Quarterly Report September 1, 2010 – November 30, 2010
Rutgers University RU FAIR / NSF ADVANCE
Office for the Promotion of Women in Science, Engineering, and Mathematics
(SciWomen)

Significant Accomplishments
- Developed and presented the Rutgers online interactive informational module for faculty search committees; online module is now live at http://search.committee.module.rutgers.edu
- Presented panel and three posters at the NSF ADVANCE PI conference in Alexandria, Virginia (Roos, Valentine, Bedley, Batamanian, Leshko, Weis, Salahi, Nyaboga, and Khan)
- The OASIS leadership and co-mentoring program at Rutgers-Camden was a successful and well-attended series of events that strengthened networks, fostered interdisciplinary communications, and developed leadership and professional skills for academic career enhancement
- Sponsored grantsmanship skills development for Newark and Camden women faculty
- Successfully hired a new full-time business manager, Chanelle Ridgeway
- Met with our External Advisory Board in a successful exchange of feedback and advice on issues related to the RU FAIR ADVANCE grant in particular and women’s and underrepresented minorities’ participation in SEM in general
- Leveraged External Advisory Board for a panel on navigating the terrain of higher education for Women of Color faculty, students, staff, and postdocs

Noteworthy Indicators for Women’s Enhanced Participation, Leadership, and Visibility at Rutgers University
- Two faculty women nominated by our office for prestigious national awards received these honors
- Associate professor who published major paper in the journal Nature received broad national and institutional recognition, with our office and University Relations each contributing to the enhanced visibility
- NSF Indicator Data for AY 2010-2011 show continued positive rates of change in faculty recruitment for gender and racial/ethnic diversity
- Allison Bernstein, a former vice president of the Ford Foundation, was appointed Director of the Rutgers Institute for Women’s Leadership (IWL). Dr. Bernstein is a historian with a specialty in Native American history and a long track record of diversity work.
- After two years with an interim dean, Jacqueline Litt was hired as Dean of Douglass Residential College. A sociologist and former ADVANCE PI at the University of Missouri, Litt’s appointment signals strong support for ADVANCE and women’s leadership at Rutgers.
- New chair appointments: Athina Petropulu was hired as Chair in the Department of Electrical and Computer Engineering, the second woman to serve as chair in the history of the School of Engineering; Laura Lawson was hired as Chair of Landscape Architecture, becoming one of only two women to currently chair a SEBS department.

Advisory Boards
External Advisory Board: The RU FAIR ADVANCE External Advisory Board (EAB) met for the first time on September 23, 2010. The EAB was chaired by Executive Vice President Philip Furmanski; the list of members and attendees is provided in Appendix A. Most members of the RU FAIR ADVANCE Executive Team were in attendance (note: we purposefully constituted our Board with a larger number of members to ensure a quorum). The meeting itself consisted of two parts: an open session in which RU FAIR ADVANCE personnel gave presentations on our philosophy, programs and projects, outreach, and indicator data; sought guidance for future work; and gained insight from experts at other institutions. This was followed by a closed session between Dr. Furmanski and the EAB members in which specific feedback and recommendations were fleshed out in further
The closed-session report, transcribed by an independent, external scribe, was delivered to Dr. Furmanski, who, in turn, conveyed its content to us in a subsequent debriefing session on November 1, 2010. A synopsis of the Board’s recommendations is forthcoming from Dr. Furmanski. In addition to the formal meeting, we had a full-day of interactions with the Board members: an extended morning session that included breakfast and a more social event around dinner in the evening.

The EAB meeting served several important purposes. It was an opportunity to do a self-study of the grant and to summarize our entire RU FAIR ADVANCE program. It allowed us to prepare for and “dry run” our upcoming February 2011 site visit. In addition, we used the meeting to leverage both evaluation and programming. Mary McCain, our external evaluator, met with both Executive Vice President Philip Furmanski and Karen Stubaus, Associate Vice President for Academic Affairs as well as three other faculty and administrative leaders. EAB members, Shireen Lewis and Marian Johnson-Thompson, participated in a panel on women of color in the academy at Douglass Residential College on September 24, 2010, the day after the EAB met (see below under Programs and Projects).

Our theme for the EAB concerned developing “model systems” for creating diversity and gender equity and the way in which our model systems link to the long-term institutionalization of ADVANCE goals at Rutgers and elsewhere. Our geographically and historically diverse campus is one in which “one size does not fit all.” Hence, it is a crucible for creating not one, but many, national models for enhancing women’s and underrepresented minorities’ participation and leadership in STEM. An important aspect of our models is their reliance on building collaborations and partnerships with existing allied units across the various campuses, thereby generating synergies and leveraging resources.

**RU FAIR ADVANCE Consortium (Internal Advisory Board):** The Consortium held its fall meeting on October 19th. The broad theme was on best practices for increasing faculty diversity. Karen Stubaus, Associate Vice President for Academic Affairs and the Director of the Office of Institutional Diversity and Equity (OIDE) and Cheryl Wall, Board of Governors Zora Neale Hurston Professor of English and co-Chair of the President’s Council on Institutional Diversity and Equity, led the discussion with an overview of the handbook for faculty search committees, the President’s Council, and the newly developed online resource module for faculty search committees. RU FAIR ADVANCE Director, Doreen Valentine, then led a discussion of the online module, calling on Consortium members to participate in role-play scenarios of faculty search committees. The Consortium was a pilot-run of the module, which was subsequently presented to larger administrative and faculty audiences in New Brunswick and Newark (see below under Programs and Projects).

