Response to NSF’s 3rd Year Site Visit Report
Social Science Studies Report
August 30, 2013

The Social Science Studies (SSS) team would like to thank the NSF site visit team for their visit, feedback, and the opportunity to respond. Below we insert excerpts of the report in italics to contextualize our responses.

The TAMU ADVANCE research and implementation branches must keep both gender and the overarching theoretical foundation of their original proposal, the Psychologically Healthy Workplace, at the center of every activity and study. There are no adequate reasons to remove the focus on gender in any ADVANCE-funded activity or to remove the influence of the theoretical foundation upon which the TAMU grant was awarded.

We want to reaffirm that all of our studies include gender as a focal interest. We are committed to focusing on and contributing to the research literature on women’s experiences in STEM and want to reassure the NSF site visit team that gender is central to all of the social science studies we are conducting. We elaborate on the role of gender in each study below in the order that they were described in the NSF site visit report.

The social science study’s data sets should be made fully available to the internal evaluators so that they can begin tracking progress toward the mid-term outcome/impact metrics identified in the TAMU ADVANCE logic model.

We want to emphasize our good working relationship with the Evaluation Team. We have no problem sharing data with the Evaluation Team. For example, the 2013 Faculty Climate data file and a codebook for the data file that was created by the SSS Team have been shared with the Evaluation Team. Any data that has evaluative value will be used by the Evaluation Team in its efforts to document the efficacy of the interventions.

Study 1: STEM women faculty experiences of student/staff-initiated incivility

Related activities: FASIT Teams and Student Diversity Training

The 2012/2013 Faculty Campus Climate Survey was conducted as planned; however, the gender-bias workshops designed for students and staff were significantly altered and also delayed, making the 2012/2013 Faculty Campus Climate Survey ineffective as a tool for collecting post intervention data.

Although the goal of shortening the [2013] survey instrument is laudable, the site visit team is troubled by the removal of questions concerning sexual harassment and the exclusion of questions on
threats/hostility/micro aggressions. Although these constructs were not found at significant levels in the previous administrations of the in the Faculty Campus Climate Survey, they seem critical to the project’s theoretical framework of the project, the Psychologically Healthy Workplace (PHW), and should be retained for theoretical reasons.

Response: We agree that the 2013 faculty climate survey cannot be used as a tool for post-staff/student intervention data. However, we can compare faculty reports of student and staff incivility in 2013 to reports in the 2009 climate data, and intend to gather similar data in the planned 2015 climate survey. In the meantime, we will conduct various comparisons based on the focal variables of interest including sex, STEM status, ethnicity, etc. and examine the influence of these reports on various self-reported psychological well-being outcomes using the 2013 data. The results of these analyses will reveal the extent to which staff and student interactions, as elements of academic climate, play a role in STEM women’s everyday experiences and ultimately promotion and retention outcomes.

We were very careful to retain critical psychological constructs in the 2013 survey. We believe that there is a delicate balance between survey length (and survey fatigue)—which can affect participation—and survey replication over several administrations. We worked to maintain this balance and to ensure that all of the PHW categories that were previously represented (e.g., employee health; work-life balance; workplace recognition) were still included, albeit sometimes with shorter metrics. Statistical techniques can be used to test the equivalence of the 2009 scales with the 2013 scales.

The following measures were included/retained in the 2013 climate survey to assess interpersonal mistreatment (note that these items overlap substantially with items that assess microaggressions and subtle hostile behavior in the literature):

- 4-item sexual harassment measure
- 5-item racial harassment measure
- 24 items measuring experiences of incivility/ostracism initiated by 3 different groups (faculty, staff, and students); with 4 follow-up questions about each group

With regard to the PHW constructs, we included/retained the following measures. Note that each component of PHW is assessed by at least one measure.

- 12-item measure of faculty-specific job satisfaction
- 8-item measure of feeling valued
- 3-item measure of general job satisfaction
- 3-item measure of turnover intentions from TAMU
- 3-item measure of turnover intentions from academia
- 2 items about productivity
Based on the site visit team’s recommendations, we intend to more fully assess experiences of subtle mistreatment in the 2015 climate survey. We will also examine intersectionality (combinations of various demographics like sex and race; sex and age; sex and sexual identity) and vicarious mistreatment.

Study 2: Implicit bias in course evaluations

Related activity: Student Diversity

As described in the original proposal, the second planned study “will consist of a qualitative content analysis of undergraduate students’ open-ended comments on all possible STEM women faculty’s teaching evaluations before and after material on gender bias is incorporated into student orientation activities... for negative and positive themes and explicitly inappropriate statements....” The proposal also described the intention to “link the frequency of students’ positive and negative comments to women faculty’s well-being assessed via climate surveys.” A subset of male STEM faculty evaluations would also be assessed for comparison. This study has suffered the same delays as those described above due to the postponement of the student gender-bias training sessions; however, data are continually being collected and analyzed. Comparisons of student evaluations of male and female faculty members have been made but no differences have been found thus far. The research team has since forgone an early attempt to do a manual content analysis and switched to a text analysis program, Linguistic Inquiry and Word Count (LIWC.) The TAMU ADVANCE Research Team is in the preliminary stages of utilizing this software. The site visit team echoes its previously mentioned concern that changes to the proposed gender-bias training have led to manipulations that are too diluted to initiate change in attitudes or behavior. The site visit team also hopes that the LIWC software proves more sensitive to possible differences in student evaluations based on the sex of the faculty member and is able to evaluate difference along constructs that are relevant to the PHW and implicit bias. It is important that the research team does not lose sight of the overarching theoretical foundations of the TAMU ADVANCE institutional transformation project.
**Response:** Although our preliminary analyses did not reveal main effect differences for sex in qualitative comments provided by students on course evaluations, we have not abandoned making such comparisons. On the one hand, a lack of differences is a meaningful finding in and of itself. On the other hand, we had limited power to detect differences ($n = 15$ women faculty), so we feel further analyses are warranted. Utilizing the LIWC software offers an additional means to code these data and may identify sex differences in a way that more subjective content coding could not. It may be that differences are so subtle that they can only be detected by such software. We are optimistic that this method will reveal differences, if they are indeed there. We also plan to examine numerous moderators (e.g., STEM status, class level of the student) using the LIWC software. We hypothesize that women in STEM receive more negative comments than nonSTEM women and we expect that this is especially likely in classes that are taken predominantly by first-year students. If we find significant moderation by class level (first year vs. upperclass), it will shed a completely different light on the lack of differences initially found.

Although we are not able to track which students viewed the student diversity skits and videos, we know that the skits and video were disseminated in the summer of 2013 and that the majority of the students who observed them were freshman. We could contrast comments to faculty teaching freshman courses in the spring of 2013 to comments directed to faculty teaching the same courses in the fall of 2013. This would provide some evidence of the efficacy of the student activity. This information, combined with a recent 6-item survey launched by the evaluation team and planned for repeated administration next year (asking about uncivil behavior from students), can be used to evaluate the efficacy of the student diversity activity.

In addition, we have included some questions on the 2013 climate survey about the extent to which faculty read comments on course evaluations, ruminate about those comments, and react to them. We will examine the extent to which there are sex differences on these items and their associations with various PHW outcomes (e.g., job satisfaction, psychological well-being).

**Study 3: Meta-analysis of sex differences in course evaluations**

**Related activity:** Student Diversity Training

*The third study outlined by TAMU ADVANCE proposed to compare the “well-being, self-efficacy, indicators of success as coded from participants’ CVs (e.g., publications), social networks on campus (i.e., number of collaborators and informal relationships with faculty), and multiple mentoring criteria…” of all newly hired STEM faculty members who would be randomly assigned to either the existing mentoring program run by the Dean of Faculties or to the TAMU ADVANCE Success Circles. This experiment was deemed infeasible for two primary reasons. The first reason was the near freeze on hiring and the second was the organic change experienced in the Success Circles program. As described in more detail elsewhere in this report, the self-directed actions of the Success Circle participants have reduced the scope of the program. To serve as a replacement study, the TAMU ADVANCE Social Science Team has chosen to conduct a meta-analysis of gender differences in student course evaluations studies while looking at moderators not previously explored (e.g., STEM discipline, sex of student.) While this study*
sounds fascinating and potentially important, it is unclear to the site visit team how this study fits into the paradigm of the ADVANCE TAMU proposal (e.g., PHW, implicit bias.) It is also unclear why a more similar study to compare mentoring programs was not initiated.

**Response:** It would have also been our preference to pursue a study on mentoring and a number of alternative studies were explored including a study of the ADVANCE Scholars who are engaged in a mentoring program. However, multiple mentoring programs would be necessary in order to conduct a study comparing mentoring programs.

Teaching is arguably a practice in which there is always room to improve and course evaluations provide faculty with specific feedback about what they can do differently. To the extent that students provide constructive criticism, course evaluation comments are useful and potentially helpful. However, to the extent to which they are biased and irrelevant, they can be harmful to a faculty member’s self-esteem, self-efficacy, and career. Course evaluations are the primary metric used in academia to evaluate teaching. They are regularly requested as a part of job application materials (e.g., “evidence of effective teaching”) and frequently required as a part of tenure and promotion materials.

A meta-analysis of sex differences in course evaluations synthesizes the numerous studies that make this comparison allowing for a more accurate estimate of the difference. Meta-analysis reveals a number of study design limitations and confounds that have been previously overlooked and allows for statistical corrections of some of these limitations. Meta-analysis also allows for an examination of important moderators like discipline (i.e., STEM status), rank, and sex of the student that complicate relationships in single studies and cannot be teased apart in single studies (e.g., too small of a sample of female physics students taking classes from female physics faculty in one study, but sufficient sample across many studies). This investigation is guided by theory on sex roles, implicit bias, and social roles. For example, the deviation from traditional gender roles is one possible explanation for why STEM women faculty would receive lower ratings than STEM men faculty. We believe this study makes an important contribution to the literature on women in STEM. Practically, these results could be used to inform search as well as tenure and promotion committees about differences in expectations for student evaluations for men and women faculty in STEM.

**Study 4: Qualitative Study of STEM women in leadership roles**

**Related activity:** Administrative Fellows

*The fourth study described in the initial proposal involved a string of case studies of women who participated in the Administrative Fellows Program. Each Fellow would be interviewed before, during, and after participating in the program. The interview protocol was to include “expectations of what the assignment will be like, how their lives (work and home) will change, and their beliefs about administration” before their assignment and “positive and negative aspects associated with participating in the program, the skills and abilities they developed during the process, how participation affected their well-being, and ways the program could be improved” during and after their participation. Interviewees would also be asked in the final interview to reflect on their pre-participation views. The stated goal of this investigation was to “examine the degree to which participants experienced an*
increase in self-efficacy for leadership roles, felt empowered, felt they grew professionally, felt included in university decision-making, and experienced higher levels of wellbeing rewards as a result of participating in the program.” The research team also planned to interview the administrative host or an administrative colleague to see if their views of women in administration had changed. To date, the research team has conducted interviews on participants and administrative hosts/colleagues for two, yearlong rounds of the Administrative Fellows Program. The process of data collection seems to be progressing well with few hitches in execution. Plans have been made to extend the data collection for an additional year follow-up for participants such that each Fellow will be interviewed a fourth time.

**Response:** We have also been pleased with the progression of this study. We have collected large amounts of data on these women’s experiences in administration and plan to begin data analysis in the next few months. Analyses will reveal trends with regards to psychological constructs of interest including stretch assignments, self-efficacy, work-family conflict, and implicit bias. It is anticipated that the results of these analyses will provide new insights on the benefits and challenges associated with leadership and administrative assignments to STEM women faculty careers. These data will also be used by the Evaluation Team to examine the efficacy of this intervention.

**Study 5: Reducing Implicit Bias in Search Training Committees**

**Related activity:** STRIDE Training

The fifth study proposed by the TAMU ADVANCE team would ask university administrators to complete hypothetical job offers (e.g., salary, lab space, start up funds, teaching load) to job candidates who varied by sex, race, and parental status. The administrators would be asked to complete these offers before completing STRIDE-like implicit bias training, immediately after receiving training, and one month after training. Little progress has been made on this research study in part because the STRIDE training of administrators and hiring/tenure/promotion committee members has not progressed significantly. The TAMU ADVANCE Social Science Research team has abandoned the plan to ask administrators to complete three fictitious job offers and is currently seeking a way to assess the efficacy of the proposed training. Since the training has gained little traction, the research team has the time needed to put a research plan into place. The site visit team is resolute in its contention that the Social Science Team should find a way to assess the efficacy of implicit bias training for administrators and decision-making committee members.

**Response:** We have prepared three surveys to be administered to the participants of the STRIDE training: a pretest to be administered before the training, a post-test to be administered immediately after the training, and a post-post test to be administered six months after the training. The surveys include a number of individual difference psychological constructs that we hypothesize will interact with the training such that the training is more effective for some people than others. In the training literature this is described as an attribute treatment interaction. The variables we plan to test include social dominance orientation, ambivalent sexism, modern sexism, professional beliefs about diversity, beliefs about women in science, structural inequalities, and implicit person theory. These surveys and the study protocol are currently under review at the Institutional Review Board in anticipation of STRIDE
training launching in the coming weeks. If the training is successful, we expect to see improvements in attitudes, increases in knowledge about implicit bias, increases in good recruiting and selection practices, and decreases in poor recruiting and selection practices. We also intend to examine characteristics of the people who are invited to campus for interviews, but given the small number of people invited to campus (usually 3 per search) as well as the fact that the training is launching during on-going searches, it might be difficult this year to see differences across searches based on the number of search committee members who were trained in the STRIDE program. Finally, data from this study will also be used by the Evaluation Team to examine the efficacy of the STRIDE program.

In addition, we included 9 items in the 2013 climate survey about search committee behavior in one’s department.

