Quarterly Report June 1, 2010 – August 31, 2010
Rutgers University RU FAIR / NSF ADVANCE
Office for the Promotion of Women in Science, Engineering, and Mathematics
(SciWomen)

Significant Accomplishments
- Launched a new project to create an online interactive informational module for faculty search committees
- Funded ten mini-grant proposals that address key initiatives of the grant, strengthen collaborative networks, serve individual faculty and campus needs, and couple to RU FAIR research goals
- Planned programs for fall 2010 on all three campuses, and readied each for successful roll-out
- Created a new brand-identity—SciWomen: Join in the Discovery—using a collaborative, democratic process that involved University Creative Services
- Engaged the Rutgers Center for Organizational Development and Leadership Executive Director, Dr. Brent Ruben, and Executive Associate Sherrie Trompe, for strategic planning and process implementation for enhanced operations, communications, and administration of the RU FAIR grant and SciWomen office
- Facilitated strategic planning and SWOT analysis for the Rutgers University Department of Chemistry and Chemical Biology (Valentine)
- Authored chapter for inclusion in an edited volume on women in chemistry to be published by the American Chemical Society Press (Arbuckle-Keil and Valentine)
- Contributed several chapters to an edited volume on women’s leadership in higher education as part of a Rutgers Institute for Women’s Leadership collaboration (Bennett, Roos, Valentine, Batmanian, Gatta)
- Developed panel for November 2010 NSF ADVANCE conference (Roos, Valentine, Bedley, Weis)
- Expanded OASIS leadership and co-mentoring program to Rutgers-Camden
- Nominated three faculty for national awards

Noteworthy Indicators for Women’s Enhanced Participation, Leadership, and Visibility at Rutgers University
- New female chair in the Department of Electrical and Computer Engineering, the first woman to serve as chair in the history of the School of Engineering
- Two new female faculty recruited to the Department of Mathematics in New Brunswick, doubling the percentage of women faculty in the department
- RU FAIR Professor Judith Weis selected chair of the Science Advisory Board of the New Jersey Department of Environmental Protection
- Principal Investigators gave invited lectures at national and international conferences

Our Institutional Partners and the Five Initiatives

We have continued our efforts to outreach to the Rutgers community on all three campuses—from faculty to department chairs to deans and executive administrators. At the grassroots level, we have collaborated with faculty and staff in research, event planning, and professional development in advancing the five initiatives of the grant: recruitment and retention, communications, networking and liaisons, visibility, and family/work-life balance. At the administrative level, we have played a key role in highlighting the objectives of the ADVANCE mission and in institutionalizing initiatives and best practices for gender and race equity.
Office of Institutional Diversity and Equity and the President’s Council on Institutional Diversity and Equity (RU InS T R I D E)

RU FAIR PI Joan W. Bennett met with Karen Stubaus, Vice President of Academic Affairs and Director, Office of Institutional Diversity and Equity to lay plans for developing systemic collaborations between the SciWomen office and the Office of Institutional Diversity and Equity (OIDE). In 2008-09, OIDE had taken the lead in developing a print manual on best practices for faculty recruitment and retention (“Increasing Faculty Diversity”). RU FAIR ADVANCE will partner with the President’s Council to bring the manual to the next level.

Director Doreen Valentine met with the co-director of the President’s Council, Board of Governors Zora Neale Hurston Professor of English Cheryl Wall, to discuss several ideas for partnering on the shared goal of increasing racial and gender equity at the level of faculty and university leadership. This meeting launched a new project to create an online interactive informational module for faculty search committees. The online module is an extension of the “Increasing Faculty Diversity” handbook produced by the President’s Council and is intended to be a resource and professional development tool for deans, department chairs, and all faculty who are involved in faculty searches. The development of the module is being carried out with the supplementary financial support and full intellectual backing of the Office of Institutional Diversity and Equity and the Office of the Executive Vice President for Academic Affairs. Eventually, with the support of President Richard McCormick and Executive Vice President Philip Furmanski, the university intends to institute a policy whereby certified completion of the online module is mandatory for active voting members of faculty search committees. This new policy will signal a strong and significant indicator of institutional transformation that helps pave the way for greater diversity in the academic workplace.