**Programs and Projects:**

Each one of our programs touches on one or more of the five core grant initiatives: recruitment and retention, communications, networks and liaisons, visibility, and family/work-life balance. Simultaneously, we try to avoid reifying these five categories. They are not commensurate, nor are they rigid structures. Most of our activities impact several initiatives at once.

That said, the programs and projects presented here are highlighted according to the initiative most salient for the program or project. This allows us to connect our programs and projects to evaluative measures for assessing our overall progress toward goals of institutional transformation.

We also highlight here the leadership and professional development program, which itself touches on each of the original five initiatives in the grant proposal. As OASIS, its signature program, has evolved and as mini-grants and RU FAIR Professorship activities have focused on leadership skills development through peer mentoring and cooperative learning, we’ve begun to expand the five initiatives architecture into six. Our leadership and professional development activities are distinct and significant.
• Recruitment and Retention

Associate Professors Project: Dana Britton, Professor of Sociology at Kansas State University, who serves as that university’s ADVANCE-IT executive director and a co-PI of an ADVANCE-PAID grant to study the transition between associate and full professor for faculty in SEM disciplines, brought her PAID work to Rutgers for a week-long visit to collect interview data and to present her findings thus far. During her five-day visit (November 1 – 5, 2010), she interviewed 19 associate-level women and men and facilitated a focus group of associate professor women. On Friday of her visit (November 5), she delivered a lecture during a networking lunch. Her talk, “The Glass Ceiling in the Ivory Tower: Gender and Promotion to Full Professor,” was attended by about 30 faculty members, many of whom were associate professors. Notably, this talk brought in quite a few women faculty who had not previously been involved in previous ADVANCE initiatives. In an event survey, the overall satisfaction with the program was overwhelming positive, with attendees reporting having gleaned critical insights into structural factors related to promotion at the level of full-professor. Formal and informal (peer) mentoring for the associate-to-full promotion has been identified as an area of focus by ADVANCE. Rutgers is the 12th institution that Britton has visited for her research and the interview data will be integrated into her larger, national study as well as transcribed for us in a more targeted report. This report will complement our own institutional research. The funding mechanism for the Britton project represents a successful example of our collaboration with Institute for Women’s Leadership (IWL) programs. This program was funded by a mini-grant awarded to the Institute for Research on Women (IRW) and Douglass Residential College, and was ably organized and facilitated by Sarah Tobias, the Associate Director of IRW, in consultation with Christina Leshko, Patricia Roos, and Doreen Valentine of RU FAIR ADVANCE. In addition to being a major component of recruitment and retention initiatives, this project significantly impacted the networks and liaisons initiative.

Online Interactive Search Committee Module: With the support of the Office of the Executive Vice President of Academic Affairs (Associate Vice President Karen Stubaus), the President’s Council on Institutional Diversity and Equity (co-Chair Cheryl Wall), and the Office of Vice President and General Counsel (Haley Lindcourt), RU FAIR ADVANCE Director Doreen Valentine led a team from the Office for the Promotion of Women in Science, Engineering, and Mathematics (including Leshko, Sahali, and Nyabogata) to create an online interactive search committee module to inform faculty members on current hiring research and nationally recognized best practices. The Module is based on the Rutgers Handbook, “Increasing Faculty Diversity,” research literature, original scenario development, and several search committee training programs and models from other universities and colleges. It is comprised of a series of audio vignettes, interspersed with multiple-choice self-assessment questions, access to resources, and links to references. The Module addresses the following topics: Active Recruitment, Determining Disciplinary Focus and Rank of the Position, Constituting the Search Committee, Drafting the Position Description and Ad Copy, Reviewing and Ranking Candidates, Making Cognitive Errors, Hidden Bias, Evaluating Reference Letters, CVs, and Published Works, Interviewing and the Campus Visit, Confidentiality and Compliance, and Making the Offer. The host website includes more detailed information, including data from studies on evaluation of competence and merit, cognitive shortcuts, and implicit bias and research on best practices for inclusive hiring. We began work on the Module in August 2010. In September, we delivered a comprehensive white paper to Academic Affairs and gave presentations on the concept to our External Advisory Board and to the President’s Council. In October 2010, we presented a “bare-bones” version of the complete module in PowerPoint to the ADVANCE Consortium. After going to the recording studio with a group of amateur and professional voice actors, we presented the Module at two day-long faculty diversity events in Newark and New Brunswick. The Module presentation followed a program by the Cornell Interactive Theatre Ensemble entitled, “It Depends on the Lens.” The two-campus, two-day visit featuring the Rutgers Module and the Cornell Ensemble was attended by deans, department chairs, executive administrators, and members of faculty search committees. Our roll-out of the Module as a series of presentations allowed for grass-roots administrative and faculty participation in its development and content. The Module is “live” on a host website <http://searchcommittee.module.rutgers.edu> and is now being refined and customized for use by search committees. We plan to work closely with Academic Affairs and the President’s Council to develop a comprehensive program and suite of services and tools for deans, chairs, and faculty, including grass-roots workshops and interactive, research-driven, video-based content.
Grantsmanship: Newark RU FAIR ADVANCE Professors, Judith Weis and Maggie Shiffrar sponsored six women’s travel to Washington, D.C. to meet with grant officers. The women were assistant- and associate-level faculty in SEM disciplines at Rutgers-Newark. They enlisted Lewis Burke Associates, a Washington-based full service government relations firm to tailor and facilitate each woman’s itinerary. Each woman had several one-on-one meetings with grants officers who were well-matched to her research interests. Agencies visited include NSF, USDA, and Department of Energy. Shiffrar arranged for RU FAIR’s Valentine and Batmanian to debrief the participants. Most of the women reported being led to discussions with grants officer that they wouldn’t have necessarily considered themselves and saw increased possibilities for where they might apply for funding. Weis and Shiffrar plan to send another group of women faculty to Washington in the spring. RU FAIR Professor Georgia Arbuckle-Keil also addressed grantsmanship in her programming for fall 2010. In the first session of the OASIS Leadership series, Arbuckle-Keil invited Vice President for Research Michael Pazzani to speak to Camden faculty on successful grantsmanship; Camie Morrison, the director of sponsored research for Camden also spoke and provided information on navigating the process at Camden.