**Study 6: Future Women Faculty**

**Related activity:** Roadmap Workshops

The sixth and final study proposed by the TAMU ADVANCE Social Science Team was intended to measure the effects of negotiation training on the final job offer letters given to workshop participants as compared to matched control groups consisting of other potential female and male STEM faculty members who did not participate in the workshop. The Roadmaps workshop was to target future women faculty members by looking at late-stage graduate students and post-docs. Job-offer letters would be compared on the basis of salary, lab space, start-up funds, teaching load and other relevant variables. Two rounds of workshops have been conducted, and data collection is progressing well. Data is being collected before participation, immediately after the completion of the workshop, and one year after the workshop, and an additional round of collection is also scheduled for two years past the workshop. The scope of the workshop has been expanded to include early career faculty. This change in scope of the workshop cannot be reconciled with the intention of the original study; it is too late for the job offers made to current faculty members to be influenced by negotiation training. As such, the stated goals of the workshop have been changed to “support departments in recruitment of early career academics and provide professional development training, mentoring, and networking opportunities.” The TAMU ADVANCE Social Science Research Team has also noted a failure to obtain the matched sample of potential STEM female faculty members, but the team has have devised a new strategy for obtaining this control group. The site visit team is firm in its support of the TAMU ADVANCE Social Science Research Team’s efforts to obtain the desired control group. This is an essential component of the study. It is also important to the site visit team that data be collected from enough postdocs and late-stage graduate students that the original study can be carried out as planned.

**Response:** The team is currently discussing, and will soon be implementing, a strategy to gain a comparison group and feels hopeful that our new strategy will be successful. Our plan is to contact dissertation advisors of workshop participants and request that they provide names of a few students matched on the characteristics of the participants. We will then contact those individuals and invite them to participate in the survey. We also plan to identify colleagues at participants’ current institution who can serve as a matched comparison and ask them to participate. To the extent possible, we plan to
collect CVs of all of the possible matched comparisons to code for research productivity and other relevant variables whether or not they complete the online survey.

### Dissemination

As we complete our studies, we will write up our results and submit them for presentation at professional conferences and for publication consideration in peer-reviewed journals. When appropriate, we will also share our findings with ADVANCE leadership and university administrators. In addition, our papers and posters are posted on TAMU’s ADVANCE website.

In the past three years, we have been invited to speak on a number of occasions about our work with ADVANCE. Here is a list of those presentations.


2. Payne, S. C. (2012, September). *Social science studies as a part of TAMU ADVANCE-IT.* Invited talk to the first year cohort of graduate students, Department of Psychology, Texas A&M University, College Station, TX.


Please note that the Society for Industrial and Organizational Psychology (SIOP) and the Academy of Management (AoM) are international societies that just by coincidence hosted conferences in 2012 (AoM, San Antonio) and 2013 (SIOP, Houston) in the state of Texas. In 2013, Academy of Management was held in Orlando; the 2014 meeting is set for Philadelphia. The 2014 meeting for SIOP is planned for Honolulu, with 2015 planned for Philadelphia. The SSS Team is currently preparing submissions for SIOP 2014.

Regarding dissemination on campus and within our local community, members of the SSS team presented three mini-studies to the ADVANCE Planning Committee in the Fall of 2012. Two of these were based on 2009 climate data and were subsequently presented at the annual SIOP conference.
Additionally, the SSS Team leader/co-PI attends the ADVANCE Planning Meeting every two weeks where she advises ADVANCE Leadership of interesting findings and other developments in our research and the Director of the ADVANCE Center has been attending biweekly SSS Team meetings for the past four months.

In response to encouragement we received from the NSF Site Visit team, we have reached out and connected with a number of ADVANCE researchers this summer.

- We met with colleagues from the University of Houston and Rice University in May of 2013 to discuss lessons learned about ADVANCE proposals, activities, and social science.
- Mikki Hebl from Rice University visited in May of 2013 and presented some of her research on “Subtle but Serious Discrimination.”
- We are organizing a symposium at the 2014 annual Society for Industrial/Organizational Psychology (SIOP) conference on Women in STEM research funded by ADVANCE. Audrey Jaegar from North Carolina State University, Christine Shea from the University of New Hampshire, and Jessica Lavariega Monforti and Margaret Graham from the University of Texas – Pan American have agreed to participate.
- We are organizing a round table at the 2014 SIOP conference on Contributions of Industrial/Organizational Psychology to the STEM pipeline. Mikki Hebl has agreed to participate.

Contributions beyond the Six Studies

Given our expertise in survey item writing, social science theory, and evaluation, we have been asked to participate and contribute to a wide variety of activities over the course of the past 3 years.

- **Analyses of the 2009 climate survey data.** In order to determine which items should be retained in the 2013 climate survey, we conducted a number of mini studies using the 2009 climate data. Based on these studies, we slightly revised the measure of diversity climate, retained perceived organizational support, and revised how college and department information was solicited in the survey to maximize our ability to match survey data aggregated to the department level to Dean of Faculties records. The following papers are based on the 2009 climate survey data and were presented at the 28th annual conference of the Society for Industrial and Organizational Psychology, Houston, TX.


• In addition, these papers were also based on the 2009 climate data and helped to inform the 2013 survey.


• **Need for Childcare Survey.** At the request of Dean Bermudez from the College of Liberal Arts, we led the construction, programming, and administration of a brief survey of all staff and faculty at the university on the need for more university-affiliated childcare in the fall of 2012. We analyzed the data and generated a full report as well as individual college-level reports summarizing the results of the survey for each dean. For example, 256 faculty members indicated they have a child/children in childcare or at home and would consider utilizing a university–affiliated center. Data on children’s ages were also gathered indicating that 112 of those children could not be cared for at the current university-affiliated center which does not provide for children under 12 months of age. These data facilitated further discussions among the Dean’s Council about the need to respond to the disparity between the need conveyed in the survey and the number and ages of children provided for by the one university-affiliated childcare center.

• **Faculty–to-Staff Incivility Survey.** In order to obtain staff buy-in on the Staff Diversity activity, data on the extent to which staff perceive that faculty mistreat them were collected in February of 2012. We designed a survey of STEM staff, obtained IRB approval, administered the survey, and analyzed the data. A copy of this survey was included in our 1st annual report (Appendix C). The results of this survey informed the facilitators of the activity about the extent to which faculty-to-staff incivility is perceived to be a problem which was incorporated into workshop materials.

• **Women’s Faculty Network (WFN) Mentoring Evaluation Study.** In response to a request by the WFN to determine if the WFN’s mentoring program is effective, we took the lead on conducting
this study. We developed parallel mentor and mentee surveys, obtained IRB approval, and administered surveys to all of the participants of the mentoring program in May of 2012. Data for 18 pairs of mentors and mentees was summarized in a report dated June 29, 2012 that was given to the Dean of Faculties and WFN. All of the mentees were women. Both mentors and mentees have favorable perceptions of the mentorships as indicated by a variety of psychological constructs including relationship quality, perceived mentoring program effectiveness, and relationship learning. Both mentors and mentees reported positive career-related outcomes (e.g., high levels of job satisfaction and performance and low levels of turnover intentions).

- **Diversity Survey Menu.** Two of our team members gave two invited talks to the Vice President and Associate Provost for Diversity’s Diversity Operations Committee on the measurement and evaluation of diversity climate. Given the charge from this office that all units on campus regularly conduct diversity surveys, our team volunteered to lead the development of a Diversity Survey Menu to facilitate science-based surveys that would permit some comparisons across university units. The Diversity Survey Menu provides guidance on measures to include in diversity surveys. Measures were drawn from the literature and revised as needed to fit different subpopulations (faculty, staff, students), organized into four major areas: demographics, diversity climate, mistreatment (e.g., ostracism, incivility, harassment/mistreatment based on group membership), and outcomes (e.g., job or school satisfaction, turnover intentions). This menu is available to anyone via the ADVANCE website and the Vice President and Associate Provost for Diversity’s website and was included in our Year 1 Interim Report 3 (Appendix F).

- **Dual-Career Needs Assessment.** In order to generate a proposal for supplemental NSF funds to address dual-career issues, we assisted with a very brief dual-career needs assessment. We provided input on the questions asked and prepared a full report summarizing the results, contrasting STEM women faculty from other respondents. Seventy-one unique couples were identified as including a tenured or tenure-track STEM woman faculty member. Overall, the results for these respondents were not dramatically different from the other respondents. For example, both groups reported similar dual-career-related challenges and sacrifices. The results of this survey informed ADVANCE about the extent to which commuting from Austin and Houston is an issue for dual-career couples and other challenges that they face (e.g., securing jobs for partners).

- **Study of Employee Discretion.** Many faculty members have discretion over when, where, and how they conduct their work, particularly their research. In order to determine the relative importance of various aspects of employee discretion (when, where, and how) on faculty members’ psychological well-being, a handful of employee discretion items were embedded in the 2013 climate survey. This study fulfilled a dissertation requirement for one of our research assistants, which she will be defending on August 30, 2013. She has been invited to submit her findings to be presented as a part of a symposium at the 2014 annual Society for Industrial and
Organization Psychology conference. She also plans to submit some of her findings to the Work and Family Researchers Network conference in June 2014.
Response to NSF’s 3rd Year Site Visit Report

On April 25-26, 2013, the National Science Foundation visited Texas A&M University ADVANCE Center to evaluate the progress of the program at the mid-way point. The ensuing report (dated June 28, 2013) requested a response to 3 key questions specifically related to our activities:

1. How will TAMU ADVANCE engage students in more than “Call the Professor Doctor” training for the Student Diversity Training activity?
2. How will TAMU ADVANCE change the call and review process for Departmental Mini-grants to ensure that the awards directly impact department-specific climate challenges and/or deploy truly innovative strategies?
3. How will TAMU ADVANCE integrate direct and clear implicit bias training into the workshops for the LEAD Program?

*Per the NSF Program Officer’s instructions, we are responding only to these three items and not the entirety of the report.*

Student Diversity Training

TAMU ADVANCE plans to engage students in more than “Call the Professor Doctor” training for the Student Diversity Training by:

1. developing and delivering a more formal implicit bias presentation for the Fish Camp Counselor Training (400+ student leaders) where the skit competition is announced;
2. expanding the content of the Fish Camp skits and remaking the New Student Orientation (NSO) video to address issues such as faculty credentials, email etiquette, and other dimensions of identity in addition to gender (e.g. race);
3. incorporating faculty input into future Fish Camp skits and the NSO video by conducting a very brief online survey to identify what student behaviors present the greatest obstacles to faculty success and the frequency with which disrespectful comments toward faculty are experienced or observed;
4. incorporating the Aggie values of Excellence and Leadership into the Fish Camp Skits and NSO video as they relate to diversity (The 6 Core Values of Texas A&M are Excellence, Integrity, Leadership, Loyalty, Respect and Selfless Service. By tying our message to multiple Core Values, our efforts will be more aligned with what students believe it means to be an Aggie.)
5. asking the Fish Camp Director to sit on the committee for this activity as well as to
nominate one or two co-directors to sit on the committee so as to ensure continuity in
liaising with ADVANCE as Fish Camp Leadership changes;

6. working with Fish Camp leadership to conduct focus groups with the counselors to
further understand how our messages are being received among these student leaders;

7. working with associate deans who present the NSO video to standardize the
presentation and further encourage dialogue with students about content; and

8. encouraging faculty through newsletters or other communications to enhance the
message delivered at Fish Camp and NSO and foster respectful behavior (e.g. make clear
how they wish to be addressed, addressing email etiquette etc.).

**Departmental Mini-grants**

TAMU ADVANCE aims to change the call and review process for Departmental Mini-grants in
the following ways:

1. The ADVANCE Center will hold a workshop for those considering submitting a proposal
prior to the next Request for Proposals. (We will also include committee members so as
to further educate this group of faculty.) This will allow us to disseminate the literature
on climate and gender, share strategies to address climate at the unit level, and provide
guidance on what type of initiatives we are looking to fund.

2. We will refine the Request for Proposals to indicate that preference will be given to
proposals that:
   a. demonstrate broad departmental participation as evidenced by the targeting of
      a large fraction of department faculty and specifically address issues of
department climate; and
   b. derive from the department’s climate assessment that is tied to the University
      Diversity Plan (UDP).

3. In order to encourage greater impact, funds will be distributed amongst fewer awardees
to support larger-scale endeavors and encourage a more competitive process. Further,
the program will be renamed so as not to reflect “small-scale” or “mini” (e.g. ADVANCE
Departmental Awards).

4. The Dean of Faculties Office and the Office of the Vice President and Associate Provost
for Diversity will partner with ADVANCE to co-sponsor innovative proposals that
demonstrate a partnership between STEM and non-STEM departments.

5. The committee will provide feedback to departments that receive awards based on the
department’s mid-term and annual reports to create a stronger feedback loop.
LEAD Program

TAMU ADVANCE will integrate direct and clear implicit bias training into the workshops for the LEAD Program as follows:

1. Agendas for the LEAD Workshops will be similar to the draft agenda below for Improving Faculty Recognition (tentatively slated for academic year 2013-14). Implicit bias content will be woven into each workshop as appropriate for the topic. For example, in a workshop about Faculty Retention, focused time would be spent on how implicit bias impacts the retention of women and minorities.

2. The content of the workshop sessions will utilize presentations, facilitated discussions, case studies, and small group activities to surface issues related to implicit bias.

3. Support materials related to implicit bias will be provided to workshop participants. One example of support materials is the document, *Key Research Findings*, which includes summaries of key research studies related to implicit bias.

4. The department heads who are selected to plan each workshop will participate in implicit bias training through the ADVANCE Center in order to:
   a. impact academic leaders on a deeper level vis-à-vis implicit bias; and
   b. ensure their planning efforts are aligned with the goals of the LEAD Workshops.

### Draft Agenda – Improving Faculty Recognition

| Introduction | Scope of issue  
|              | Differential impact on women in STEM |
| TAMU Data    | What do awards look like at TAMU?  
|              | What do awards look like in professional societies?  
|              | Existing policies and practices |
| Case Study   | What would you do?  
|              | Small Group Discussion & Report Back |
| Challenges & Strategies | What are the challenges you face and strategies you currently employ for faculty recognition?  
|              | Small Group Discussion and Report Back |
| Best Practices | Best Practices for Faculty Recognition  
|              | *Impact of Implicit Bias on Faculty Awards*  
|              | Facilitated Discussion  
|              | STRIDE Content |
| ADVANCE      | Awards Brochure  
|              | Workshop Evaluation (including the extent to which participants plan to use the information they learn) |
Evaluation Team Response

to NSF Third-Year Site Visit Report

REVISED
June 1, 2014

On September 30, 2013 the TAMU Evaluation Team responded to the NSF 3rd Year Site Visit Team feedback. On January 21, 2014, we received a request for more information from the Program Officer as follows:

The revision of the evaluation report is a little harder. While it covers all the bases, it has no mention of your theoretical/conceptual framework. I quote from your proposal:

Institutional transformation activities are based on the novel, theoretically sound and evidence-based Psychologically Healthy Workplace (PHW) model, established by the American Psychological Association, which will improve recruitment, reduce attrition, and promote success of women faculty.

