Action, the Research Office, and the Graduate School. Being included as part of the President's Commission on the Status of Women's (PCOSW) Strategic Plan for next year, and including representatives from other groups on our own committees will further this goal.

### **Years 4 & 5 Planned External Evaluation**

For Years 4 and 5, external reviewers will fully evaluate program goals and components, attending to all columns of the evaluation tables. In particular, the evaluation questions, needed data collections, and planned analyses (see the 2<sup>nd</sup>, 6<sup>th</sup> and final columns for each of the five tables) will be explicitly and comprehensively addressed in the last years of the project.

The final product is expected to meet and sometimes exceed initial program goals, with disseminated and sustainable outcomes including ongoing benchmark assessment, focus groups, interviews, campus events to advance STEM women, publications, presentations, women STEM hires, ADVANCE inclusion in strategic plans, equitable and broader impact policies, support workshops, mentoring, distinguished professorships, collaborative research, work-life awareness, inter- and intra-disciplinary social gatherings, periodic climate checks and workshops, ongoing internal advisory council meetings, an integrated change model, and best-practices implementation and pamphlets.

In order to keep the achievements and progress from the ADVANCE project sustainable, continued attention and monitoring will be necessary into the future at all levels, including faculty, department, college, administration and the wider institution. The letters of support submitted to the Year 3 NSF Site Visit Team testify to the likelihood of that happening.



Table 1. Years 1-3 Evaluation Progress and Years 4-5 Plans for Goal 1

Goal	Evaluation Questions	Project Components	Data Sources	Internal Evaluation	Needed Data Collection	Planned Analyses
<b>Evaluation</b>  1. To develop a comprehensive understanding of the status of women STEM faculty	Has the program defined the status of women STEM faculty?	Visibility (ADVANCE resource center, press releases, active website, campus colloquia, campus events)	# attendance at events # website visits other sources	✓ +	Pre & Post survey Years 1-5 Benchmarks	Expository Narratives of Program and Impact
	Has the program promoted an understanding of the status of women STEM faculty?	Climate survey - Key aspects of status of women (career satisfaction, positive work environment, inclusivity)	Focus groups 1st climate survey 2 <sup>nd</sup> climate survey	✓	Focus Groups Interviews Attendance counts	Descriptive stats Group difference stats (e.g., Gender)
	Have efforts to understand the status of women STEM faculty been institutionalized?	Dissemination (conference presentations, publications, change model reports, newsletter, best Add external review	Benchmarks (salary, longevity, committee memberships) # publications/presentations from ADVANCE Breadth of dissemination reach Impact potential of Climate surveys, benchmarks, interviews, event attendance, website visits, dissemination	✓	Website counts Dissemination products Other sources	Predictive models (e.g., Career Satisfaction) Theory development and integration Program model exposition inside and beyond URI

Key to Internal Evaluation Ratings: ✓ + = excellent progress, ✓ = good/moderate progress, ✓ - = needs more efforts toward progress; Years 4-5 not yet initiated

Table 2. Years 1-3 Evaluation Progress and Years 4-5 Plans for Goal 2

Goal	Evaluation Questions	Project Components	Data Sources	Internal Evaluation	Needed Data	Planned Analyses
<b>Recruitment</b>  2. To increase the number of ranked women STEM faculty	Does the ADVANCE program influence the number, promotion, tenure, and retention of women STEM faculty?  Have ADVANCE recruitment policies been institutionalized?	Promotion, tenure, and retention assessment	Benchmark Indicators: # and % women faculty # and % tenure-track women # and % women in non-tenure track positions # and % women in administrative positions # and % women in endowed/named chairs tenure promotion outcomes time in rank time in institution Non-retirement attrition  HR records	✓ +	Pre & Post survey  Years 1-5 Benchmarks  Focus Groups  Interviews  Attendance counts  Website counts  Dissemination products  Other sources	Descriptive stats  Narrative summaries  Web Postings  Disseminated Products  Pamphlets  Newsletters
		Faculty Fellows Program	Ads for ADVANCE positions Project Records on searches Fellows interviews Progress toward tenure (?)	✓ +		
		Supplemental funding	Interviews	✓		
		Other ADVANCE-influenced appointments	Interviews	✓ -		
		Best practices guidelines on recruitment/retention	ADVANCE search workshop Interviews	✓		
		Administrative emphasis on diversification (President, Provost, deans, etc)	President's strategic plan '06-'09 Recruitment inclusivity policy	✓		