Tenure and Promotion Workshop: Patricia Roos, RU FAIR ADVANCE co-PI, Director of the Center for Women and Work, and Professor of Sociology, Lisa Klein, Professor II of Materials Science and Engineering and a member of our internal advisory group, the ADVANCE Consortium, served as presenters at a tenure workshop for pre-tenure faculty in the Women of Color Scholars group. The session was held on November 22, 2010, and was organized by Niki Dickerson von Lockette and Monique Porow, current facilitators for the Women of Color Scholars Project. This project is funded through the ADVANCE mini-grant program. Roos and Klein talked about both the mechanics, as well as the more informal aspects, of the tenure process. Seven faculty members attended the workshop, representing five different schools within Rutgers. Several of the participants had not previously attended an ADVANCE event. Most came away from the workshop with key information for navigating the tenure promotion process: “I benefited from the systematic way the two speakers took us through the tenure process, the insights they shared on key components of a tenure file (such as outside letters), and the reminder to be taking steps now to ensure success later. One woman, closer to the tenure-decision year, had hoped for a deeper and more intimate discussion about “the real world experiences and challenges that WoC [scholars] face.” She felt that she had already gotten this sort of “nuts and bolts” information from her department. She noted that “Patricia Roos did provide some valuable and new information such as tenure success rates, stats on challenges that women of color face such as lower teaching evaluations, overload in terms of students asking us for help.” A video recording of the workshop was made, though one woman reported finding that to be intrusive. For events with fewer than ten or so people, we would opt not to video in the future.

• Communications

Talking Creativity: Conversations between Scientists and Artists: The first of two moderated panel discussions between scientists and artists took place on Monday, October 25, 2010. The program, called Water Work, featured artist and activist Betsy Damon, founder of Keepers of the Waters; Allison Candelmo, post-doctoral researcher in the Department of Ecology, Evolution, and Natural Resources and an expert on coastal fisheries; and Lisa Rodenberg, associate professor in the Department of Environmental Sciences and an environmental organic chemist who studies organic contaminants (like PCBs) in water and air. Douglass Residential College Dean, Jacqueline Litt, moderated the panel. More than 100 people attended. Most of these were undergraduate students who came as part of their class or as residents of the Douglass-based living-learning community known as Bunting-Cobb House (named for the two Douglass Deans who were scientists, Mary Ingraham Bunting and Jewel Plummer Cobb). A good number of faculty members were also present. These faculty and others also attended a pre-event dinner at the Douglass Dean’s Residence. The panel discussion sparked a passionate response from the students in the audience, underscoring that water issues are of paramount importance to this generation. Their responses in event evaluation surveys reflected these sentiments, but also expressed an interest in more visual presentations, in addition to moderated-panel discussion. The organizer of this event was Ferris Olin, co-director of the Institute for Women and Art (IWA) and “Talking Creativity” represents a mini-grant collaboration between IWA and RU FAIR ADVANCE. A second event is slated for spring 2011.
New Dean and Chair Reception: Together with the Dean of Biological and Environmental Sciences, Robert Goodman, we welcomed two new women leaders at Rutgers University. At a reception on September 30, 2010, administrative leaders and faculty honored Jacqueline Litt as the new dean of Douglass Residential College and Laura Lawson as the new Chair of Landscape Architecture in the School of Biological and Environmental Sciences (SEBS; formerly Cook College). These appointments significantly raise the profile of women in leadership positions on the Cook-Douglass campus. Dean Litt was the PI of an ADVANCE PAID grant at the University of Missouri before coming to Rutgers and is eager to collaborate with RU FAIR ADVANCE as she develops new and innovative programs at Douglass Residential College. Chair Lawson is instituting a new mentoring program for pre-tenured faculty in her department and has appointed PI Bennett to be on the mentoring committee for assistant professor Seiko Gotto, a recipient of an RU FAIR ADVANCE mini-grant.

Dr. Anne Joliot, known both for her work in plant biology and photosynthesis and for her familial legacy (she is the wife of French biologist Pierre Joliot, son of Irène and Frédéric Joliot-Curie), met with a group of senior women faculty from the Department of Plant Biology and Pathology and several other departments on October 28, 2010. Program coordinator Christina Leshko organized the event as a working lunch and discussion group.

- Networks and Liaisons

The Science and Health Fair is an annual event organized by SciWomen that focuses on women’s health issues while highlighting female research faculty at Rutgers and University of Medicine and Dentistry of New Jersey (UMDNJ). Students are encouraged to “Learn, Network, and Get Involved” through exposure to practical information and current research in women’s health topics and to volunteer and explore internship and research opportunities available in the Rutgers community and beyond. The Fair, held on November 12, 2010 this year, featured a panel discussion and a variety of exhibitors from on- and off-campus.