Since your proposal is framed around this model, it would seem appropriate that your evaluation would be as well. The evaluation should be framed around this. So for each of the 12 activities, the questions used to assess the impact, should be related to your theoretical framework. Your evaluation should be able to test the utility of the theoretical framework. While I understand that the final research on the project will do that to some extent, your evaluation plan should be articulated in a clear and deep way with the theoretical framework. Doing so, will ultimately help you and others determine whether or not the framework is useful in the case of institutional transformation. I would like to draw your attention to your own statement that the model is evidence-based. Your external evaluator should be able to fix this situation with little additional effort since I believe it is embedded in the plan but not articulated. Articulation is key to contributing to knowledge building.

Below is our initial response with new text added to address this latest request regarding our theoretical framework. As with the initial response, we insert the initial comments from the Program Officer in italics to contextualize our responses.

The highest order required change for your program is to create and implement a detailed evaluation plan that will lead to information beyond satisfaction with activities to a clear understanding of the impact of your activities. A report on this plan is due September 30th 2013.

From the beginning, satisfaction surveys have been a very small part of the TAMU ADVANCE evaluation plan; they are primarily used as formative feedback to improve the activities. However, the site visit report and a very productive meeting with the external evaluator, Sandra Laursen, have helped us recognize that program-specific aspects of our analysis plan had not been emphasized in recent reports to NSF and that we needed to better articulate the evaluation plan with respect to the twelve (12) individual activities and their alignment with the 5 Psychologically Healthy Workplace (PHW) categories.
We affirm that the difference-in-difference strategy adopted for use in analyzing institutional transformation can and will be used to examine individual activities. For example, short-term and mid-term objectives of the LEAD program are to improve leadership skills and increase awareness of implicit bias among STEM department heads. The Evaluation Plan now expressly describes how the team will use questions regarding unit leadership from the 2009, 2013 and planned 2015 Climate Surveys to evaluate the extent to which attendance at LEAD workshops is associated with changes in faculty perceptions about department head effectiveness and changes in the indicators for Employee Growth & Development, the PHW category most closely associated with these objectives. Furthermore, the Social Science Team has identified clusters of questions from the Climate Survey that can be used to measure each of the five categories of the PHW (see Appendix A). These PHW scales will be used as dependent variables in a difference-in-difference analysis of individual activities as well as in the analysis of institutional transformation. This part of the analysis will allow the Evaluation Team to identify which activities are associated with changes in each PHW dimension.

The Activity Evaluation Plan Summary (see Table 2) briefly describes the evaluation plan for each of the twelve (12) activities in table form, including initial satisfaction, intermediate and transformative outcomes. The Activity Evaluation Plan (see Appendix B) provides details of the analysis plan for each activity as well as context related to the PHW framework. (The Activity Evaluation Plan is distinct from the Institutional Transformation Evaluation Plan that was previously submitted.) Also, we have updated our Logic Model for greater specificity and further articulation of alignment with the PHW categories (see Appendix C).

The social science study’s data sets should be made fully available to the internal evaluators so that they can begin tracking progress toward the mid-term outcome/impact metrics identified in the TAMU ADVANCE logic model.

We want to emphasize our good working relationship with the Social Science Studies Team. The Evaluation Team has always had full access to the datasets for the social science studies, and, as a result, tracking progress toward the mid-term outcome/impact metrics (Table 2) is well underway. The Social Science Studies Team has worked closely with the Evaluation Team to clean and compile a common analysis database from the 2009 and 2013 Climate Surveys. In addition, the two teams have been conducting informal “workshops” to present analysis and research findings to one another, so that both groups are sharing analysis and findings as well as data.

The internal evaluation team and/or the external evaluator must develop a robust evaluation plan for assessing the impact of interventions on women of color as well as the efficacy of project activities specifically designed to recruit and advance faculty of color at Texas A&M.

All ADVANCE initiatives are oriented around inclusion and embracing diversity. To the extent that we improve the climate for diversity, it will make the institution a place that is more welcoming for faculty of color and a place where they can thrive. Further, the ADVANCE Scholar Program specifically targets women of color, so evaluating it is a key component of any analysis of the impact of interventions on women of color. The ADVANCE Scholar Program has been evaluated (see Appendix D) utilizing a confidential, web-based, three-question instrument designed to gather qualitative responses. Ensuring confidentiality is critical because the core program participants are junior women faculty of color, and we wish to avoid creating additional vulnerability. The open-ended qualitative questions were designed to capture rich, descriptive, detailed feedback in the participant’s words, and to create space for the inclusion of topics and areas not previously considered.
Our approach is also holistic. All program participants—Scholars, Internal Advocates, and External Mentors were asked to simultaneously provide feedback about their experiences and the program’s impact. The assessment cycles are timed such that each cohort will participate in the evaluation after two years of program participation and after there has been at least one face-to-face meeting between the Scholar and her external mentor.

This culturally sensitive evaluation strategy was designed with the core program participants in mind—untenured women faculty of color. Both the method of gathering feedback (via a confidential online instrument) and the methodology (qualitative/naturalistic) place emphasis on data gathering through processes that support and protect the research and the researched (Lincoln & Guba, 1985; Schurich & Young, 2002; Smith, 1999). We are mindful that this intact group of easily identifiable participants may view our data-gathering efforts as a threatening activity with real and perceived negative consequences (Crenshaw, Gotanda, Peller, & Thomas, 1995; Niemann, 2012; Patton & Winkle Wagner, 2012). Thus, the primary research participants’ needs and concerns informed the process and the content of this evaluation design, with the goal of enabling them to participate on their own terms (Smith, 1999).

In addition, based on the Site Visit Team’s recommendations, the Evaluation Team intends to examine changes in climate perceptions, discrimination perceptions and/or job satisfaction among STEM women of color using the 2009, 2013 and planned 2015 Climate Surveys. The changing perceptions of STEM women of color (whether or not they participated in the ADVANCE Scholars Program) will be compared to those of a) other STEM women and b) non-STEM women of color. Because sample sizes are small and concerns about confidentiality are large, it may be necessary to report only university-wide results for this part of the analysis. (See Appendix B for details.)

| Table 1  |
|-----------------|---------------------------------|
| American Psychological Association’s  |
| 5 Practices of a Psychologically Healthy Workplace |
| Employee Growth & Development | • Provide employees with the opportunity to expand their knowledge, skills, and abilities and provide an outlet to apply these gained competencies  
• Job-related and career-related training and benefits |
| Health & Safety* | • Maximize the health of employees through prevention, assessment, and treatment of potential health risks  
• Disease management and health promotion and wellness |
| Employee Involvement** | • Allow employees to bring ideas and perspectives as a part of organizational decision-making  
• Autonomy and input |
| Employee Recognition | • Allow employees to be rewarded for their contributions and achievements  
• Monetary and non-monetary rewards |
| Work-Life Balance | • Help employees to balance the multiple demands in their lives  
• Work flexibility and non-work support |

* Operationalized in our academic setting as well-being and lack of mistreatment (Grawitch et al., 2007).  
**“Employee involvement may be the most crucial practice in creating a healthy work environment...” (Grawitch et al., 2009).
<table>
<thead>
<tr>
<th>Climate Change Activity</th>
<th>Participation &amp; Satisfaction</th>
<th>Intermediate Outcomes</th>
<th>Institutional Transformation</th>
</tr>
</thead>
</table>
| LEAD Program            | • Committee participation    | • Subset of items from 2009, 2013 and 2015 Climate Surveys related to faculty perceptions of department head effectiveness  
                          | • Department head participation | • All five PHW scales from the 2013 and 2015 Climate Surveys *  
                          | • End of workshop surveys     |                                      |
| Department Mini-grants  | • Committee participation    | • Subset of items from 2009, 2013 and 2015 Climate Surveys linked to award of mini-grants and evaluation of effectiveness of mini-grants with respect to climate  
                          | • Mid-term and annual department reports | • All five PHW scales from the 2013 and 2015 Climate Surveys |
| FASIT Program           | • Committee participation    | • Subset of items from 2013 and 2015 Climate Surveys related to faculty perceptions of changes in faculty-staff interactions  
                          | • Participant tracking         | • PHW scales for EGD, H&S, & EI from the 2013 and 2015 Climate Surveys |
                          | • End of workshop surveys     |                                      | **Difference-in-Difference Analysis of Climate Survey**  
| Merit Pool Incentives   | • Funds allotted to units    | • Description of funds allocated to units (including departmental mini-grants) and differences among units in relation to job satisfaction, departmental inclusion and climate for diversity  
                          |                              | • PWS scales for H&S and ER from the 2013 and 2015 Climate Surveys |
| Student Diversity Training | • Committee participation | • Subset of items from 2013 and 2015 Climate Surveys related to faculty perceptions of changes in faculty-student interactions  
                          | • Participant tracking         | • PHW scales for EGD, H&S and ER from the 2013 and 2015 Climate Surveys  
                          | • Focus groups with fish camp counselors | • A brief survey of faculty perceptions related to faculty-student interaction  
                          |                              | • Social Science Studies: 1) *Reducing Student Implicit Biases: Analysis of Course Evaluations before and after Student Diversity Training* and 2) *Reducing Staff & Student Implicit Biases: Campus Climate Perceptions before and after Diversity Training* |

*Psychologically Healthy Workplace Practices are abbreviated as follows: Employee Growth and Development (EGD); Health and Safety (H&S), Employee Involvement (EI), Employee Recognition (ER) and Work-Life Balance (WLB)
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<thead>
<tr>
<th></th>
<th>Participation &amp; Satisfaction</th>
<th>Intermediate Outcomes</th>
<th>Institutional Transformation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recruitment &amp; Retention Activity</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>
| ADVANCE Speaker Series | • Committee participation  | • Subset of items from 2009, 2013 and 2015 Climate Surveys related to faculty mentoring and networking  
• PHW scales for EGD and H&S from the 2013 and 2015 Climate Surveys |                             |
|                      | • Department reports       |                                                                                                              |                             |
| STRIDE               | • Committee participation  | • Subset of items from 2013 and 2015 Climate Surveys related to Search Committees  
• PHW scales for EGD, H&S, EI, and ER from the 2013 and 2015 Climate Surveys  
• Social Science Study: Improving Selection and Promotion of STEM Women Faculty: Reducing Search and Award Committee Biases | Difference-in-Difference Analysis of Climate Surveys  
Salary Studies  
Startup Studies  
Retention |
|                      | • Participant tracking     |                                                                                                              |                             |
|                      | • End of workshop surveys  |                                                                                                              |                             |
| Faculty Recognition  | • Committee participation  | • Qualitative description of new sources of faculty recognition  
• PHW scales for H&S and ER from the 2013 and 2015 Climate Surveys |                             |
|                      | • Participant tracking     |                                                                                                              |                             |
| Roadmap Workshop     | • Committee participation  | • Subset of items from the 2009, 2013, and 2015 Climate Surveys related to Search Committees  
• Social Science Study: Repairing the Leaky Pipeline: Workshops for Early Career Academics |                             |
|                      | • Participant tracking     |                                                                                                              |                             |
|                      | • End of workshop surveys  |                                                                                                              |                             |

*Psychologically Healthy Workplace Practices are abbreviated as follows: Employee Growth and Development (EGD); Health and Safety (H&S), Employee Involvement (EI), Employee Recognition (ER) and Work-Life Balance (WLB)
<table>
<thead>
<tr>
<th>Success Enhancement Activity</th>
<th>Participation &amp; Satisfaction</th>
<th>Intermediate Outcomes</th>
<th>Institutional Transformation</th>
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</thead>
<tbody>
<tr>
<td>Administrative Fellows Program</td>
<td></td>
<td>Social Science Study: <em>Advancing Women into Leadership Positions: Effectiveness of the Administrative Fellow Program</em></td>
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<tr>
<td></td>
<td>Committee participation</td>
<td>Qualitative data collected from ADVANCE Scholars, internal advocates and external/ eminent scholar/mentor</td>
<td>Difference-in-Difference Analysis of Climate Surveys Salary Studies Startup Studies Retention</td>
</tr>
<tr>
<td></td>
<td>Participant tracking</td>
<td>Subset of items from the 2009, 2013, and 2015 Climate Surveys to compare the climate perceptions of STEM women of color to those of a) other STEM women and b) non-STEM women of color.</td>
<td></td>
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<tr>
<td></td>
<td>Formative interviews with fellows that feedback to program development</td>
<td>All five PHW scales from the 2013 and 2015 Climate Surveys</td>
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<tr>
<td>ADVANCE Scholar Program</td>
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<td>Committee participation</td>
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<td></td>
<td>Participant tracking</td>
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<td></td>
<td>Subset of items from the 2009, 2013, and 2015 Climate Surveys related to networking</td>
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<tr>
<td></td>
<td>End of workshop surveys</td>
<td>PHW scales for EGD, H&amp;S, EI, and WLB from the 2013 and 2015 Climate Surveys</td>
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<tr>
<td></td>
<td>Circle formation</td>
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<td>Success Circles</td>
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*Psychologically Healthy Workplace Practices are abbreviated as follows: Employee Growth and Development (EGD); Health and Safety (H&S), Employee Involvement (EI), Employee Recognition (ER) and Work-Life Balance (WLB)*
Citations


APPENDIX A
Questions from the 2013 and 2015 Climate Surveys that can be used to Measure Aspects of a Psychologically Healthy Workplace (PHW)

PHW Practice 1: Employee Growth & Development (EGD)

Department Head promotes faculty growth and development

- The head/director of my department:
  - provides opportunities for members to develop their abilities to become future leaders.
  - supports faculty development for future administrative positions.
  - meets with me regularly to provide constructive feedback regarding my performance.
  - encourages my development with respect to establishing and maintaining an effective research program.
  - encourages my development with respect to improving my teaching.