Key to Internal Evaluation Ratings: ✓ + = excellent progress, ✓ = good/moderate progress, ✓ - = needs more efforts toward progress; Years 4-5 not yet initiated

Table 3. Years 1-3 Evaluation Progress and Years 4-5 Plans for Goal 3

Goal	Evaluation Questions	Project Components	Data Sources	Internal Evaluation	Needed Data	Planned Analyses
<b>Faculty Development and Support</b>  3. To advance the careers of all women faculty, especially STEM faculty	Have women STEM faculty's programs of research benefited from the supervision offered in this program?	Topical Lunches	Lunch evaluations	✓+	Pre & Post survey	Descriptive stats
		Mentor Training	Workshop ratings and # attendees	✓+	Years 1-5 Benchmarks	Statistical analyses (using data from climate survey)
			Climate survey			
	Does ADVANCE influence the level of productivity of women STEM faculty?	Incentive Fund Awards	Final reports from Incentive Fund awardees (use qualitative comments)	✓+	Focus Groups	Web Postings
			Outcomes from Incentive Fund Awards		Interviews	Dissemination products
		Women in leadership positions	# of leadership positions	✓	Attendance counts	
	Have women gained skills and knowledge to advance their careers?	Career Workshops Negotiations Workshop Collaborative	# attendees, ratings, impact	✓	Website counts	
	Have project components been institutionalized?	Writing Workshops	# attendees, ratings, impact (new grants, -----	✓	Faculty feedback	
		Distinguished professorship (to be initiated in year 4)		Not yet initiated	Other sources	
		Collaborative research	# publications/presentations of women STEM faculty	✓-		

Key to Internal Evaluation Ratings: ✓+ = excellent progress, ✓ = good/moderate progress, ✓- = needs more efforts toward progress; Years 4-5 not yet initiated

Table 4. Years 1-3 Evaluation Progress and Years 4-5 Plans for Goal 4

Goal	Evaluation Questions	Project Components	Data Sources	Internal Evaluati	Needed Data	Planned Analyses
<b>Work-Life-Family</b>  4. To improve the available networks of support for all women faculty, especially STEM faculty	Have the networks of support (both professional and social) been improved?  Have networks of support been institutionalized?	Parental Leave policy	# individuals using Parental Leave policy	✓+	Pre & Post survey	Descriptive stats
		Work-Life-Family website	Qualitative comments from Interview project	✓+	Years 1-5 Benchmarks	Qualitative Summaries
		Mentoring	# visits to website survey	✓+	Focus Groups	Pamphlets
			Mentoring brochures (use qualitative comments)	✓+	Interviews	Web postings
			Mentoring training ratings/qualitative comments		Attendance counts	Disseminated products
			Mentoring best practices guidelines		Faculty feedback	Work-Life manuscript
		Dual career policy consideration	Program records - progress of dual-career policy consideration	✓	Website counts	
		Topical lunches	Qualitative comments		Other sources	
			Feedback on networking opportunities at the lunches	✓		
		Networking and Social gatherings	# events and attendees Interviews	✓-		

Key to Internal Evaluation Ratings: ✓+ = excellent progress, ✓ = good/moderate progress, ✓- = needs more efforts toward progress; Years 4-5 not yet initiated