This year's panel featured Gloria Bachmann, Director of the Women’s Health Institute and Chief of the OB/GYN Service at UMDNJ-RWJ Medical School; Dr. Naa Oyo Kwate, a newly appointed associate professor in the Rutgers Department of Human Ecology, who presented her research on targeted marketing of alcohol in African-American neighborhoods and its impacts on consumption and health; and Dr. Juana Hutchinson-Colas, who specializes in female pelvic medicine and reconstructive surgery at UMDNJ-RWJ Medical School. This year’s exhibitors included: Douglass Project for Rutgers Women in Math, Science, and Engineering; WINGS (Women Investing in and Guiding Students); the Institute for Women’s Leadership Office of Diversity and Academic Success in the Sciences (ODASIS); School of Environmental and Biological Sciences (SEBS) Graduate Programs; SEBS SPIN (student to professional internship network); Graduate School of BioMedical Sciences at UMDNJ-RWJ Medical School; Rutgers Professional Science Masters Degree Program; RU Health Services/HOPE; Institute for Health, Health Care Policy and Aging Research; the Center for Health Services Research on Pharmacotherapy, Chronic Disease Management, and Outcomes; the Global Institute for BioExploration; NJ Environmental Health Association; Ronald McDonald House; Family and Community Health Sciences (FCHS) “Get Moving, Get Healthy”. Approximately 75 people attended the event; most were undergraduates. The program received positive evaluation results overall. Post-event conversations with Douglass Residential College event volunteers and a sampling of attendees and exhibitors revealed that the appeal of the Science and Health Fair among undergraduates is likely to increase with early and more extensive involvement of Douglass students and other student groups. This presents an opportunity for us to deepen our collaboration with Douglass Dean Jacqueline Litt and her colleagues.

Sheryl Tucker. Program Director for the NSF Graduate Research Fellowship Program and a Principal Investigator for the ADVANCE grant at the University of Missouri, visited Rutgers University on October 14 and 15, 2010 to meet with graduate students, deans, and ADVANCE personnel. SciWomen actively recruited students to attend Dr. Tucker’s program. In addition, Dean Jacqueline Litt of Douglass Residential College (who is a former colleague of Tucker’s at University of Missouri), Dean Robert Goodman of the School of Environmental and Biological Science, PI Joan W. Bennett, SciWomen Associate Director Natalie Batemanian, and RU FAIR Director Doreen Valentine met with Tucker for a discussion about the broad NSF ADVANCE program. Dean and
co-PI Kathryn Uhrich, a chemist like Tucker, also met during Tucker’s two-day visit to the New Brunswick campuses.

- **Visibility**

  **Elinor Ostrom**, the Arthur F. Bentley Professor of Political Science and Professor of the School of Public and Environmental Affairs at Indiana University-Bloomington and winner of the 2009 Nobel Prize in Economics, visited Rutgers University on October 20, 2010 as a high-profile academic leader and world-renowned economist. RU FAIR ADVANCE / SciWomen, together with the Eagleton Institute of Politics, sponsored a series of events featuring Ostrom: two receptions, a networking lunch, and a public lecture. Ostrom’s lecture, which brought out a large audience of students, faculty, and administrators, was entitled “Institutional Robustness: how institutional arrangements facilitate or detract from efforts to sustain ecological systems.” Bonnie McKay, Professor II and Chair of Human Ecology, played a critical role in organizing the reception for graduate students and social networking opportunities for a cross-section of women interested in sustainability issues. Rutgers president Richard McCormick introduced Ostrom at the networking lunch, while Executive Vice President Philip Furmanski introduced her at the lecture.

**Awards:** SciWomen/ RU FAIR ADVANCE nominated Dr. **Diana Sanchez**, a pre-tenure social psychologist on the Rutgers-New Brunswick campus, for two awards from one of her key professional organizations, the Society for the Psychological Study of Social Issues (SPSSI). The first award, the Louise Kidder Early Career Award, is intended to recognize social-issues researchers who have made substantial contributions to the field early in their careers. The second award, the Michele Alexander Early Career Award for Scholarship and Service, is intended to recognize early career excellence in scholarship as well as in service. Dr. Sanchez was selected as this year’s recipient of the Michele Alexander Early Career Award due to her outstanding contributions to teaching, mentorship and community service. Her support as faculty advisor to Fusion, a multiracial student organization on the Rutgers campus, was especially noted in her nomination. She served as a graduate student mentor for the Society for Personality and Social Psychology in both 2008 and 2009. In addition, Sanchez received the Leader in Diversity Award in 2008 from Rutgers, which recognizes her efforts to foster diversity in teaching, research, and service, not only for Rutgers students, but also to serve the needs of the State of New Jersey. Dr. **Noemie Koller**, Emeritus Professor of Physics and the first woman tenured to the faculty of the all-male Rutgers College in 1965, was awarded the 2010 Nicholson Medal for Human Outreach by the American Physical Society. The citation reads, "For unselfish commitment to advocating the freedom of scientists around the world and for leadership in fostering equal opportunities for women in science.” Dr. Koller is also a member of the President’s Council on Institutional Diversity and Equity and was chair of the Faculty of Arts and Sciences Gender Equity ad hoc committee in 2001.

- **Leadership and Professional Development**

  Leadership and Professional Development activities, in particular, transcend the borders of the original five initiatives, or rather, encompass each initiative in multiple and effective ways. As a major emphasis of SciWomen and RU FAIR ADVANCE, we believe that Leadership and Professional Development has become a critical “sixth initiative.” This is based on feedback and insight gleaned from our evaluative processes.