Mentoring (quantity, quality, and satisfaction with)

- Approximately how many TAMU mentors, both formal and informal, do you currently have? (open ended response)
- Mentoring has been effective for me.
- Mentoring has failed to meet my needs.
- Mentoring has disappointed me.
- I have enjoyed high quality mentoring relationship(s).
- I have unmet mentoring needs. (R)
- I have been encouraged to consider becoming an administrator.

PHW Practice 2: Health & Safety (H&S)

Department Head creates a psychologically safe environment/climate (general respect)

- The head/director of my department works to create a climate that is respectful of all faculty members.
- The head/director of my department fosters a climate that is respectful of diverse people and perspectives.
- The head/director of my department creates a cooperative and supportive environment.
Physical Health/Physical Symptom Inventory

During the past year, how often did you experience the following symptoms?
- An upset stomach or nausea
- Trouble sleeping
- Headache
- Acid indigestion or heartburn
- Diarrhea
- Constipation
- An infection
- Tiredness or fatigue

PHW Practice 3: Employee Involvement (EI)

Involvement Practices
- The head/director of my department encourages and empowers faculty.
- The environment provides adequate collegial opportunities for women.

Autonomy with regard to when, where, and how research is conducted.
- I am allowed to decide the methods I use to get my research done.
- I have discretion over the procedures I use when conducting my research.
- I am free to choose the method(s) I use to conduct research-related tasks.
- I have control over the scheduling of my research tasks.
- I have control over the sequencing of my research activities (i.e., when I do what).
- I decide the order in which I complete research-related tasks.
- I can modify the way I am evaluated so that I can emphasize some aspects of my research and play down others.
- I am able to modify my research objectives (what I am supposed to accomplish).
- I have some control over what I am supposed to accomplish in my research.
- I decide when I start and stop working on research-related activities each day.
- I decide when to do particular research activities.
- I decide when I perform research-related tasks.
- I am able to choose where I conduct my research.
- I can conduct my research-related tasks from the location of my choosing.
- I decide where I perform research activities.

Ostracism (lack of involvement, reverse coded)
- During the PAST 12 MONTHS to what extent have the following groups engaged in the following behaviors TOWARD YOU in your department?
  - Excluded you?
  - Kept you out-of-the-loop on information that is important?
  - Gave you the cold shoulder?
  - Treated you as if you are invisible?
• How satisfied are you with each of the following?
  o Opportunity to collaborate with other faculty.
  o Amount of social interaction with members of my unit/department.
  o Level of intellectual stimulation in my day-to-day contacts with faculty colleagues.

PHW Practice 4: Employee Recognition (ER)

Feeling Valued

• To what extent do you feel valued as a teacher by students?
• To what extent do you feel valued as a mentor by students?
• To what extent do you feel valued for your research, scholarship, or creativity by members of your unit/department?
• To what extent do you feel valued for your social and/or cultural identity membership?
• To what extent do you feel valued for your disciplinary expertise and/or contributions?
• How satisfied are you with each of the following? Current salary in comparison to the salaries of my TAMU colleagues.
• My colleagues: would fail to notice, even if I did the best job possible. [R]
• The head/director of my department praises my successes.

PHW Practice 5: Work-Life Balance (WLB)

Work interfering with family conflict (lack of)/ Work-Nonwork (Between Role) Conflict

• After work, I come home too tired to do some of the things I’d like to do.
• On the job I have so much work to do that it takes away from my personal interests.
• My family/friends dislike how often I am preoccupied with my work while I am at home.
• My work takes up time that I’d like to spend with family/friends.

Family Supportive Work Environment

• To what extent do you agree that each of the following statements represent the philosophy or beliefs of the majority of the members of your department?
  o Work should be the primary priority in a person’s life. (R)
  o It is considered taboo to talk about life outside of work. (R)
  o Individuals who take time off to attend to personal matters are not committed to their work. (R)
  o It assumed that the most productive employees are those who put their work before their family life. (R)
  o The ideal faculty member is one who is available 24 hours a day. (R)
Activity Evaluation Plan
(Last Updated: June 1, 2014)

The ADVANCE Program at Texas A&M University is comprised of a series of interlocking activities. Each activity was originally selected for two reasons: 1) it fills an institutional need and 2) it is aligned with one or more categories of the Psychologically Healthy Workplace (PHW). Further, the activities were designed to contribute synergistically to the common goal of institutional transformation. However, each was also designed to produce intermediate outcomes that are specific to that intervention. This Activity Evaluation Plan, as distinct from the Institutional Transformation Evaluation Plan, describes the plan for evaluating intermediate outcomes for each of the twelve (12) program activities and their corresponding PHW category.

It should be noted that our Social Science Studies Team, in partnership with the Evaluation Team and the Dean of Faculties Office, designed our Climate Survey to measure a number of constructs that fit within the PHW framework. For example, there are multiple assessments of mistreatment (e.g. incivility, ostracism, sexism, and racism). We speculate that less mistreatment over time is an indicator of better Health & Safety and Faculty Recognition. See Appendix A for a description of the survey items associated with each PHW category. Those items will be used to construct scales and/or indicators for each PHW category. If an activity is associated with changes in those indicators, it will be interpreted as having had an impact on that PHW category.

LEAD Program

The LEAD Program aims to improve leadership skills and increase awareness of implicit bias among STEM department heads. LEAD workshops focus on such topics as Faculty Evaluation, Faculty Recognition, Dual Career Accommodations, Faculty Retention, Building an Inclusive Climate and more. Implicit bias and its impact on underrepresented faculty is woven into the content of the workshops. This activity is aligned with all 5 PHW categories: Employee Growth & Development (EGD), Health & Safety (H&S), Employee Involvement (EI), Employee Recognition (ER), and Work-Life Balance (WLB).

Intermediate outcomes for the LEAD program are to improve leadership skills and increase awareness of implicit bias among STEM department heads. The Evaluation Team will use selected questions from the 2009, 2013 and planned 2015 Climate Surveys to evaluate the extent to which attendance at LEAD workshops is associated with changes in faculty perceptions about department head effectiveness. Climate Survey items that may be used for analysis include variables such as:

1. The head/director of my department:
   - provides opportunities for members to develop their abilities to become future leaders.
   - supports faculty development for future administrative positions.
   - meets with me regularly to provide constructive feedback regarding my performance.
   - encourages my development with respect to establishing and maintaining an effective research program.
   - encourages my development with respect to improving my teaching.
The difference-in-difference analysis will examine whether departments where the head received LEAD training show larger improvements than other departments on these and/or similar indicators. It will also examine whether departments where the head received LEAD training show greater improvement on each of the five PHW indicators.

**Departmental Mini-grants**

Departmental Mini-grants provide funding for innovative projects proposed by individual departments based on how well their projects support the goals of the ADVANCE Program. Although in our original proposal we anticipated that this activity would align with EGD and ER, we now recognize that, given the varied initiatives proposed by departments, this activity is potentially aligned with all 5 PHW categories: EGD, H&S, EI, ER and WLB.

An intermediate outcome for the Departmental Mini-Grants is to provide opportunities to address department-specific issues that undermine climate for women STEM faculty. The Evaluation Team will use selected questions from the 2009, 2013 and planned 2015 Climate Surveys to evaluate the extent to which receiving a departmental mini-grant is associated with improvements in job satisfaction and measures of departmental inclusion and climate for diversity. (For more on the measures of departmental inclusion and climate for diversity, see the Evaluation Team report ‘2013 Campus Climate Survey: Climate and 2013 Campus Climate Survey: Job Satisfaction and Turnover Intentions.’)

The difference-in-difference analysis will examine whether departments that received a departmental mini-grant show larger improvements than other departments on these and/or similar indicators, including the appropriate (potentially all five) PHW indicators.

**FASIT Program**

The FASIT Program aims to improve workplace climate by focusing on the relationship between faculty and staff. In our original proposal, we anticipated that this activity would align with H&S and WLB. However, given the progression of program development, we now recognize that this activity is aligned with EGD, H&S, and EI.

Intermediate outcomes for the FASIT program are improvement in interactions between STEM faculty and academic staff and an increase their awareness of implicit bias. The Evaluation Team will use selected questions from the 2013 and planned 2015 Climate Surveys to evaluate the extent to which participation in the FASIT Program is associated with changes in faculty perceptions of faculty staff interactions. Climate Survey items that may be used for analysis include:

- **During the PAST 12 MONTHS to what extent have staff members engaged in the following behaviors TOWARD YOU in your department?**
  - Put you down or was condescending to you?
  - Paid little attention to your statements or showed little interest in your opinion?
  - Made demeaning or derogatory remarks about you?
  - Doubted your judgment on a matter over which you have responsibility?
  - Made jokes at your expense?
  - Interrupted or spoke over you?
  - Talked about you behind your back?
  - Questioned your expertise or credentials?
o Addressed you inappropriately?
o Excluded you?
o Kept you out-of-the-loop on information that is important?
o Gave you the cold shoulder?
o Treated you as if you are invisible?
o Treated you “differently” because of your sex?
o Challenged your authority?
o Made sexist remarks?

The difference-in-difference analysis will examine whether departments that participated in the FASIT Program show larger improvements than other departments on these and/or similar indicators, including the PHW indicators for EGD, H&S, and EI.

**Merit Pool Incentives**

The ADVANCE Center is working with our Vice President and Associate Provost for Diversity to leverage a new institutional practice of rewarding units for meeting diversity goals to further the goals of the ADVANCE program. In our original proposal we associated this activity only with ER. However, we now recognize that it is aligned with H&S as well.

Merit pool incentives have been zero since 2009, so there is little to evaluate. However, $1 million in one-time funds were allocated for each year 2011-2013 through the VP for Diversity’s office to campus units based on progress in accountability, climate, and equity efforts as outlined in the University Diversity Plan. The Evaluation Team will describe the distribution of those allocations across departments and examine whether or not departments that have received awards in the past are systematically different from other departments with respect to job satisfaction, departmental inclusion and climate for diversity. (For more on the measures of departmental inclusion and climate for diversity, see the Evaluation Team report ‘2013 Campus Climate Survey: Climate and 2013 Campus Climate Survey: Job Satisfaction and Turnover Intentions.’)

The difference-in-difference analysis will also examine whether departments that received a departmental mini-grant show larger improvements than other departments on the PHW indicators for H&S and ER.

**Student Diversity Training**

The goal of this activity is to develop and disseminate interactive experiences (e.g. skits) that address student’s implicit biases, prejudices, and stereotypes of women and minorities in order to further educate students that respecting all faculty members is part of the culture of Texas A&M. In our original proposal, we associated this activity with H&S and WLB. However, given the progression of program development, we now recognize that this activity is aligned with these PHW categories: EGD, H&S, and ER.

An intermediate objective of the Student Diversity training program is to increase awareness about implicit bias and reduce biased student comments. The Evaluation Team will use selected questions from the 2013 and planned 2015 Climate Surveys to evaluate changes in perceived student behaviors toward faculty. Climate Survey items that may be used for analysis include:
During the PAST 12 MONTHS to what extent have students engaged in the following behaviors TOWARD YOU in your department?

- Put you down or was condescending to you?
- Made demeaning or derogatory remarks about you?
- Doubted your judgment on a matter over which you have responsibility?
- Made jokes at your expense?
- Interrupted or spoke over you?
- Talked about you behind your back?
- Questioned your expertise or credentials?
- Addressed you inappropriately?
- Excluded you?
- Treated you “differently” because of your sex?
- Challenged your authority?
- Made sexist remarks?

These variables address students’ awareness and acknowledgement of women faculty’s expertise and are therefore aligned with the PHW Category of Employee Recognition.

The difference-in-difference analysis will examine whether female STEM faculty members perceive larger improvements than male STEM faculty members on these and/or similar indicators, including the PHW indicators for EGD, H&S and ER.

The Social Science Studies Team is conducting two studies of student course evaluations. The Evaluation Team will incorporate those findings into the evaluation of the student diversity training. In particular, a comparison of qualitative comments on course evaluations from the spring of 2013 to comments on course evaluations from the fall 2013 will be conducted. This analysis will be limited to freshman (100) level classes taught by STEM women faculty. Results will be shared with the Student Diversity committee as feedback on their intervention and further needs analysis, as well as Department Heads via the LEAD Program given the role that course evaluations play in the selection and promotion of faculty members.

In addition, the Evaluation Team, in collaboration with the Social Science Team and the ADVANCE Leadership Team, developed and administered a brief survey in August 2013 seeking faculty feedback regarding student interactions with faculty members (previously provided). The survey will be administered again in August 2014 and 2015, and changes over time in faculty perspectives of student interactions will be used in a pretest-posttest model to evaluate the impact of the student diversity training. In addition to providing a baseline for evaluating changes in the quality of faculty/student interactions, the August 2013 survey has also allowed the Evaluation Team to provide formative feedback about additional areas of concern or types of micro-aggression that are being addressed as the scope of the student diversity intervention is expanded for summer 2014.

**ADVANCE Speaker Series**

The ADVANCE Speaker Series has two goals. First, the ADVANCE Center is working to bring senior women scientists and engineers who have also been active in gender and diversity issues to campus to speak about their research as well as women in STEM. The second goal is to bring in mid-career and senior women scientists and engineers that are nominated by STEM departments for recruiting purposes. This activity is aligned with these PHW categories: EGD and H&S.
An intermediate objective of the ADVANCE Speaker Series is to improve networking and professional development opportunities for women STEM faculty. The Evaluation Team will use selected questions from the 2009, 2013 and planned 2015 Climate Surveys to evaluate the extent to which hosting an ADVANCE speaker in a department is associated with changes in faculty perceptions about their professional networks. Climate Survey items that may be used for analysis include:

- Women are less likely than men to be invited to give talks in my department. (reverse)
- How would you rate the breadth of your network within TAMU compared to other researchers at your rank in your area/discipline at other Tier 1 Research universities?
- How would you rate the breadth of your network outside of TAMU compared to other researchers at your rank in your area/discipline at other Tier 1 Research universities?
- How many new professional contacts have you made as a function of ADVANCE-related activities?