A team at RU FAIR (Doreen Valentine, Christina Leshko, and Sara Salahi) is creating the module for roll-out in October 2010. Milestones along with way include presenting a conceptual model of the module at a September 27, 2010 meeting of the President’s Council and to our External Advisory Board, chaired by Executive Vice President, Philip Furmanski, on September 23, 2010; piloting the module at a meeting of our ADVANCE Consortium (our internal advisory board) on October 19, 2010; and launching the module for more widespread review at events on October 28 and October 29, 2010. These launch events are day-long workshops on the theme of “Faculty Recruitment in the 21st Century.” Chancellor Steven Diner and Associate Chancellor and Director of the Dana Library, Mark Winston (both members of our ADVANCE Consortium) are organizing a program on the 28th on the Newark campus that includes the Cornell Interactive Theatre Ensemble, the online module (presented by RU FAIR Director Doreen Valentine) and open discussions on issues of recruitment and retention of a diverse faculty. A similar program, with Cornell and the online module presentation by RU FAIR will take place in New Brunswick on the 29th. Karen Stubaus and the Office of Institutional Diversity and Equity have organized this event. Chancellor Wendell Pritchett and Associate Dean and Director of the Camden Office of Diversity and Equity, Nancy Rosoff, have organized an event for Camden as well, scheduled for October 8th. In short, Rutgers University is kicking off the annual cycle of faculty search and hiring with a concerted effort to provide committees with the tools and resources to implement best practices and equity-driven active recruitment principles.

Institute for Women’s Leadership and Douglass Residential College

The Office for the Promotion of Women in Science, Engineering, and Mathematics is the eighth member of the Institute for Women’s Leadership (IWL) Consortium. SciWomen is also a strong partner to Douglass Residential College, where several initiatives to support undergraduate women in SEM are housed.

On June 21st, the RU FAIR / SciWomen group met with the Interim Dean of Douglass Residential College, Harriet Davidson, Associate Douglass Dean, Barbara Balliet, Douglass Project Director, Regina
Riccioni, Assistant Vice President for Instructional Support and Director of the Science Explorer Program and the Math and Science Learning Center, Kathleen Scott, and others to generate and implement ideas for programming and increasing visibility for women in science. One outcome was a mini-grant supported symposium that brought undergraduate and graduate women together with faculty to discuss research and careers in academia. The Women in Science group, as the Douglass and SciWomen collaboration is now known, will continue meeting each semester. With the arrival of Professor Jacqueline Litt as the new Dean of Douglass Residential College, RU FAIR ADVANCE stands to gain a great deal of expertise and experience. Litt, a sociologist whose work centers on issues of gender, was a principal investigator on the ADVANCE grant at the University of Missouri.

The relationship between RU FAIR ADVANCE /SciWomen and IWL continues to deepen, both administratively and programmatically. PI Joan W. Bennett serves on the search committee to select a new director of the IWL Consortium. This committee has met multiple times since the spring of 2010 and conducted an intensive national search. Further, Bennett met on July 20, 2010 with past IWL director, Mary Hartman, to gain informal input on how Hartman’s long experience in women’s leadership at Rutgers University could inform future plans for institutional transformation. Bennett and co-PI Patricia Roos, as well as SciWomen directors Natalie Batmanian and Doreen Valentine, have been engaged in leadership discussions with IWL. RU FAIR / SciWomen, through its RU FAIR Professorship and the mini-grant sub-award program is sponsoring nine events (workshops, lectures, and symposia) on the Institute for Women’s Leadership fall 2010 programming schedule.