**OASIS Leadership and Professional Development Program at Rutgers-Camden:** Modeled after the signature OASIS Leadership Program run by SciWomen in New Brunswick, RU FAIR Professor Georgia Arbucke-Keil developed the program at Camden to provide a structured leadership-training for women in SEM and other professional disciplines. The program prepares Rutgers faculty women for administrative roles within the university and develops formal and informal mentoring relationships among these leaders. OASIS creates a mechanism and a community whereby female faculty members can craft their leadership skills, network with other women to develop effective strategies for coping with “work/life balance” issues, and reach their full potential as leaders. The Camden program consisted of four half-day sessions, which were held in the Camden Campus Center and Law School Building from September through November of 2010. Each session included lunch and opportunities for open discussion and networking. The session topics, led by subject-matter experts and
professional coaches, were: “Understanding Grant Funding at Rutgers and in Washington”; “Being Heard Clearly at the Leadership Table and beyond”; “DISC: Understanding Style in the Workplace”; and “The Successful Scholar: Strategies for Writing and Publishing”. All of the sessions were reviewed positively, with networking and opportunities for future collaboration highlighted as a significant benefit of participation. The participants found that, for example, although they may have known the theory of writing successful grants or communicating effectively, the practical elements of each session were essential to their learning. It is interesting to note that at Camden, which is a primarily undergraduate institution (PUI), several participants reported using what they learned in OASIS to help students or improve their classroom teaching.

**Myers-Briggs Workshop:** The Myers-Briggs Type Indicator (MBTI) assessment is a popular psychometric questionnaire designed to measure preferences in how people perceive the world and make decisions. In practice, it is a powerful tool that allows women to explore their professional and personal work-style in a setting that is collegial and comfortable. On October 8, 2010, RU FAIR Professor and co-PI Helen Buettner sponsored a workshop led by MBTI expert Judith Katz. Katz, who has worked with hundreds of women at the HERS Bryn Mawr Women’s Leadership program, provided MBTI analysis for the twenty-eight women who attended the four-hour workshop on the Busch science and engineering campus. Participants completed the inventory online and received a personal analytic report at the workshop. Katz teased apart the MBTI profile through a series of group exercises and discussions. The recruited participants were largely from the associate and full professor ranks and represented a broad spectrum of disciplines, including engineering, life sciences, and social science. They all expressed a strong favorable assessment of the program: even the science skeptics in the group felt they had learned something new about their work-style. For everyone, it was a rich networking opportunity.

**Negotiating Basics for Academic Women Workshop:** For the third time, RU FAIR ADVANCE and the Institute for Research on Women (IRW) collaborated to co-sponsor this popular and informative workshop. The program, which took place on Wednesday, October 27, 2010, was funded through a mini-grant to Yolanda Martínez-San Miguel and Sarah Tobias, Director and Associate Director of the IRW, respectively. The workshop featured four faculty panelists: Lisa Klein, Distinguished Professor of Materials Science and Engineering; Nina Fefferman, Assistant Professor in the Department of Ecology, Evolution, and Natural Resources (EENR) and the Center for Discrete Math and Theoretical Computer Science (DIMACS); Allan Isaac, Associate Professor of American Studies; and Mary Rigdon, Assistant Research Professor, Department of Psychology and Department of Economics and the Rutgers University Center for Cognitive Science. The panelists represented nearly every stripe of academic appointment: tenure-track, tenured, distinguished, non-tenure-track, and joint (multiple affiliations and “split lines”). More than 80 people attended (mostly graduate students and post-docs, but also a few non-tenured women and assistant professors). We received back 31 evaluation surveys with detailed feedback. Participants reported on the information they learned: “First get offer--then negotiate;” “I enjoyed all the reassurance that its ok to ask for what you need;” “Apply everywhere’ and ‘cast a wide net’ are quotes I will never forget;” “It was interesting to hear the different stories and trajectories of the presenters, but also found the info in the handout extremely helpful.” They valued hearing the panelists talk about their own personal experiences—both positive and negative-- in negotiating and they thought the break-out sessions were particularly worthwhile. Many survey respondents wished for more time and more resources than the four-page informational brochure that we provided (co-developed by RU FAIR ADVANCE/SciWomen and IRW). IRW intends to repeat the workshop again next fall and we will incorporate this feedback. In addition, more resources for faculty and students will be posted on our website this spring. Finally, RU FAIR ADVANCE and IRW will partner on another panel-based workshop in March 2011. The topic: “Split Lines, Split Lives: Navigating Joint Faculty Appointments at Rutgers.”

**Institutional Research**

**NSF Indicator Toolkit:** An updated version of Table 0, our summary table for institutional toolkit indicators, is provided in Appendix A. Most significant is the acquisition of academic year 2010-11 demographic data, which are also included in this appendix. These new data are for table 1 (“Number and Percent of Women Tenured and
Tenure Track Faculty in SEM at Rutgers University by Rank and Department”; table 2 (“Number and Percent of Women Tenure Track and Non-Tenure Track in SEM, by Department”); table 6 (“Voluntary, Non-Retirement Attrition, by Rank, Gender, and Department”); table 7 (“New Hires, by Rank, Gender, and Department”); table 9 (“Number and Percent of Faculty of Color, by Department”); and Table 10a and 10b (“Average Salary in SEM at Rutgers University by Gender, Department, and Rank”). In addition, amended forms of other tables are appended to correct recently discovered reporting errors (table 1, 2009-10) and table 9 (all reporting years).