The difference-in-difference analysis will examine whether women in departments that hosted one or more ADVANCE speakers show larger improvements than other departments on these and/or similar indicators, including the PHW indicators for EGD and H&S.

**STRIDE**

The Strategies and Tactics for Recruiting to Improve Diversity and Excellence (STRIDE) Program is a joint effort between the ADVANCE Center and the Dean of Faculties to expand existing gender bias training for all members of search committees. In our original proposal, we associated this activity with all 5 PHW categories. However, we now anticipate that this activity will align with all categories except WLB.

An intermediate objective of the STRIDE training is to increase awareness of implicit bias on Search Committees and reduce the incidence of biased Search-Committee behaviors. The Evaluation Team will use selected questions from the 2013 and planned 2015 Climate Surveys to evaluate changes in perceptions of search committee misbehaviors. Climate Survey items that may be used for analysis include:

- Search committees in my department perpetuate a “good ol’ boys” network.
- Search committees in my department talk differently about male and female candidates.
- Search committees in my department hold male and female candidates to different standards.
- Search committees in my department talk about candidates’ personal characteristics (e.g., sex, marital status, children, religion, race) during discussions.
- Search committees in my department are concerned that focusing on diversity is at the expense of excellence.
- Search committees in my department do not make an effort to recruit diverse applications.
- Search committees in my department believe that there are very few women to apply for faculty positions in our field.
- Search committees in my department believe that recruiting diverse applicants to College Station is very difficult.
- Search committees in my department send faculty position postings to minority interest group listservs. (reverse)

The difference-in-difference analysis will examine whether departments where search committees have participated in STRIDE training show larger improvements than other departments on these and/or similar indicators, including the PWH indicators for EGD, H&S, EI, and ER.
Faculty Recognition

This activity is focused on highlighting the success of women STEM faculty and is aligned with the PHW categories H&S and ER. Intermediate objectives of the Faculty Recognition activity include providing public recognition of women STEM faculty’s accomplishments, increasing visibility of women STEM faculty, providing greater access to information regarding awards to women STEM faculty, changing mindsets regarding nominations of women STEM faculty for major awards and other recognitions, and ultimately, increasing nominations of women STEM faculty for awards. The Evaluation Team will track participation in each of these activities and provide a qualitative description of new sources of faculty recognition. In addition, a difference-in-difference analysis will examine whether STEM departments show larger improvements than other departments on the PWH indicators for H&S and ER.

Roadmap Workshop

The ADVANCE Center is hosting annual workshops for early-career women STEM faculty who are potential or new hires and postdoctoral researchers who are considering a career in academia. In our original proposal, we associated this activity with only with EGD. However, given the progression of program development, we now recognize that this activity is aligned with these PHW categories: EGD, H&S, EI, and WLB.

Intermediate objectives of the Roadmap Workshops include improving mentoring and networking (increase in number of STEM contacts from workshops) for women STEM faculty, and reducing feelings of isolation in pursuit of tenure for women STEM faculty. The Evaluation Team is administering satisfaction surveys to workshop participants, but the primary objective of those surveys is formative. The Social Science Studies Team is conducting an analysis entitled Repairing the Leaky Pipeline: Workshops for Early Career Academics using an additional/separate post-workshop survey and follow-up surveys of participants and a matched sample of nonparticipants as data sources. This study, which is the primary source of summative evaluation for the Roadmap Workshop, documents the impact of the workshop on individuals’ negotiation self-efficacy and career expectations. It further documents the impact of the workshop on stress, burnout, ostracism, and job satisfaction – all of which are measures of well-being and are aligned with the PHW category of Health & Safety. The Evaluation Team will rely heavily on those findings in their evaluation of the Roadmap Workshop.

In addition, the Evaluation Team will use selected questions from the 2009, 2013 and planned 2015 Climate Surveys to evaluate the extent to which departments where faculty have participated in Roadmap Workshops are associated with improvements in faculty perceptions about their professional networks and access to mentoring. Climate Survey items that may be used for analysis include:

- How would you rate the breadth of your network within TAMU compared to other researchers at your rank in your area/discipline at other Tier 1 Research universities?
- How would you rate the breadth of your network outside of TAMU compared to other researchers at your rank in your area/discipline at other Tier 1 Research universities?
- How many new professional contacts have you made as a function of ADVANCE-related activities?
- Approximately how many TAMU mentors, both formal and informal, do you currently have?
- I am satisfied with my mentor.
- Mentoring has been effective for me.
- Mentoring has failed to meet my needs.
- Mentoring has disappointed me.
• I have effectively used mentoring.
• I have enjoyed high quality mentoring relationship(s).
• I have unmet mentoring needs.

The difference-in-difference analysis will examine whether tenure-track women in departments where assistant professors or post-docs participated in the Roadmap Workshops show larger improvements than tenure-track men in the same departments or tenure-track women in other departments on these and/or similar indicators, including the PHW indicators for EGD, H&S, EI, and WLB.

**Administrative Fellows Program**

This activity provides an opportunity for women STEM faculty at the associate or full professor level to serve as an ADVANCE Administrative Fellow through developmental assignments in upper administrative offices. In our original proposal, we associated this activity with EGD, H&S, and EI. However, we now recognize that this activity is also aligned with ER.

The Social Science Studies Team is conducting an analysis of the Administrative Fellows program entitled *Advancing Women into Leadership Positions: Effectiveness of the Administrative Fellow Program* using interviews with Fellows and their unit colleagues as data sources to measure work-family conflict, job-related skills, affective reactions, and personal evaluations of the program. The Evaluation Team will incorporate those findings into the evaluation of the Administrative Fellows Program. Due to the small size of the program, a difference-in-difference analysis of Climate Survey responses would not be viable.

**ADVANCE Scholar Program**

The purpose of the ADVANCE Scholar Program is to provide mentors for underrepresented women STEM faculty. In our original proposal, we associated this activity only with EGD and H&S. However, given the progression of program development, we now recognize that this activity is aligned with all 5 PHW categories.

The ADVANCE Scholar Program evaluation has just been completed and submitted as part of the Year 4 Annual Report. We evaluated the program utilizing a confidential, web-based, 3-question instrument designed to gather qualitative responses. The questions invited participants to:

1. Describe experiences with the ADVANCE Scholar Program (consider experiences with Scholars, Internal Advocates, and External Mentors). Offer both strengths and constructive suggestions for improvement;
2. Explain what effects the program has had on their work-life and/or professional career; and
3. Identify suggestions for the ADVANCE Center in general, or for future institutionalization of TAMU ADVANCE efforts.

The open-ended qualitative questions were designed to capture rich, descriptive, detailed feedback in the participant’s words, and to create space for the inclusion of topics and areas not previously considered. Data has been analyzed by individual responses, by groups of respondents, by question, and holistically. To aid in data management, we utilized ATLAS.ti, a qualitative analysis software package, and the technical aspects involved content analysis, principally the processes of unitizing, categorizing, and constant comparison, as detailed in Lincoln & Guba (1985). Data gathering for the first cohort concluded on October 11, 2013. Identifying information was redacted to protect respondents’ confidentiality.
In addition to this qualitative analysis, the Evaluation Team plans to compare the climate perceptions of STEM women of color (whether or not they participated in the ADVANCE Scholars Program) to those of a) other STEM women and b) non-STEM women of color using items from the 2009, 2013 and 2015 Climate Surveys. In addition to the suite of mentoring questions described above under Roadmap Workshop, and the indicators for job satisfaction, climate for diversity and departmental inclusion described under Departmental Mini-grants, this difference-in-difference analysis will examine the extent to which STEM women of color and departments that house ADVANCE Scholars demonstrate stronger gains in the 5 PHW categories.

**Success Circles**

The ADVANCE Center is organizing mentoring groups centered on personal and professional interests. In our original proposal, we associated this activity with all 5 PHW categories. However, given the progression of program development, we now recognize that this activity is aligned with all categories except ER.

The intermediate objectives of this activity are to provide peer mentoring groups for women STEM faculty organized around common personal and professional interests, and to help them develop multiple social connections among women STEM faculty. The Evaluation Team will use selected questions from the 2009, 2013 and planned 2015 Climate Surveys to evaluate the extent to which departments where faculty have participated in Success Circles are associated with improvements in faculty perceptions about their professional networks and access to mentoring. Specific items that will be used for analysis may include the suite of questions described under the Roadmap Workshop. In addition, the difference-in-difference analysis will examine the extent to which departments that have participated in success circles demonstrate stronger gains on the PHW indicators for EGD, H&S, EI, and WLB.
APPENDIX C
Logic Model

**Inputs**
- NSF ADVANCE Grant
- Institutional Commitment to Diversity from TAMU Leadership
- Support/Input from DoF and Climate Survey Researchers
- Expertise of ADVANCE Activity Committees and ADVANCE Planning Committee

**Outputs**
- Activities
- Social Science Studies
- Institutional Data
- Evaluation

**Long-Term Outcomes**
- Improve Workplace Climate for Women STEM Faculty
- Enhance Recruitment, Retention, and Success of Women STEM Faculty
- Institutionalize Successful Activities

**Institutional Transformation**
The underlying conceptual framework for the TAMU ADVANCE Program is the American Psychological Association's Psychologically Healthy Workplace initiative. Psychologically Healthy Workplace (PHW) practices are grouped into 5 categories: 1) Employee Growth and Development, 2) Health and Safety, 3) Employee Involvement, 4) Employee Recognition, and 5) Work-Life Balance. Health and Safety is operationalized in our academic setting as wellbeing & lack of mistreatment (Grawitch et al., 2007). Additionally, each of the 12 activities is overseen by a faculty/staff committee which means that Employee Involvement, one of the more critical PHW categories (Grawitch et al., 2009), is even more broadly practiced than the table below indicates. Raising bias literacy on our campus (implicit bias) is also foundational to our program and is intentionally addressed where indicated.

Each of the 12 activities in which the TAMU ADVANCE Program is engaged: a) is aligned with one or more of the 5 PHW practices, b) has a collective (change faculty environment) and/or individual (support faculty) focus, and c) targets either improving Workplace Climate, Recruitment and Retention, or Success Enhancement of women STEM faculty. This approach reflects the TAMU ADVANCE theory of institutional change which assumes that no single intervention will substantially impact progress of women STEM faculty. Instead, a series of interrelated interventions/activities are necessary for **institutional transformation and a Psychologically Healthy Workplace.**

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<table>
<thead>
<tr>
<th>INPUTS</th>
<th>OUTPUTS</th>
<th>OUTCOMES / IMPACTS</th>
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</table>
| **NSF ADVANCE Grant** | **1. LEAD Program**  
Professional development workshops and implicit bias training for STEM Department Heads and other targeted participants | **Collective**  
Emp Growth & Dev for STEM Department Heads and emerging leaders Short & Mid-Term  
All PHW categories for women STEM Faculty Long-Term  
**STEM Department Heads and emerging leaders** | **Improve leadership skills for STEM Department Heads and emerging leaders** | **Increase awareness of implicit bias among STEM Department Heads and workshop attendees** | **Institutionalize Activities** |
| **Institutional Commitment to Diversity from TAMU Leadership** | **2. Departmental Mini-Grants**  
Small, competitive grants for STEM departments to address workplace climate issues | **Collective/ Individual**  
Potential for all categories for women STEM at any stage depending on STEM departments’ proposals | **Funded STEM Departments** | **Provide opportunities to address department-specific issues that undermine climate for women STEM faculty** | **Improve Workplace Climate for Women STEM Faculty** |
| **Support/Input from DoF and Climate Survey Researchers** | **3. FASIT Program**  
Training to positively impact faculty-staff interactions and educate them about implicit bias | **Collective**  
Emp G&D and Emp Inv for participating faculty and academic staff Short & Mid-Term  
H&S for women STEM faculty Long-Term  
**STEM Faculty & Staff** | **Provide regularly scheduled programming for STEM faculty and academic staff that is aimed at improving their interactions** | **Improve interactions between STEM faculty and academic staff and increase their awareness of implicit bias** | **Enhance Recruitment of Women STEM Faculty** |
| **Expertise of ADVANCE Activity Committees and ADVANCE Planning Committee** | **4. Merit Pool Increases**  
Direct incentives to work to improve diversity | **Collective**  
Emp Rec for STEM units that engage ADVANCE Short & Mid-Term  
H&S for women STEM faculty Long-Term  
**STEM Departments** | **Provide leverage for departments to engage ADVANCE** | **Provide funds to departments for engaging in ADVANCE activities** | **Enhance Retention of Women STEM Faculty** |
| | **5. Student Diversity Training**  
Diversity programming for students | **Collective**  
Emp G&D for participating students  
H&S and Emp Rec for women STEM faculty Long-Term  
**STEM Students** | **Provide student diversity program at Fish Camp and New Student Orientation** | **Increase awareness about implicit bias and reduce biased student comments** | **Enhance the Success of Women STEM Faculty** |
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<tr>
<td>Recruitment &amp; Retention Activities</td>
<td>Focus</td>
<td>PHW Practices</td>
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<td><strong>6. ADVANCE Speaker Series</strong> Speaker series focused on women STEM faculty</td>
<td>Collective/Individual</td>
<td>Emp G&amp;D for those that engage speaker Short &amp; Mid-Term</td>
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<tr>
<td><strong>7. STRIDE Program</strong> Implicit bias training for Search, Award, and P&amp;T Committees</td>
<td>Collective</td>
<td>Emp G&amp;D and Inv for Workshop Facilitators and Emp G&amp;D for Workshop Participants Short &amp; Mid-Term</td>
</tr>
<tr>
<td><strong>8. Faculty Recognition</strong> Impact recognition of women STEM faculty</td>
<td>Collective/Individual</td>
<td>Emp Rec for women STEM faculty Short &amp; Mid-Term</td>
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<tr>
<td><strong>9. Roadmap Workshops</strong> Professional development workshops for early career STEM academics</td>
<td>Individual</td>
<td>Emp G&amp;D, Emp Inv, and WLB for women STEM faculty Short &amp; Mid-Term</td>
</tr>
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**NSF ADVANCE Grant**