Another significant collaboration with IWL is the book project being led by the founding director and former Dean of Douglass College, Mary Hartman. Hartman’s vision is to bring together women leaders across the University on the theme of women’s leadership in higher education, specifically to address the failure of higher education to take up the charge of educating women leaders and how the signature efforts at Rutgers University, largely through the IWL and its individual units, are an effective intervention in closing the leadership gap. Joan W. Bennett, Patricia Roos, Doreen Valentine, and Natalie Batmanian, and Mary Gatta are among the contributing authors to this edited collection.

**Mini-grants and the Five Initiatives**

RU FAIR ADVANCE received, evaluated, and funded ten new mini-grants this quarter. This funding was the third cycle of mini-grant sub-award activity, and these ten add to thirteen previously funded mini-grants. Each proposal was distributed to the Executive Team in advance of a group meeting on July 27, 2010 to discuss each one’s merits, applicability, challenges, and budget. An evaluation form was developed and disseminated with each proposal, and members of the Executive Team assessed each along eight measures: feasibility, significance, strength and nature of collaborations, demonstration of need, impact, outcomes, budget, and clarity and organization. An overall score was assigned to each proposal by every member of the Executive Team and the tally of these scores provided a semi-quantitative snapshot for deciding whether or not to approve funding. In addition, we determined the extent to which each proposal addressed each of the five initiatives of the grant: recruitment and retention, communications, networking and liaisons, visibility, and family/work-life balance. These relevance scores are presented below in table 1.
Table 1. Mini grants funded in third cycle in relation to subjectively scored relevance-criteria to the five RU FAIR initiatives.

<table>
<thead>
<tr>
<th>Title of Mini-grant</th>
<th>RU FAIR Initiatives</th>
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<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Recruitment &amp; Retention</td>
<td>Communications</td>
<td>Networking and Liaisons</td>
<td>Visibility</td>
<td>Family/Work-life Balance</td>
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<tr>
<td>Douglass Project &amp; Faculty Engagement</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>0</td>
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<tr>
<td>Negotiations Basics &amp; Distinguished Lecture</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Women in Mathematics</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Talking Creativity (Science &amp; Art)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>0</td>
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<tr>
<td>Women of Color Scholars</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>The Garden Project</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Undergrads in the PUI Research Lab</td>
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<td>1</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Diversity Climate</td>
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<td>1</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Faculty Networks on Q&amp;D Committees</td>
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<td>1</td>
<td>3</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Associate Professors</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

Rating Scale: 0 = not relevant; 1 = weakly relevant; 2 = moderately relevant; 3 = highly relevant

**Institutional Research**

**Research Data**

With the submission of the Annual Report for June 1, 2010, the NSF-required indicator data were nearly complete for baseline (2007-08), year 1 (2008-09), and year 2 (2009-10). With this quarterly report, we are replacing table 1 and table 2 for the three reporting years in order to correct a couple of errors that came to light. In particular, we were alerted to an input error in the Human Resources and Institutional Research database that coded a female assistant professor as male in the School of Engineering for two of the three reporting years. We also discovered the inclusion of a professor in the Department of Computer Science whose status was part-time with no other University appointment in two of the three reporting years. Since these tables report only full-time faculty (with single departmental appointments or split-line appointments), we omitted this faculty member in the new tables. We have also refined the organization of our data on University Centers.

In following up on the April 16, 2010 meeting of the *ad hoc* Committee of Stakeholders, we worked jointly with the Office of Institutional Research and Academic Planning (OIRAP) and University Human Resources (UHR) to remedy an issue that had bedeviled our data collection efforts. In calculating some of the NSF Indicator data, we learned that the university had not begun electronic recordkeeping until 1997. While date-of-entry and tenure-date data were recorded, OIRAP lacked data on interim promotion steps for those faculty hired prior to 1997. As a consequence, we were only able to calculate years in rank for those hired since 1997. In searching for a solution, we learned that UHR had such information back to 1976 as part of their payroll data. Co-PI Patricia Roos and the OIRAP staff member working closely with RU FAIR, Minmin Chen, met with UHR personnel and now work in partnership with them to bring the pre-1997 data to OIRAP. This will allow us to redo the NSF Indicator data on years in rank for all faculty. Similarly, we are also working jointly with UHR and OIRAP to add measures of earnings beyond the pay rate variable currently available through OIRAP (e.g., total earnings, including summer salary and
extra pay). Finally, Roos and Chen met with Linda Schulze and her staff in the Office of the Executive Vice President of Academic Affairs to obtain updated, required NSF Indicator data that reside there (data on chairs, graduate directors, special professors, and so forth).