Figure 1 shows the relationship between rank and gender with respect to time since the inception of the RU FAIR ADVANCE grant. Every group in AY 2010-11 showed an increase in the number of faculty over baseline (AY 2007-08), except for men at the level of Professor II (the highest regular rank at Rutgers). The largest increase was in the number of female assistant professors (rate of change = 42%); the number of women in higher ranks also saw a notable increase: Professor I (18.2% increase over baseline by AY 2010-11) and Professor II (12.0% increase over baseline by AY 2010-11).
A chart of the rates of change in the number of female faculty in the various divisions that make up the SEM disciplines on the New Brunswick campus is shown in Figure 2. The School of Environmental and Biological Sciences (SEBS) saw the most dramatic three-year increase in the number of women (women’s rate of change in AY 2010-11 over baseline 2007-08 is 69.0%, compared to men’s rate of change at 29.9%). The School of Engineering has also been adding women to its ranks, just as the number of male faculty has decreased over the three years (women’s rate of change in AY 2010-11 over baseline 2007-08 is 18.8%, compared to men’s rate of change at -3.6%).

![Figure 2](image)

The percentage and number of women for each campus is shown in Table 1. The university as a whole, driven by New Brunswick and Newark hires, saw an increase in the number and percentage of women; Camden showed a loss of female faculty (from 22 of 71 to 18 of 69), a slight gain of male faculty (49 of 71 to 51 of 69), and a net loss of total faculty (71 to 69).

<table>
<thead>
<tr>
<th></th>
<th>Number Female (Total) AY2007-08</th>
<th>Percentage Female AY2007-08</th>
<th>Number Female (Total) AY2010-11</th>
<th>Percentage Female AY2010-11</th>
<th>Rate of Change Female Faculty (t2-t1/t1)</th>
<th>Rate of Change Male Faculty (t2-t1/t1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>University-wide</td>
<td>205 (924)</td>
<td>22.2%</td>
<td>238 (979)</td>
<td>24.3%</td>
<td>16.1%</td>
<td>6.0%</td>
</tr>
<tr>
<td>Camden</td>
<td>22 (71)</td>
<td>31.0%</td>
<td>18 (69)</td>
<td>26.1%</td>
<td>-18.2%</td>
<td>2.2%</td>
</tr>
<tr>
<td>Newark</td>
<td>35 (119)</td>
<td>29.4%</td>
<td>40 (131)</td>
<td>30.5%</td>
<td>14.3%</td>
<td>8.3%</td>
</tr>
<tr>
<td>New Brunswick</td>
<td>148 (734)</td>
<td>20.2%</td>
<td>180 (779)</td>
<td>23.1%</td>
<td>21.6%</td>
<td>4.1%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Other Research:** Melike Gursoy, Associate Professor in the Department of Industrial and Systems Engineering, working with sociology graduate student, Laurie Cohen, led an initiative that produced the first two drafts of a report called “Assessing the status of women in engineering at Rutgers University.” In this study, female and male tenured/tenure-track engineering faculty in the School of Engineering (SoE) and the School of Environmental and Biological Sciences (SEBS) at Rutgers University participated in an online survey of gender “climate”. Further, salary records were obtained from the Engineering Dean’s office and public sources for the 2008/2009 academic year. In addition, Gursoy and Cohen conducted one-on-one interviews of a subset of faculty. The study examined the following parameters: 1) access to physical and financial resources; 2) faculty responsibilities; 3) level of faculty support; 4) perceptions about the “local” departmental climate and the “global” University climate with regard to gender; 5) perceptions of fairness; 6) work/life balance issues. This preliminary study showed evidence of both salary and gender inequities in the School of Engineering. However, due to its provisional nature, the report has not yet been submitted to the SoE Dean, Thomas Farris. We hope this study-in-progress will produce a report that we can disseminate and act upon. It is noteworthy that about half of all full-time tenured and tenure-track women in SoE (n=9/19) have participated in our OASIS Leadership and Professional Development Workshop.

**Camden Work-load Study:** Camden RU FAIR Professor Georgia Arbuckle-Keil is spearheading a study to explore retention and work/life issues by asking Rutgers faculty in SEM fields about how they spend their time. Anecdotal evidence suggests that women faculty spend more time on teaching and service activities than their male counterparts. Moreover, women faculty often perceive that they spend more time helping students and answering emails compared to their male colleagues. This may translate into extending their office hours or staying longer after classes. One of the reasons for this, women faculty explain, is the personal reward they receive from it regardless of the negative impact that this may have on their research activities.

Using an online anonymous survey to male and female faculty in the SEM fields at Rutgers on the three campuses—Camden, Newark, and New Brunswick, Arbuckle-Keil seeks to determine how much time faculty members report teaching, attending meetings, providing service, and conducting research. The survey also probes the type of resources available to faculty and degree to which they have access to these resources. The online survey will allow us to make comparisons about any gender differences in the department and institution. This will be a first step in identifying gender-based barriers to SEM career advancement and will shed light on the ways in which these barriers can be overcome. To date, the survey has been conducted on the Camden campus and forty-three surveys have been collected for data analysis. We expect to report on these data in the March 1, 2011 quarterly report.

**Gender Equity in 1970s Rutgers-Newark.** We have reported previously on a project led by Newark RU FAIR Professors, Judith Weis and Maggie Shiffrar, to recover and celebrate the history of Newark’s women scientists’ achievements and contributions to science and women’s issues in the 1970s (see December 1, 2009 quarterly report and June 1, 2010 annual report). Katherine Mahaney, a graduate student hired by Weis and Shiffrar, documented the events of the 1970s as part of her study of gender equity. Mahaney’s paper, “A Pervasive Pattern of Delinquency: Rutgers University and the Struggle for Equal Pay, 1970-1976” has now been completed and is submitted on FastLane with this quarterly report.