**Institutional Commitment to Diversity from TAMU Leadership**

**Support/Input from DoF and Climate Survey Researchers**

**Expertise of ADVANCE Activity Committees and ADVANCE Planning Committee**
<table>
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<th>OUTCOMES / IMPACTS</th>
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<td><strong>Success Enhancement Activities</strong></td>
<td><strong>Participation</strong></td>
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<td><strong>Institutional Commitment to Diversity from TAMU Leadership</strong></td>
<td><strong>Emp G&amp;D and Emp Inv for women STEM faculty Short &amp; Mid-Term</strong></td>
<td><strong>Women STEM Faculty</strong></td>
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<tr>
<td><strong>Support/Input from DoF and Climate Survey Researchers</strong></td>
<td><strong>Emp G&amp;D, Emp Inv, and WLB for women STEM faculty of color and internal advocates Short &amp; Mid-Term</strong></td>
<td><strong>Women STEM Faculty of Color</strong></td>
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<tr>
<td><strong>Expertise of ADVANCE Activity Committees and ADVANCE Planning Committee</strong></td>
<td><strong>Emp G&amp;D, Emp Inv, and WLB for women STEM faculty of color Long-Term</strong></td>
<td><strong>H&amp;S for women STEM faculty of color Long-Term</strong></td>
</tr>
</tbody>
</table>

| **10. Administrative Fellows Program** | **Collective/Individual** | **Emp G&D and Emp Inv for women STEM faculty Short & Mid-Term** | **Women STEM Faculty** | **Provide 2-3 positions per year for women STEM faculty at the associate or full professor level to serve as Administrative Fellows in developmental assignments in the offices of Targeted Colleges, the Dean of Faculties, the Provost, etc.** | **Increase the visibility of women among administrative leaders** | **Institutionalize Activities** |
| **A program to provide women STEM faculty with opportunities to serve in an administrative position** | **H&S and Emp Rec for women STEM faculty Long-Term** | **Provide internal advocates for underrepresented women STEM faculty** | | | |

| **11. ADVANCE Scholars Program** | **Individual** | **Emp G&D, Emp Inv, and WLB for women STEM faculty of color and internal advocates Short & Mid-Term** | **Women STEM Faculty of Color** | **Provide eminent external mentors for underrepresented women STEM faculty** | **Expand the pool of mentors and role models for underrepresented women STEM faculty** | **Improve Workplace Climate for Women STEM Faculty** |
| **A mentoring program for underrepresented women STEM faculty** | **H&S for women STEM faculty of color Long-Term** | **Provide internal advocates for underrepresented women STEM faculty** | | | | |

| **12. Success Circles** | **Individual** | **Emp G&D, Emp Inv, and WLB for women STEM faculty Short & Mid-Term** | **Women STEM Faculty** | **Peer mentoring groups for women STEM faculty organized around common personal and professional interests** | **Develop multiple social connections among women STEM faculty** | **Enhance the Success of Women STEM Faculty** |
| **A group mentoring program for women STEM faculty** | **H&S for women STEM faculty Long-Term** | **Women STEM Faculty** | | | | |
Executive Summary
The purpose of the ADVANCE Scholar Program is to promote and advance the success of Texas A&M University women faculty of color in STEM through mentoring with eminent scholars in their fields. Each Scholar who participated in the program was paired with an Internal Advocate and an Eminent Scholar/External Mentor, and invited to participate in programming and activities designed to enhance their professional development. ADVANCE helped to identify potential External Mentors, provided funds so that each Scholar could travel to meet with her External Mentor, and hosted a conference in College Station for Scholars, External Mentors and Internal Advocates.

Thirty-three STEM faculty members were eligible to participate in Cohort I. Sixteen applied and were accepted, while five joined the program as committee members and later became Internal Advocates.

<table>
<thead>
<tr>
<th>ADVANCE Scholar Cohort 1: Rank and Race</th>
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</thead>
<tbody>
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Scholars, Internal Advocates, and External Mentors in Cohort 1 were invited to provide feedback about their experiences and the program’s impact. A confidential web-based, open-ended, three-question qualitative instrument was designed to gather participants’ responses. Participants were asked to:
1. Describe experiences with the ADVANCE Scholar Program;
2. Explain what effects the program has had on their work-life and/or professional career, and
3. Identify suggestions for the ADVANCE Center in general or for future institutionalization of TAMU ADVANCE efforts.

Assessment occurred after two years of program participation and after there was at least one face-to-face meeting between the Scholar and her Eminent Scholar/External Mentor. Data were gathered from July through September of 2013. Data were analyzed by responses, respondents, questions, and holistically using ATLAS.ti, a qualitative analysis software package, to aid in data coding and analysis. The response rate was 70% (26/37): 64% of Scholars; 69% of External Mentors/Eminent Scholars; and 80% of Internal Advocates.

Overall, respondents indicated that the program had a positive impact. Participants encouraged program continuation and provided suggestions on ways to strengthen the program. Additional themes emerged from the data, including the Scholars reporting: Increased visibility; increased manuscripts in preparation; increased number of proposals submitted/accepted; retention/promotion; recognition/awards; a psychologically healthier workplace; and better work-life balance.
Introduction
The purpose of the ADVANCE Scholar Program is to promote and advance the success of Texas A&M University women faculty of color in STEM through mentoring with eminent scholars in their fields. This report provides results of the program evaluation conducted during the summer of 2013 for the first ADVANCE Scholar Cohort.

Thirty-three women of color who are STEM faculty members were eligible to participate in Cohort I. The Vice President and Associate Provost for Diversity reached out to each eligible faculty member twice (See Appendix A). Sixteen applied and were accepted, while five joined the program as committee members. The committee is comprised of twelve senior Texas A&M University faculty members, who are largely in STEM disciplines, including two White males, and ten women of color. Reasons some faculty members declined participation include: they were already full professors and did not want to use resources that could be available for junior faculty and they did not see how the program would help advance their careers.

Several months into the program, while discussing how best to support the Scholars, one committee member said: “Because this group consists of mostly senior faculty, there is an opportunity to become internal advocates and really support and encourage the Scholars here on our own campus.” Consequently, the committee members became “Internal Advocates” who were paired with Scholars, for whom they became active advocates, including assisting them in identifying appropriate external eminent scholar mentors. The Internal Advocates also serve as internal mentors and assist Scholars with navigating the department, college, and university landscape, advocate for them in key areas such as grant-writing, promotion and tenure committee deliberations, and assist them in cultivating strategies for enhancing and balancing the quality of their academic and work life. Scholars also have access to the ADVANCE Center, its leadership, programs and activities. This configuration—Scholar, Internal Advocate, External Mentor/Eminent Scholar, ADVANCE Center—has the potential to form a robust network for ADVANCE Scholars, illustrated in the graph below.

Graph 1: Networking Community
Scholars met with their Internal Advocates to discuss appropriate eminent scholar/mentors to pursue, and in a couple of instances, the Scholar reached out to the potential mentor directly, however, in most cases, potential mentors were approached via an e-mail invitation signed by both the Provost and Executive Vice President for Academic Affairs and Vice President and Associate Provost for Diversity (See Appendix B).

As the underlying conceptual framework for the ADVANCE program is the American Psychological Association’s Psychologically Healthy Workplace initiative, the Scholar program focuses on the following practices: 1) Growth and Development: by connecting participants with an internal advocate and an external eminent mentor who work together to help the scholar reach her goals; 2) Health and Safety: through support and mentorship regarding workplace stress; 3) Involvement: through fostering broader university and national engagement and networking; and 4) Work-Life Balance: through guidance regarding achieving success while maintaining a quality personal and professional life.

Program Participants
Thirty-three women of color STEM faculty members were eligible to participate in Cohort I. All were invited, sixteen applied and were accepted. Table 1 represents participants by rank and race/ethnicity and Table 2 represents participants by discipline.

<table>
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<th>Rank</th>
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Table 1: Participants by Rank and Race
ADVANCE Scholar Cohort I: Rank and Race

Page | 4
Table 2: Participants by Discipline

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<td>4</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

ADVANCE Scholar Retention

Five assistant professors (1 Black; 3 Hispanic; 1 Multiracial) left the University for various personal and professional reasons, including 1) perceived lack of scholarly fit with the department; 2) denial of tenure; 3) opportunity to lead a research center at another university; and 4) giving back to the community by working at a minority-serving rather than predominantly White institution. Eleven Scholars remained in Cohort 1.

Program Activity

Scholars received funding to visit their Eminent Scholar/External Mentor, and each Eminent Scholar/External Mentor received funding to visit their Scholar on the Texas A&M University campus, as well as a $500 stipend for their participation in the program.

From June 2011 through September 2013, ADVANCE Scholars, Eminent Scholars, and Internal Advocates participated in a number of activities such as: meetings and lunches between Scholars and their Internal Advocates, a symposium, a retreat, social network gatherings, visits and collaborative activities with eminent scholars. Scholars also participated in other ADVANCE Center activities such as the Roadmap Workshop, the Writing Success Circle, and other ADVANCE-related activities. Participants were asked to reflect on these aspects of the program in this evaluation.

Evaluation Methodology

Data gathering for the first cohort took place from July through September of 2013. The assessment instrument was sent to fourteen (14) ADVANCE Scholars, thirteen (13) Eminent Scholar/Mentors, and ten (10) Internal Advocates. The decision to exclude certain participants was determined by the duration of their participation in the program. The response rate was 70% (26/37): 64% of Scholars; 69% of External Mentors/Eminent Scholars; and 80% of Internal Advocates.
The ADVANCE Scholar Program was evaluated utilizing a confidential, web-based, 3-question instrument designed to gather qualitative responses (See Appendices C, D, & E). The questions invited participants to: 1) Describe experiences with the ADVANCE Scholar Program (consider experiences with Scholars, Internal Advocates, and External Mentors). Offer both strengths and constructive suggestions for improvement; 2) Explain what impact the program has had on their work-life and/or professional career and 3) Identify suggestions for the ADVANCE Center in general, or for future institutionalization of Texas A&M University ADVANCE efforts. The open-ended qualitative questions were designed to capture rich, descriptive, detailed feedback in the participants’ words and to create space for the inclusion of topics and areas not previously considered.

Both the method of gathering feedback (via a confidential online instrument) and the methodology (qualitative/naturalistic) place emphasis on data gathering through processes that support and protect the research and the researched (Lincoln & Guba, 1985; Scheurich & Young, 2002; Smith, 1999). While the research itself is a potentially powerful intervention, evaluators are mindful that this intact group of easily identifiable participants may view our data-gathering efforts as a threatening activity with real and perceived negative consequences (Crenshaw, Gotanda, Peller, & Thomas, 1995; Niemann, 2012; Patton & Winkle Wagner, 2012). Thus, the primary research participants’ needs and concerns informed the process and the content, and therefore enables them to participate on their own terms (Smith, 1999).

While the Scholars’ interests were foremost in the research design, the evaluation was comprehensive. All program participants—Scholars, Internal Advocates, and External Mentors—were asked to simultaneously provide feedback about their experiences and the program’s impact. The assessment was timed such that Cohort 1 participated in the evaluation after two years of program participation and after there had been at least one face-to-face meeting between the Scholar and her external mentor. Program participants received up to four prompts: the initial invitation to complete the assessment and three reminders.

Data were analyzed by individual responses, by groups of respondents, by question, and holistically. To aid in data management, researchers utilized ATLAS.ti, a qualitative analysis software package, and the technical aspects involved content analysis, principally the processes of unitizing, categorizing, and constant comparison, as detailed in Lincoln & Guba (1985).

Summary of Significant Findings
The assessment produced a range of important findings. Overall, participants indicated that the program had a positive impact on their professional growth and development as scholars. Participants encouraged program continuation and provided suggestions on ways to strengthen it. Responses to each of the questions are detailed below. Quotations were selected based upon their cogency, clarity, and thematic alignment.

QUESTION 1. Describe your experiences with the ADVANCE Scholar Program. Consider your experiences with Scholars, Internal Advocates, and External Mentors. Please offer both strengths and constructive suggestions for improvement.
ADVANCE Scholars, Eminent Scholars/External Mentors, and Internal Advocates all expressed high satisfaction with the program, its goals, and the opportunities it created. Of particular note, all nine of the Eminent Scholars/External Mentors who responded to the assessment indicated that the program benefitted them also, and five of the Internal Advocates said they found the program inspirational. All nine of the Scholars who responded to the survey noted that being paired with an Eminent Scholar/External Mentor was a significant strength of the program. Graph 2 represents themes that emerged.

Graph 2: Responses to Question #1

Representative quotations in response to question 1 follow.