As of September 30, 2010, the number of faculty by gender, rank, and department for year 3 (2010-11) will be available, as will specific data on new hires and new leadership appointments at the University. We expect to report on these data in the December 1st quarterly report.

**Space Allocation Study**

We made some progress on this project, but also confirmed our sense that a space study at Rutgers is an especially challenging task. It is important to note that Rutgers has a unique history: it was a colonial college for men (Rutgers), a land-grant institution (Cook), a women’s college (Douglass), and a progressive education college (Livingston). Further, it is a multi-campus structure consisting of three independent campus locations (Camden, Newark, and New Brunswick). The New Brunswick component of Rutgers is itself comprised of five campuses in two different postal zones—New Brunswick and Piscataway. This hybrid institutional history coupled with the sprawling geography has resulted in a university with numerous departments, centers, institutes, and schools with different organizational and reporting structures. Record-keeping concerning space allocation is highly decentralized and varies from unit to unit. In addition, due to years of fiscal austerity, the staff and administrative personnel who deal with record-keeping have numerous competing responsibilities. There is no single “space czar” at Rutgers University. It is beyond the resources of RU FAIR to take on this role and the accompanying complex challenges, so our goal is to perform strategic sampling of selected units rather than to conduct a comprehensive analysis of every SEM unit at Rutgers.

In order to begin addressing these challenges, we met with Stephen DiPaolo, the University Controller, Michele Conlin, the Assistant Controller in the Division of Grants and Contracts Accounting (DGCA), and Anthony Pochesci, Cost Accounting Manager in DGCA in June 2010. The DGCA office audits space for the purpose of determining facilities and administrative (F&A) cost rates. Their database, which organizes usage by building, department, room type, principal investigator, and occupants, gives the assigned square footage. The data are from 2007 and must be downloaded department by department directly from DGCA. So far, we have obtained and analyzed the data for the Department of Chemistry and Chemical Biology in the School of Arts and Sciences, Rutgers-New Brunswick. Unfortunately, Anthony Pochesci, our liaison on this project, no longer holds his DGCA position, and his successor has not yet been hired. We hope to reinitiate this study as soon as a staff person in DGCA is available to work with us.

Using the Department of Chemistry and Chemical Biology data, we sorted and then filtered out space assigned specifically to administrative and technical staff and to non-tenure-track faculty (lecturers and research professors) in order to map the space allocated to full-time tenure and tenure-track faculty in the Department. Of the 39 faculty reported in the DGCA data in 2007, 9 are women and 30 are men (23.1% female). Women occupied 28.8% of the space (19,593 square feet of a total of 67,994 square feet), more than their representation in the Department. The amount of space, independent of gender, seemed to roughly correspond to the degree of external grant funding and rank.