**Conferences and Presentations:**

**ADVANCE PI Meeting:** Several of us from RU FAIR ADVANCE/SciWomen—PI Joan W. Bennett, co-PI Patricia Roos, RU FAIR ADVANCE Director Doreen Valentine, SciWomen Associate Director Natalie Batmanian, Program Coordinator Christina Leshko, and graduate assistant Crystal Bedley—attended the ADVANCE PI Conference in Alexandria, Virginia on November 7-9, 2010. Judith Weis, Newark RU FAIR Professor did not attend the conference (instead Weis traveled to Cairo, Egypt as a contributor to a forthcoming
publication by the United Nations Environmental Program), but she was on the conference planning committee chaired by Gail Gasparich of Towson University. Roos and Valentine organized, and Roos acted as presider, for one of the meeting’s break-out sessions, “Broadening Participation and Inclusion”, recruiting panelists from Iowa State and University of Nebraska. As part of the panel Bedley and Valentine co-presented a paper on “Changing the Culture of Science; Cultivating Community to Support a Diverse Faculty”. In addition to the panel presentation, several of us presented posters at the meeting:

- “OASIS Leadership Program”, Natalie Batmanian, Doreen Valentine, and Nadia Khan
- “From Handbook to Online Interactive Module: Digital Tools for Active Faculty Recruitment”, Doreen Valentine, Christina Leshko, Sara Salahi, and Alvin Nyaboga
- “Building Foundations for Change: The Mini-grant Mechanism”, Christina Leshko and Doreen Valentine

**International outreach:** Bennett laid some groundwork towards internationalizing ADVANCE. On October 25, 2010, she presented a lecture entitled “Women in Science” at the Institute of Microbiology at the Chinese Academy of Sciences in Beijing, China. Bennett was then invited to contribute an article based on the lecture to the journal *Protein & Cell.* Bennett plans to speak at Hokkaido University next September on women and science, having connected with Dr. Maki Kubo, who represented “ADVANCE” in Japan, at the Alexandria PI meeting. This same visit will take Bennett to Sapporo, in her capacity as vice president of the International Union of Microbiological Sciences.

**Personnel update.**

**Budget Manager:** An on-going challenge for RU FAIR ADVANCE has been the complexity of our budget. Administration of the funds for RU FAIR professors, life-cycle grants, mini-grants, collaborative workshops, lectures and other programs, part-time student and staff support, and other monetary issues has been a labor-intensive, time-draining, and extraordinarily complex effort. Each of the three Rutgers campuses has a separate fiscal system and individual departments vary widely in the capacity and experience of their support staff. In some cases, we have received conflicting advice on how best to set up accounts. Moreover, our strategy of collaboration, partnership, and liaison-building means that we are frequently sharing costs with other units, which in turn, represent different units within the university and have different levels of support personnel. After considerable discussions about the possibility of sharing a business specialist with other units, we re-evaluated our finances. Because we had budgeted personnel costs for time periods in which we were conducting searches and did not have an employee in place, we were able to sequester enough funding to hire a full-time person. In September, with guidance from University Human Resources, the Office of Research and Sponsored Programs (ORSP; particularly Direct Grants and Contracts Accounting (DGCA) Assistant Controller, Michele Conlin, and Academic Affairs), we initiated a search for a new Business Manager for the SciWomen office. We received over 190 applications and conducted eight interviews. We are pleased to announce that we have hired Chanelle Ridgeway. Ridgeway has several years’ experience administering federal and State of New Jersey grants and contracts. She was responsible for fiscal compliance and awards administration in her previous positions. She has prepared for and participated in agency site visits and brings strong computer, accounting, and professional skills to the position. Her salary is paid 50% on the RU FAIR ADVANCE grant and 50% through a separate SciWomen account. Natalie Batmanian, Associate Director of the SciWomen office, did yeoman’s service in laying the ground work, putting together the required job descriptions, and bringing to completion this important search.

**Part-time programming and research support:** This quarter, several students and one part-time staff person joined the SciWomen / RU FAIR ADVANCE team. Albertina Luchko, a Masters level astrophysicist who most recently worked in public programs development for an Alberta, Canada science center, joined our office in August as a coordinator focusing on science communications and special events. She played a key role in this fall’s Science and Health Fair (see Programs and Projects) and is working with the team to prepare for the upcoming third-year site visit, to create copy for new print and web-based communications, and to develop a workshop on effective science communications. Luchko works 20 hours per week and is paid on the SciWomen account.
Sara Salahi is a graduate student in the Department of Mechanical and Aerospace Engineering (where women comprise 7.1% of the full-time faculty, n = 2/28). She joined our office in August to provide part-time research support. She has played an instrumental role in the development of the online search committee module and is now working to analyze the space allocation spreadsheets that we’ve obtained from DGCA. She is paid on the SciWomen account.

Sara Ghorbani is a graduate student in the Department of Industrial and Systems Engineering (2 of the 12 full-time faculty in that department are women; 16.7%). Ghorbani has assisted with analysis and graphic visualization of toolkit indicator tables. She is paid on the RU FAIR ADVANCE account.

Alvin Nyaboga is one of two undergraduate students who work part-time in our office. Nyaboga, a senior majoring in cell biology and neuroscience, has played a critical role on the online module team. His work in collecting information for a resource toolkit has been invaluable. He is paid on the RU FAIR ADVANCE account.

Nadia Khan is an undergraduate who comes to our office through the Rutgers Aresty Undergraduate Research Scholars Program. She has been working on the My Stories project, our web-based collection of coming-of-age portraits of Rutgers women scientists. Khan has developed a table organizing the women by departments and ranks to identify gaps in the representation of the women in the database. She has analyzed fifty interviews based on ten variables to identify the factors that might contribute to successful advancement in the scientific path. She plans to follow-up this narrative research by conducting additional interviews with questions to explore these critical variables.