“I was selected for this program in my first year as an assistant professor and it has been of tremendous help. I was exposed early on to information and guidance since the beginning of my tenure which definitely has assisted in my professional trajectory. This program provided me the tools to reach out for mentors and mentoring opportunities, which I believe I would not have done otherwise.” – Scholar
“The ADVANCE Scholar Program was one of the best experiences I had during my [time] at TAMU. I felt great support from the activity leaders and my Internal Advocate [name redacted] was amazing. I always felt comfortable sharing with him the struggles I was having. He provided a balanced view and multiple options to pursue . . . My external mentor was also really great. I think because of the formalization of the relationship through ADVANCE, he felt even more strongly tied to my success. He introduced me to senior scholars (including a Nobel Laureate), he read my work, and he gave me feedback and advice on where to get it published. I could not have asked for nor found a more engaged and supportive mentor.” – Scholar

“My experiences with ADVANCE have been primarily positive. I think the strengths included the networking I was able to do with the other ADVANCE scholars, meeting with my ADVANCE external mentor, and the first spring conference. A weakness is that the conferences became less and less relevant as time marched on. Many of the messages were repeated. Formally linking me to my eminent mentor was probably the nicest perk from participating in the program.” – Scholar

“Before I participated in this Program, I did not know where and with whom I should consult regarding my problems and issues associated with my minority status . . . Now I’ve found a place and a group of people with whom I can talk about my issues at least, which is a great relief. Before participating in this program, I thought many times of quitting my job or leaving. The Advance Program gave me energy to survive in an environment very difficult for a female, non-white, scholar at A&M . . . The program itself is really encouraging and saves my life. The feeling that I am no longer alone is so important for me.” – Scholar

“My experiences with the Scholars, Internal Advocates, and External Mentors were supportive, consistent, and extremely useful.” – Scholar

“I received a personalized education on constructing a productive research program and I received guidance in building my academic portfolio for a successful review by the P&T committee. I also enjoyed the camaraderie with other early career scholars.” – Scholar

“I finally felt connected and felt as though I belonged to the academic community. The program helped me establish a solid and reliable mentoring network.” – Scholar

“My experiences have mostly revolved around the external mentor, which has been very helpful. I probably would not have reached out to a senior person in my field had it not been for the ADVANCE Scholars program which gave me mechanism for asking for mentoring . . . I have attended a few ADVANCE talks on campus but for the most part did not find them that helpful -- it is hard to make interdisciplinary events meaningful for such a broad group.” – Scholar

“My experiences were positive working with my mentee and meeting other mentees, as well as their graduate students. While attending program activities at the university, I met with other faculty and graduate students. This was a nice opportunity for sharing research and being able
to give them feedback. Also, the conversations provided support for the circumstances women of color face in academia. I am currently planning to working on an edited volume with my mentee in the near future and another one with her and another faculty at Texas A&M. I do wish the conference held had provided more time for individual meeting time with mentee and the workshops had been geared at grant writing and publishing -- not given by faculty but from press editors and folks from NEH, NSF, etc.” – Eminent Scholar/Mentor

“The strength of the program lies primarily in that it creates an environment in which a mentee can be guided through a structured, well-planned program.” – Eminent Scholar/Mentor

“We were well matched . . . I met with my mentee two years in a row at our annual national conference and will meet with her again at the upcoming annual conference. We spoke on the telephone a couple of times and emailed several times. I gave her advice about her research plans, about a competing outside offer she received and her negotiations (she decided to stay at Texas A&M), and about work/family issues. I nominated her [original research] for professional awards and she won one of them (a credit to her [work] not to my nomination--it did make me feel like I could help, though.” – Eminent Scholar/Mentor

“The program helped me enhance my mentoring skills.” – Eminent Scholar/Mentor

“The meeting of Internal Advocates should also continue. These meetings are a great opportunity to exchange ideas and experiences with scholars, discuss any challenges any Scholar is facing, and other general issues.” – Internal Advocate

“Being a White, male professor, our scholar/Internal Advocate interactions involved some situations that I had never experienced in my career and the basis of my advice was devoid of similar life experience, in that regard. Still, my breadth of experience in academic teaching, research and administration (particularly familiarity with TAMU P&T protocol and cases) allowed for, as the scholars have told me, beneficial direction prior both critical decisions on their paths and also comforting insights into a very stressful process. I have a sense that not having a female women of color as their Internal Advocate was not to any significant degree an impairment of the mentoring/advocacy process in these two cases. But, I will leave that to the scholars to relate.” – Internal Advocate

“My interactions with our ADVANCE Scholars have come primarily through coffees and lunches that we have had together, at least once per semester. These are often 1-2 hours in length and have explicit goals to be achieved and topics to be discussed, sometimes involving pre-meeting activities for both scholar and mentor . . . Our meeting discussions go much deeper than the mechanics of academic process and often deal with personal aspects of how the scholars’ lives are going, regarding work-life balance, relationships both professional and personal, etc.” – Internal Advocate
“The fact that there was a personalized forum for us to meet and discuss the challenges for professional recognition and advancement of women of color in STEM disciplines and offer possible solutions or simply exchange notes was - to my mind - a huge strength of the program.”
– Internal Advocate

“I have been able to make positive ties with more women faculty of color, and with women outside my department and college.” – Internal Advocate

In summary, participants’ experiences were primarily positive. Constructive feedback was provided regarding streamlining programming and tailoring events to meet the needs of broad audiences. In addition, three participants commented about the strengths of cross-gender and cross-racial mentoring.

**QUESTION 2. What impact has the program had on your work-life and/or professional career?**

All nine of the Scholars who responded to the survey indicated that networking opportunities increased their exposure and noted that the program provided important emotional support that aided in their wellbeing. Scholars also believed they received useful and timely advice, that their affiliation with the program helped to increase their productivity, and that endorsement/sponsorship by their Eminent Scholar/Mentors was of particular importance. The Eminent Scholars/Mentors also expressed appreciation for the networking the program afforded and noted that the program increased their awareness of the need to diversify STEM disciplines and to provide support for underrepresented women of color in STEM. Internal Advocates indicated that the program heightened their awareness of issues faced by women of color in STEM, expressed appreciation for the camaraderie and support that exists among the committee members, and said they found the program motivating. Graph 3 represents themes that emerged.
Representative quotations in response to question 2 follow.

“The ADVANCE Scholar program has accelerated my visibility with the peers of my research field.” – Scholar

“With the encouragement of the program’s stakeholders, I have initiated research collaborations with the post-doctoral and doctoral students in my external mentor’s thriving and eminent research lab.” – Scholar

“This program has provided me with tools, information, support, and mentoring to be able to strategize my tenure process and focus on what is important . . .” – Scholar

“Encouraged me to find and project my voice as a scientist and a faculty member.” – Scholar

“I’ve been given opportunities through my external mentor that I don’t believe I would have had otherwise, including invitations to join exclusive working groups of professors who are at the cutting edge of experimental [research in my field]. In terms of work-life, I think the speakers at
ADVANCE Scholar events have helped demonstrate that very successful women in STEM fields have families and outside interests. It was nice to see this in a TAMU context since my own department felt family-unfriendly.” – Scholar

“Less isolation. Improved network within and outside university.” – Scholar

“The feeling that I am no longer alone and that help is available if things get serious makes me feel emotionally secure. Even if the Program may not be able to actually ‘solve’ problems, the existence of this support system gives a sense of security in my daily life at A&M.” – Scholar

“Things that I have learned from [Eminent Scholar/Mentor] through this Program were invaluable for my survival . . .” – Scholar

“I had the opportunity to get to know younger scholars, which helps me when asked to make recommendations for publishing and research opportunities, serving on national committees and learning new areas in [our discipline].” – Eminent Scholar/Mentor

“It has helped me a good deal in my work with my own students as their mentor and guide through their academic careers. It was an excellent experience for me.” – Eminent Scholar/Mentor

“The program re-sensitized me to the particular challenges of being a junior scholar and the variety of demands on young scholars. It also helped me understand the particular challenges faced by women of color in the profession. The program gave me personal insights to complement my academic background in this area.” – Eminent Scholar/Mentor

“It made me more aware of the needs of a diverse work force, the need to more actively recruit women from underrepresented groups in the science fields, and to provide more mentorship to our own junior faculty. I am happy to maintain a professional relationship with [ADVANCE Scholar]. I have already written a strong letter in support of her tenure and will be happy to follow her career as she progresses in her academic career.” – Eminent Scholar/Mentor

“The program has made me more aware of the great need for junior scientists to have consistent, timely mentoring. As a result of my experiences in this program, I decided to take on the role of Departmental Mentoring Director at my own institution.” – Eminent Scholar/Mentor

“I also think it’s great that your program includes social scientists. All too often, people assume that only women in the ‘hard’ sciences need a support/mentoring program like ADVANCE and I don’t think that’s correct.” – Eminent Scholar/Mentor

“When she visited, we had a great opportunity to discuss issues in depth than what we could do on the phone or by Skype. If she had a larger travel budget for coming to visit, it would have been helpful.” – Eminent Scholar/Mentor
“The program needs to ensure substantial outreach. It strikes me that there are pockets of resistance in a number of Departments. Educating senior, male faculty would be useful.”
– Eminent Scholar/Mentor

“I hope the program continues and receives strong support from administration” – Eminent Scholar/Mentor

“When thinking of people for leadership posts or review board memberships, I will now first seek to identify women who are leaders in their field. Many times, people will just default to their close colleagues or people with whom they are most familiar, resulting in a reproduction of similar others in various posts. However, as I learned through the different ADVANCE workshops, we can combat this by being very intentional in our inclusive practices.” – Internal Advocate

“As internal advocate it was empowering for me to hear the stories of other internal advocates, especially to hear the pros and cons of various approaches since cultures are so radically different between departments and colleges.” – Internal Advocate

“I am much more sensitized to - and have a ‘language’ for naming - obstacles and barriers facing women scholars of color in STEM fields. Hearing the individual stories of advocates and scholars makes it easier to recognize that there are patterns and that many challenges are systemic and need to be addressed structurally.” – Internal Advocate

“I am much more willing to get involved at an individual and an institutional level to offer mentoring, support, and insight to tackle this problem.” – Internal Advocate

“The Program inspired me to develop a new graduate course focusing on research interests in gender, race, and science.” – Internal Advocate

To summarize, Scholars reported that the program promoted and supported their well-being, reduced isolation, opened doors, and provided vital encouragement. Mentors indicated that the program enhanced their mentoring skills, encouraged them to think about mentoring needs of junior scientists at their home institutions, and re-sensitized them to the challenges faced by junior scholars and those faced by women of color, in particular. Internal advocates noted that the program: inspired them; increased their awareness of the need to be intentional regarding broadening participation; helped them to identify multiple approaches to addressing issues that emerge; and brought attention to the need to address lack of participation in STEM at the structural level.

QUESTION 3. What suggestions do you have for the ADVANCE Center in general, or for future institutionalization of Texas A&M University ADVANCE efforts?

The Scholars provided valuable suggestions about topics they believe were either overlooked or that should be included going forward, suggested fewer programs in general, and promoted the
idea of broadening the program to men, and also to men of color, in particular, as they believe men of color contend with similar issues of marginalization. Eminent Scholars/Mentors reported that they would have liked more guidance regarding how to engage their Scholars and recommended including more women in the program and strengthening certain aspects of the program. Internal Advocates provided suggestions about how the program could be strengthened. Graph 4 represents themes that emerged.

**Graph 4: Responses to Question #3**

Representative quotations in response to question 3 follow.

“A significant element for me that was overlooked in this program of early career development was having support to establish a professional image and web presence, including an engaging and effective research lab page” – Scholar

“Take the time in the initial orientation of new participants to explain how the different ADVANCE programs track under different administrators. The agendas for the ADVANCE workshops, receptions, and Roadmap sessions, in total, often seem redundant.” – Scholar
“It may not be possible, but I have had more than a few White women make comments about wanting to join the ADVANCE Scholar program and not being able to. These have resulted in awkward conversations about how disadvantaged they are -- some stories are more compelling than others (e.g., religious minorities in TX). Is it possible to just evaluate their cases individually so I don’t have to hear ‘well they won’t let White women in’?” – Scholar

“I have attended a few ADVANCE talks on campus but for the most part did not find them that helpful. It is hard to make interdisciplinary events meaningful for such a broad group.”
– Scholar

“Attending the talks (on food, exercise, etc.) take valuable time away from work and family. Those talks seemed too basic for professional women.” – Scholar

“My greatest experiences have been the Scholar program and the informal writing groups that the Center has helped facilitate. I managed to get seven papers under review last summer, and I credit some of that to the writing group I was part of. It was really great to be around other women of color who were early in their careers and encourage each other to succeed.”
– Scholar

“I like the personal touch of the current Program.” – Scholar

“Honesty, confidentiality, no penalty, empathy, caring of each other within the community – these should remain the heart of the Program.” – Scholar

“I suppose the only thing I would recommend is that you provide Mentors more long-distance guidance about ‘best practices’ for mentoring the Scholars. However, I guess that Mentors are invited because it is believed that they already engage in best practices and may not need help. I hope that’s true! I enjoyed the experience.” – Eminent Scholar/Mentor

“I do wish the conference held had provided more time for individual meeting time with my mentee.” – Eminent Scholar/Mentor

“I think the ADVANCE Scholar Program is an immensely useful and much needed opportunity to be able to offer support to our colleagues in academic professions.” – Eminent Scholar/Mentor

“The ADVANCE Scholar program enables an institutionalized means of being able to make time to engage in important kinds of supportive activities and relationships. I was delighted to be invited to participate . . . getting to know someone whose research interests overlap with many of my own. I also quite enjoyed the opportunity to think through, with my mentee, intellectual problems in conducting research, in writing for different kinds of scholarly and popular audiences, and in becoming more familiar with navigating the terrain of academic appointments, retention, and promotion.” – Eminent Scholar/Mentor
“So mentees can get the absolute most out of their participation in the Program, I think there could be greater Program oversight: 1) Mentees should send in regular, brief progress reports over the course of the year 2) Mentees should submit detailed, brief explanations or proposals for each of their funded trips - to do research, attend conferences, visit their mentors, etc. 3) Mentees should submit an end-of-the-year report reiterating what their initial goals were, what they have accomplished during the course of the year, and how they have benefitted from the ADVANCE Scholar Program and 4) Coordinators should convene meetings with all mentees regularly.” – Eminent Scholar/Mentor

“I would say that I was brought in as a mentor fairly late. I would have liked to mentor from a much earlier time in the career path of my mentee.” – Eminent Scholar/Mentor

“It will be very important to keep this going. And, while I appreciate that the scholars sign on for 2-year stints, we really need to extend these opportunities beyond that time. Using resources from other areas would allow that to happen. The benefits are too important to just drop it.” – Internal Advocate

“This program is very important for the advancement of minority faculty at our institution and it should become a permanent program or center. My only suggestion is that you need to involve more the Department Heads and Deans who should be responsible for the success of their faculty [and] accountable for their failure.” – Internal Advocate

“Continue what you are doing. I appreciate being invited to serve as an Internal Advocate. Efforts like these are necessary to improve the climate at Texas A&M and to promote these great young women faculty.” – Internal Advocate

“Both the program and the mentoring it supported have been tremendous successes. . .” – Internal Advocate

“I would love to see the administrative fellows program continue. It is so important for female faculty to be able to test the waters of administration without feeling like they have to commit fully. The retreat for Internal Advocates and Scholars also brought into clear focus how much we need a place/time for all supporters of women to be able to speak freely.” – Internal Advocate

“As important and supportive as the ADVANCE Scholar initiative is, I believe that until departments and colleges actually are held accountable for their efforts to address diversity, efforts by individual faculty involved in ADVANCE will not be appropriately recognized or validated. I believe that annual evaluations of individual faculty should not just solicit information about diversity efforts but also reward faculty who have been active in them and not reward faculty solely on the basis of advancing their own career.” – Internal Advocate

Future topic suggestions include: delivering a great presentation, developing a research website, financial planning, funding your summer, getting the most out of conferences, mentoring women
faculty of color, non-standard ways of succeeding in the academy, transitioning from a Post-doc to faculty, thinking about leaving academia or needing a break; using conferences to highlight achievements; and whole department mentoring junior faculty.