**Strategic Planning and Evaluation**

The reports developed and submitted by internal evaluator Dr. Mary Gatta (see Annual Report 2010) and external evaluator Dr. Mary McCain (submitted with this quarterly report) informed our approach to strategic planning, process and program evaluation, best practices development, and systems administration as we prepared to enter Year Three of the ADVANCE grant. We held an Executive Team retreat on July 15, 2010 to discuss process evaluation—how to
specifically relate goals to outcomes and impacts. Mary Gatta led this discussion to try to define and map the questions, purpose, and anticipated impact of each research project in which our group is engaged or supports through mini-grant or RU FAIR Professorship funds. For each project—institutional research on NSF-required indicators, department chair interviews, faculty workload study, salary equity studies, and so on—we identified the central research questions, the key personnel, the institutional partners, the implementation strategy, the data resources, the grant initiatives, the timeline, the outcome, and the deliverable. Some of our projects easily plugged into a clear matrix from concept to impact (online interactive module for faculty search committees); others remained more elusive indicators of institutional transformation (the RU FAIR Professorship program in general). One mechanism to tease apart the significance of the RU FAIR ADVANCE Professorship program, in particular, and women’s leadership at Rutgers, in general, is the Agents of Change project. Beyond her role as internal evaluator, Gatta is the principal investigator for this IRB-approved research project that investigates the experiences of administrators, distinguished faculty, opinion leaders, and key staff in achieving goals related to women’s leadership participation at Rutgers. Three interviews have been carried out to date and Gatta plans ten more during the fall 2010 semester.

During this quarter, we also initiated a facilitated process of strategic development and evaluation with the expertise and support of the Rutgers Center for Organizational Leadership and Development (ODL), headed by Executive Director and Professor II (Distinguished) of Communications, Brent Ruben. Ruben facilitated two strategic retreats with the RU FAIR / SciWomen personnel—Bennett, Roos, Buettner, Valentine, Batemanian, Leshko, Bedley, Merdjanoff, and Murray. Our goals for the retreats were to develop and articulate our vision, strategic goals, and institutional identity; enhance internal processes and communications; and plan for milestones like the External Advisory Board meeting and the third-year NSF site visit. We have already implemented many of Ruben’s recommended best practices and are making significant strides in planning for the third year milestones.

In addition to the work targeted at our summer strategic retreats, we tackled head-on some of the weaknesses raised by the reports. In particular, we strengthened the partnership with the President’s Council (see above); invited external evaluator Mary McCain to our September 23, 2010 External Advisory Board meeting and arranged for her to interview five key administrators and opinion leaders on campus; hired more student and staff support and increased our diversity in doing so; and set a date for the Women of Color Scholars Symposium and helped recruit prominent experts for a panel at the event. Comprehensive process evaluation that clearly defines, measure, and connects questions to impacts and interventions to outcomes remains somewhat elusive, but our group continues to address this at every opportunity.

**Best Ideas Yet**

Economy of scale is a wonderfully efficient and nimble approach to creating momentum, building on successes, and expanding impacts. We are constantly looking for how one intervention can have multiple or rippling effects; how a particular project can at once serve research, outreach, and institutional transformation goals; how a pilot effort can be duplicated, and yet customized, for implementation on three distinct campuses; and how streamlined processes can serve both our internal group and our constituents. We are busy creating templates for mini-grant submissions, mechanisms for enhancing faculty’s participation in our programs, processes for evaluating every one of our activities, methods for data analysis, systems for internal and external communications, and models for institutional transformation. We are also ramping up our visibility as an ADVANCE institution through local, regional, and national engagements. Georgia Arbuckle-Keil (Camden RU FAIR Professor) and Doreen Valentine
Director of RU FAIR) co-authored a book chapter for a volume on women in chemistry to be published by the American Chemical Society Press, and Arbuckle-Keil presented on RU FAIR ADVANCE at several conferences, including one in Washington, D.C. this past summer. Judith Weis (Newark RU FAIR Professor) participated in the planning committee for the upcoming November 2010 NSF ADVANCE conference. Several RU FAIR personnel will attend this meeting and present on RU FAIR research activities and programs. PI Bennett met with Jackie Willis, Director of PRISM (Practical Resources in Science and Mathematics) and Lynn Schneemeyer (former RU FAIR Co-PI), Associate Dean for Academic Affairs at Montclair State University, to discuss ways of increasing the regional profile of SEM women in New Jersey. Bennett also met with Daniel Shain, Associate Professor of Biology, and Charlene Sayers, Assistant Instructor of Biology, Rutgers-Camden, to discuss the status and challenges of part-time, adjunct and non-tenure-track SEM faculty. A large pool of highly skilled and educated SEM women is currently found in such positions and finding ways to promote their careers will enhance institutional transformation.