Best Ideas Yet

The economy of scale approach that we wrote about for the September report served us well this past quarter. It was an inherently reiterative process, with refinements and lessons learned applied to each instantiation. The online module, for example, developed through a series of milestones, that were multi-purposed for partnership-building, community-building, leadership skills training, and evaluation—in other words, for institutional transformation. OASIS, especially, has evolved as a primary mechanism and model for building a community of women leaders at Rutgers. The first OASIS was developed through a Rutgers Center of Excellence award and later received support from Bio-1 Wired, a biosciences workforce development initiative funded through the Department of Labor. It was a “best idea” to adapt the OASIS model for the Camden community and to merge OASIS themes of leadership and professional development and peer mentoring with our grassroots mechanisms—RU FAIR Professorships and mini-grants. Leadership and professional development incorporates the meanings and practices of our original five initiatives—recruitment and retention, communications, networking and liaisons, visibility, and family/work-life balance—yet stands apart as a direction that our ADVANCE work has taken to serve the Rutgers faculty. We are now recruiting for a sixth OASIS cohort in New Brunswick and plan to develop a women’s entrepreneurship program as well.

We have spent considerable time this quarter preparing for the third-year site visit, which takes place on February 3-4, 2011. It may not be our own unique “best idea,” but without a doubt, preparing for a site visit is a “best approach” to surveying progress, assessing impact, and identifying and leveraging support. We have invited more than sixty administrators and faculty to participate in site-visit interviews. Many of our participants will also join us and the site visit team for first-day breakfast and opening remarks. President Richard McCormick, Executive Vice President Philip Furmanski, and Vice President for Research Michael Pazzani will each give a brief presentation that morning, followed by the RU FAIR ADVANCE team’s presentation.

Areas of Difficulty
**Internal Evaluation:** Our internal evaluator, Dr. Mary Gatta, has taken a leave of absence from Rutgers to accept a position as Senior Scholar at Wider Opportunities for Women (WOW) in Washington, D.C. WOW is a national organization that works to build pathways to economic independence for America's families, women, and girls. Further, this organization leads the National Women’s Workforce Network. We appreciate the work Dr. Gatta did as Internal Evaluator since the grant’s inception. We are currently “re-evaluating our evaluation” and are in the process of seeking a new individual to aid us in developing a modified blueprint that incorporates the feedback from the activities and programs we have conducted to date. With input of the formative evaluation received to date, we will conduct a preliminary self-study, outline priorities for the future, and identify a new evaluation expert to work with us in developing appropriate evaluation rubrics and strategies.

**Complexity and paperwork:** In the original proposal and in our subsequent quarterly and annual reporting, we have discussed the historical, geographic, and systemic complexities of Rutgers University. A single university under one president, Rutgers has three distinct campuses—Camden, Newark, and New Brunswick. Rutgers-New Brunswick, which spans two city/townships (New Brunswick and Piscataway), itself derives from five once-separate colleges—Rutgers, Douglass, Cook, Livingston, and University College. Each of these legacy units had its own systems and its own institutional cultures. These systems and cultures are still very much at play, with decentralized structures butting up against a push to streamline and unify. A very constrained economic climate in the State of New Jersey sits on top of this: faculty and staff salaries have been frozen and staff attrition has not been countered with replacement hires. Everyone tries to do more with less. This quarter, new policies for processing professional service agreements have been put into place, while resources for moving the paperwork through the system have decreased. Our ability to process the paperwork to bring in external speakers and professional development experts for mini-grant, RU FAIR Professorship, and OASIS programming is more difficult and time-consuming as a result.
## Appendix A
RU FAIR ADVANCE External Advisory Board – Fall 2010

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Philip Furmanski (Chair)</td>
<td>Executive Vice President of Academic Affairs</td>
<td>Rutgers University</td>
</tr>
<tr>
<td>Dr. Michael Harris</td>
<td>Associate Dean of Engineering for Undergraduate Education</td>
<td>Purdue University</td>
</tr>
<tr>
<td>Dr. Marian Johnson-Thompson</td>
<td>Professor Emerita of Biology and Environmental Sciences</td>
<td>University of D.C.</td>
</tr>
<tr>
<td>Dr. William English Kirwan</td>
<td>Chancellor &amp; CEO</td>
<td>University System of Maryland</td>
</tr>
<tr>
<td>Dr. Shireen Lewis</td>
<td>Executive Director and Founder</td>
<td>EduSeed and Sister Mentors</td>
</tr>
<tr>
<td>Dr. Karen E. Nelson</td>
<td>Director</td>
<td>J. Craig Venter Institute</td>
</tr>
<tr>
<td>Dr. Vita Rabinowitz</td>
<td>Provost and Vice President for Academic Affairs, Co-Director</td>
<td>Hunter College, Gender Equity Project</td>
</tr>
<tr>
<td>Dr. Kerry Ann Rockquemore</td>
<td>Executive Director</td>
<td>National Center for Faculty Development &amp; Diversity</td>
</tr>
<tr>
<td>Dr. Manuela Romero</td>
<td>Assistant Dean for Student Diversity and Academic Services</td>
<td>University of Wisconsin-Madison</td>
</tr>
<tr>
<td>Dr. Sheila Tobias</td>
<td>Author and Science Education Consultant</td>
<td></td>
</tr>
<tr>
<td>Dr. Lilian Wu</td>
<td>Program Executive</td>
<td>University Relations and Innovation, IBM Technology Strategy and Innovation</td>
</tr>
</tbody>
</table>