In summary, the Scholars requested greater clarity regarding all ADVANCE Center initiatives, encouraged broadening the program beyond women of color in STEM, requested more relevant topics, and urged coordinators to ensure that the program maintains its personal touch. The Eminent Scholars/Mentors recommended greater program oversight and the provision of specific ways to engage their protégés. Internal Advocates encouraged institutionalization of the Program, the inclusion and involvement of more college administrators, and increased accountability.

Conclusions of the Evaluation
Many important findings emerged from this program assessment. However, the most compelling are these: The ADVANCE Scholar Program is deemed very beneficial for early career women faculty of color in STEM, as it provides important support and guidance. Additionally, pairing the ADVANCE Scholar with an Eminent Scholar/External Mentor is believed to be a core strength of the Program. Furthermore, structuring a “circle of advocates” around the Scholars where they had access to a senior Texas A&M University faculty colleague, the ADVANCE Center, and an Eminent Scholar/External Mentor was very valuable. Moreover, an unintended positive outcome was evidenced in Scholars, Eminent Scholar/External Mentors, and Internal Advocates all reporting that they benefitted from participation in the Program. This is consistent with research which indicates that successful mentoring relationships are mutually beneficial. Also, a majority of participants from each group—Scholar, Eminent Scholar/External Mentor, and Internal Advocate—recommended continuing and institutionalizing the Program.

Several themes of programmatic success also emerged. The Scholars reported: increased visibility, increased manuscripts in preparation and proposals submitted, increased recognition and awards, important invitations to present their scholarly research, fruitful networking opportunities, as well as promotion and retention.

Overall, the evaluation participants provide evidence that the ADVANCE Scholar program is indeed facilitating the Psychologically Healthy Workplace goals of promoting 1) Growth and Development: by connecting participants with an internal advocate and an external eminent mentor who work together to help the scholar reach her goals; 2) Health and Safety: through support and mentorship regarding negotiating workplace stress; 3) Involvement: through fostering broader university and national engagement and networking; and 4) Work-Life Balance: through guidance regarding achieving success while maintaining a quality personal and professional life.

Recommendations
The factors that influence the success of women faculty of color in STEM disciplines, particularly at predominantly White colleges and universities such as Texas A&M University, are complex, intersecting, nuanced, and varied. ADVANCE Scholar participants applied largely
because they welcomed the opportunity to be recognized, supported, and treated foremost as scholars. In addition, they are well aware that their identities place them in local and national spaces where they are often made to feel silenced, isolated, alienated, vulnerable, and invisible. Several of the participants, including the senior women faculty of color who served as internal advocates and external mentors, noted that they, too, could have benefited from this program, particularly early in their careers. The literature states that mentoring does influence success, when the mentoring relationship is cultivated and sustained well (Stanley, 2006; Stanley & Lincoln, 2005; Turner, Gonzalez & Wood, 2008).

While the findings of this evaluation point to clear areas of success, Scholars, Eminent Scholars/Mentors, Internal Advocates, and the ADVANCE Center leadership team have discussed areas for further exploration and enhancement, including the following recommendations for future program success, as well as possible sustainability:

1) Incorporate constructive feedback and use components of the ADVANCE Scholar Program as a working model for mentoring all faculty at the university, with particular attention to faculty who may be underrepresented and/or marginalized by discipline, as well as across social and cultural identities.

2) Develop guidelines for Eminent Scholar Mentors and Protégés so that individuals who agree to enter a mentor-protégé relationship are better aware of goals, best practices, expectations for engagement, and professional development outcomes.

3) Ensure that the mentor-protégé relationship is established at the time of faculty hire to enable deeper and more meaningful impact over the course of the faculty member’s career. This could lead to more successful third-year and promotion and tenure reviews.

4) Work with the Office of the Dean of Faculties and the ADVANCE Center to incorporate the findings of the program evaluation into key faculty and administrator development initiatives at the university such as the annual new faculty orientation, leadership development seminars for deans and department heads, promotion and tenure development workshops, and search committee training.

5) Use the findings of the program evaluation to enhance the Scholar Program and to develop future faculty mentoring programs at the university.
APPENDIX A
INVITATION TO ALL ELIGIBLE STEM WOMEN FACULTY OF COLOR

Dear INSERT NAME:

On behalf of the ADVANCE Center, we extend to you our cordial invitation to attend an informational meeting to learn about the ADVANCE Scholar Program, a program explicitly designed to contribute to the retention and promotion of women faculty of color in STEM disciplines. For your convenience, we have scheduled two identical sessions at different times, both held in 404 Rudder Tower:

Thursday, April 28, 2011 1:45pm - 3:15pm

Friday, April 29, 2011 3:30pm - 5:00pm

You only need to attend one.

One of our committee members will contact you in the next few days to follow up on this invitation and to address any questions you may have.

To register your attendance, please contact Dr. Becky Petitt at becky@tamu.edu or (979) 862-2926 by April 26. Please inform us of any necessary accommodations when registering.

You may also visit the ADVANCE website ahead of the meeting to learn more about the program: http://advance.tamu.edu/.

We welcome your involvement and hope you will come and learn about the benefits of your participation. We trust you will find this opportunity worth pursuing.

Cordially,

ADVANCE Scholar Co-Chairs

Christine A. Stanley, PhD
Vice President and Associate Provost for Diversity
Professor, Higher Education Administration

Becky Petitt, Ph.D.
Associate Vice President for Diversity and
Chief of Staff
APPENDIX B
INVITATION TO SERVE AS EMINENT SCHOLAR/MENTOR

Dear Professor INSERT NAME:

We cordially invite you to serve as an NSF ADVANCE Mentor to Dr. INSERT NAME, assistant professor of INSERT NAME at Texas A&M University.

INSERT NAME, a very talented scholar, applied and was selected to be one of eighteen ADVANCE Scholars through our recently awarded NSF ADVANCE-IT grant. The objective of our ADVANCE Scholar Program is to facilitate mentoring between Texas A&M University women faculty of color in STEM disciplines and eminent scholars in their fields. The program is explicitly designed to contribute to the retention and promotion of tenured and tenure-track women faculty of color in STEM disciplines at Texas A&M University and to enhance their success as they advance in academia.

Our program seeks to supplement formal advising Dr. INSERT NAME is already receiving in her home college. We have attached Dr. INSERT NAME curriculum vitae and professional goals for your review. She is a scholar with extraordinary potential and we believe the opportunity to receive mentoring from you as an external leading scientist will strengthen her capabilities and propel her even further in her career.

While we hope the mentoring relationship is enduring, we ask for a one-year commitment, at minimum. Additionally, the relationship should necessarily be customized to accommodate both your and Dr. INSERT NAME needs, interests, and availability.

Dr. INSERT NAME, our ADVANCE Scholar, has been awarded funds to travel to a conference or to your institution to meet with you in person. As a mentor, you will receive a one-time $500 stipend and funds to travel to Texas A&M University to visit with INSERT NAME, and to possibly deliver a seminar while you are here.

Having been awarded an NSF ADVANCE grant represents significant progress in our goal to recruit, retain, and advance outstanding women faculty. We welcome your involvement and hope you will consider joining us in our effort to promote women faculty in the sciences.

If you are interested in serving as a mentor to Dr. INSERT NAME, please inform Dr. Christine Stanley by e-mail christine-a-stanley@tamu.edu or by phone (979-458-2905) by September 23, 2013. Thank you in advance for your consideration.

Sincerely,

Karan Watson, PhD, PE
Provost and Executive Vice President for Academic Affairs
Regents Professor, Electrical and Computer Engineering

Christine A. Stanley, PhD
Vice President and Associate Provost for Diversity Professor, Higher Education Administration
APPENDIX C
PROGRAM EVALUATION EMAIL INVITATION

Dear ${e://Field/title},

Thank you so much for your participation as an ${e://Field/role} in the ADVANCE Scholar Program.

The purpose of the ADVANCE Scholar Program is to increase the likelihood of success for underrepresented women STEM faculty members, particularly women of color, by providing mentoring with eminent scholars. Furthermore, the ADVANCE Center’s Success Enhancement Activities bring together senior Texas A&M faculty who serve as program advisors and internal advocates for the ADVANCE Scholars.

Over the past two years, ADVANCE scholars, eminent scholars, and internal advocates have participated in a number of ADVANCE Scholar activities such as: mentoring meetings and lunches, the Fall symposium, Spring retreat, social network gatherings, visits with eminent scholars, and other ADVANCE-related activities.

This summer, we are evaluating the program to assess whether the program is addressing its purpose, while meeting the needs and expectations of the ADVANCE scholars, eminent scholars, and internal advocates. The evaluation is comprised of three open-ended questions designed to provide qualitative data. We will use your feedback for NSF reporting purposes and to continue developing the ADVANCE Scholar program. Your responses to the evaluation are confidential: No identifying information will be disclosed when we report the results of the evaluation.

Please complete the evaluation no later than 9:00 AM, August 30, 2013. Please note: The URL below is linked to your name, title, and email address, but will not be attached to your responses. No individual responses will be attributed to any person and information will be reported in aggregate.

Follow this link to the evaluation:
${l://SurveyLink?d=ADVANCE Scholar Evaluation 2013}

Or copy and paste the URL below into your internet browser:
${l://SurveyURL}

If you have any questions or concerns about the program evaluation, please feel free to contact Dr. Becky Petitt by email at becky@tamu.edu, or by phone at (979) 458-2905. Thanks again for your participation in the ADVANCE Scholar Program, and we look forward to your valuable feedback.

Sincerely,

ADVANCE Scholar Co-Chairs
Christine A. Stanley, PhD
Vice President and Associate Provost for Diversity Professor, Higher Education Administration

Becky Petitt, Ph.D.
Associate Vice President for Diversity and Chief of Staff
APPENDIX D
ADVANCE SCHOLAR PROGRAM EVALUATION FORM IN QUALTRICS

Introduction and Background: The purpose of the ADVANCE Scholar Program is to increase the likelihood of success for underrepresented women STEM faculty members, particularly women of color. The program provides mentoring for participants with eminent scholars in their respective fields. As one of the ADVANCE Center’s Success Enhancement Activities, this program also brings together senior Texas A&M faculty who serve as program advisors and internal advocates for the ADVANCE Scholars. Over the past two years, ADVANCE scholars, eminent scholars, and internal advocates have participated in a number of ADVANCE Scholar activities such as: mentoring meetings and lunches, the Fall symposium, Spring retreat, social network gatherings, visits with eminent scholars, and other ADVANCE-related activities.

Purpose: The purpose of this evaluation is to collect feedback about your experiences with the ADVANCE Scholar Program. Responses to these three open-ended questions will provide qualitative data so that we can use the feedback to gauge efforts for improvements in the program as well for future institutionalization of ADVANCE efforts. No individual responses will be attributed to any person and information will be reported in aggregate. Please click “Next” to proceed with the evaluation.

Q1. Describe your experiences with the ADVANCE Scholar Program. Consider your experiences with Scholars, Internal Advocates, and External Mentors. Please offer both strengths and constructive suggestions for improvement.

Q2. What impact has the program had on your work-life and/or professional career?

Q3. What suggestions do you have for the ADVANCE Center in general, or for future institutionalization of Texas A&M University ADVANCE efforts?
Dear $e://Field/title$,

Thank you so much for your completing the ADVANCE Scholar Program evaluation. We will use your feedback for NSF reporting purposes and to continue developing the ADVANCE Scholar program. Again, your responses to the evaluation are confidential: No identifying information will be disclosed when we report the results of the evaluation.

We plan to have the results analyzed and the report prepared by September 30, 2013. If you are interested in the results of the program evaluation, we will be happy to share them with you. If you have any questions or concerns about the program evaluation, please feel free to contact Dr. Becky Petitt by email at becky@tamu.edu, or by phone at (979) 458-2905. Thanks again for your participation in the ADVANCE Scholar Program and for your valuable feedback.

Sincerely,
ADVANCE Scholar Co-Chairs
Christine A. Stanley, PhD
Vice President and Associate Provost for Diversity
Professor, Higher Education Administration

Becky Petitt, Ph.D.
Associate Vice President for Diversity and Chief of Staff
Office of the Vice President and Associate Provost for Diversity
APPENDIX F
MENTOR PARTICIPATION THANK YOU

Dear Professor INSERT NAME:

We would like to express our sincere appreciation for your service as an NSF ADVANCE Mentor to Dr. INSERT NAME, Assistant Professor of INSERT NAME at Texas A&M University.

Your commitment of time, energy, and attention to Dr. INSERT NAME professional development has been an invaluable contribution toward the ADVANCE Scholar Program’s objective to promote and advance the success of Texas A&M University women faculty of color in STEM through mentoring with eminent scholars in their fields. Your guidance and support has not only helped strengthen Dr. INSERT NAME capabilities and propel her even further in her career, but has also had a lasting impact on the retention and promotion of tenured and tenure-track women faculty of color in STEM and targeted disciplines at Texas A&M University.

We particularly want to recognize your dedication to fostering enduring mentorship with Dr. INSERT NAME by going beyond the minimum one-year commitment initially requested by the ADVANCE program. We hope that both of you will find opportunities to maintain the mentoring relationship in years to come.

We also want to thank you for the valuable feedback you provided in the program evaluation. Your comments, especially those suggesting ways in which we can improve the program, have helped us identify our best practices and have encouraged us to continue to seek ways to better meet the needs of our Scholars and their mentors.

The NSF ADVANCE grant and Scholar Program represents significant progress in our goal to recruit, retain, and advance outstanding women faculty, and your contribution toward this goal reinforces the value of the work we are doing. Thank you again for your involvement.

Sincerely,

Karan Watson, Ph.D., P.E.
Provost and Executive Vice President for Academic Affairs
Regents Professor of Electrical and Computer Engineering

Christine A. Stanley, Ph.D.
Vice President and Associate Provost for Diversity Professor, Higher Education Administration

CC: Eminent Mentor’s Dean
Eminent Mentor’s Department Head
References