Table 5. Years 1-3 Evaluation Progress and Years 4-5 Plans for Goal 5

Goal	Evaluation Questions	Project Components	Data Sources	Internal Evaluation	Needed Data	Planned Analyses
Climate Change  5. To plan and implement organizational climate change in collaboration with university leaders	Has the culture of recruitment, support, promotion, and collaboration for women faculty changed since the inception of the program?  Has ADVANCE promoted a positive and inclusive climate?  Has climate change been institutionalized?  Has an effective model of change been developed and adopted at URI? Beyond URI?	Climate Survey	1 <sup>st</sup> Climate survey	✓+	Pre, Post	Narrative description comparing pre-, during- and post- ADVANCE climate  Disseminated products
		Other Surveys	2 <sup>nd</sup> climate survey – track stages WIS survey (ratings and selected qualitative)	✓	Faculty feedback	
		Internal Advisory Action Council (IAAC)	Meeting records from IAAC Action plan outcomes	✓+	Advisory Council input	
		Invited speakers	#attendance	✓+	Qualitative comments integrated into reports in years 4-5	
		Department climate workshops	Focus groups Department action plans	✓+		
		Chairs discussion forum	# attendees Feedback from chairs	✓		
		ADVANCE Day of Research Week	# Research Week attendees	✓	Discussion of sustainability	
		Other Campus-wide events	Interviews	✓-		
		Campus Collaborations	Records on collaboration with campus groups (i.e. PCOSW, Women’s center)	✓-		
		Institutionalization	Adoption of ADVANCE recruitment policies by 4 STEM colleges	✓		
	Integrated Change Model	Other data sources Reports from ProChange Publications	✓-			
	Collaboration with ProChange	ProChange handbook and reports	✓-			
	Dissemination/Distribution Plan	Comparison to other institutions (larger context for final report)	Not yet initiated			

Key to Internal Evaluation Ratings: ✓ + = excellent progress, ✓ = good/moderate progress, ✓ - = needs more efforts toward progress; Years 4-5 not yet initiated

## D. CONTRIBUTIONS

The Incentive Fund awards, workshops, Mentoring Program, and Recruitment Funding have offered women scientists and engineers increased opportunities to further their research and their careers. Our aim is, by increasing the visibility of women's excellence here at URI, and the importance of their research agendas, to produce a general overall increase in stature of women in STEM. There are indications that this is occurring. And perhaps most significantly, the increase in numbers of women in all STEM colleges is making a significant step toward creating the critical mass that will eliminate women's minority status.

The Climate Survey report will broaden everyone's understanding of workplace environment at URI, and how it contributes to or detracts from women's success, as have the department climate workshops. The development and application of a theoretically-grounded and integrated climate change model will provide a significant contribution to a deeper understanding of organizational climate change, to URI, the social sciences, and to end users outside URI.

Our emphasis on open use of the Parental Leave policy, advertisement of a work-life website, and articulating the need for work-life balance and family friendly policies has brought a national conversation to a local level. Our publications on mentoring, family leave, and recruitment have, or will be, distributed to the entire university community, and open, public events are featured.

It has always been an ADVANCE goal to extend opportunities to the wider University community. We recognize that *a rising tide lifts all boats*, and that workplace equity must extend to all groups; otherwise we are engaging in the same practices we are trying to eliminate. The Parental Leave policy, for example, now covers several staff unions as well as AAUP faculty.

We are collaborating with the Graduate School Diversity Officer to develop ways to attract women into graduate programs, and with the Multicultural Center in educating students about women in STEM and work-life balance. We have agreed to collaborate with the EPSCOR program, aimed at enhancing the science base in Rhode Island, as well as other pending projects.

Joan Peckham, co-PI, has made many presentations in public schools to attract women into computing. ADVANCE collaborates with the South County Women's Network, and Lisa Harlow has spoken on ADVANCE and promoting women in science. We have employed and offered research opportunities to several graduate and undergraduate students through the ADVANCE office.

Finally, the widespread grass roots energy from the ADVANCE program has changed the collective consciousness about the status of women in STEM at URI, and the value of a diverse faculty. Though difficult to measure, the numbers of outspoken proponents in every STEM area at this moderate-sized university has effected general attitude change in noticeably positive ways.

#### **SECTION IV. APPENDICES**

Because of the file size, appendices are included as a separate attachment.