Areas of Difficulty

Rutgers University is a unified institutional academic system comprised of historically separate entities. This impacts RU FAIR in several ways: data collection on NSF-required indicators requires multiple approaches and parallel excavations of disparate systems; implementation of projects requires strategic partnering across distinct silos; institutional transformation must happen independently and yet simultaneously on campuses with their own unique legacies, traditions, and challenges; and our office must contend with redundant systems for business operations and implementations.

As we deepen our understanding and compliance with Rutgers grants accounting and human resources systems, we have encountered several policies that are not exactly aligned with NSF guidelines and the parameters of the RU FAIR ADVANCE grant. In particular, we are committed to maintaining the confidential relationship of our life-cycle grant recipients to our office and have encountered some resistance to that promised anonymity from within the network of departmental business specialists. We are fortunate to have the Office of the Executive Vice President of Academic Affairs as an ardent supporter of our office and the ADVANCE grant.

Mastering the business operations related to grants accounting and human resources will be facilitated once we have a full-time staff member in the position of accounting assistant for our SciWomen office and the RU FAIR ADVANCE grant. Director Natalie Batmanian and PI Joan W. Bennett have been working closely with University Human Resources, Department of Grants and Contracts Accounting (DGCA), and the Vice President of Finance and Budgeting to create a job description for a position that would fulfill the needs of RU FAIR Project and the SciWomen Office. We expect to have this person on staff shortly.

Change in Personnel

Camden: Daitza Frydel worked part-time with RU FAIR Professor of Chemistry Georgia Arbuckle-Keil to plan the fall OASIS Leadership series for Camden faculty. Frydel was paid this quarter on the RU FAIR grant through the sub-award to Arbuckle-Keil from June 1 – August 16, 2010. Jinnie Towey is a part-time assistant for Dr. Arbuckle-Keil and since Frydel’s departure, she has taken over programmatic support for RU FAIR in Camden. She is supported by RU FAIR funds to Arbuckle-Keil.

Newark: Cherise Paramore, an undergraduate student majoring in Information Technology, worked part-time on a project to enhance SEM women faculty’s professional websites. She is paid on the RU FAIR grant through the sub-award to RU FAIR Professors Judith Weis and Maggie Shiffrar. Jaime Perry, a
graduate student in the Rutgers School of Business, New Brunswick and Newark, was paid part-time by a mini-grant sub-award to Professors Nancy DiTomaso and Laurie Rudman. Perry is working on an annotated bibliography of the social science research on gender and race issues in the professional workforce, such as unconscious bias and evaluation of competence and merit.

New Brunswick: Lauren Miller, an undergraduate student in sociology, worked part-time on the MyStories project. She interviewed 22 women faculty at Rutgers, and transcribed them as well. Eleven new MyStories have now been uploaded to the website. Jackie Piccolo, an undergraduate communications major from Syracuse University, worked with us this summer on the SciWomen Science and Health Fair and on general public relations and communications activities. Both Miller and Piccolo were supported out of SciWomen funds. Sara Salahi, graduate student in Mechanical and Aerospace Engineering, joined as a part-time assistant in the SciWomen office. Her work focuses on the online interactive module for faculty search committees. Sara Ghorbani, graduate student in Industrial and Systems Engineering, worked part-time on analysis and graphical visualization of NSF-required indicator data. Guarav Kharkwal, a graduate student, was paid part-time to support a faculty member who received a life-cycle sub-award. Hongmei Zhang, a laboratory assistant, was paid part-time to support a faculty member who received a life-cycle sub-award. Part-time business manager and office assistant, Ludvinia Samson, resigned on June 25, 2010 due to a family relocation. We expect to hire a full-time accountant / business specialist by October 2010. All other personnel associated with the grant in the Annual Report of June 1, 2010 have continued as such this quarter.