#### FY 2013 REPORT TEMPLATE FOR NSF COMMITTEES OF VISITORS (COVs)

The table below should be completed by program staff.

Date of COV: September 9–10, 2013

**Program/Cluster/Section:** Historically Black Colleges and Universities – Undergraduate Program (HBCU-UP)

**Division:** Division of Human Resource Development (HRD)

**Directorate:** Directorate for Education and Human Resources (EHR)

Number of actions reviewed: 89

Awards: 32

**Declinations: 45** 

Other: 12 (Supplements and Forward Funds)

Total number of actions within Program/Cluster/Division during period under review: 479

Awards:124

**Declinations:221** 

Other: 134 - 10 RWR, 31 WTH,3 INVT, 5 NINVT, 85 Supplements and forward funds Manner in which reviewed actions were selected:

Program staff selected 89 awards and declines by randomly choosing actions that ended in the odd numbers 3, 5 and 7, as well as selecting a few additional actions to give a complete picture of the portfolio. Out of the sample of 89 jackets, each COV member was asked to review 12 (6 awards and 6 declines). However, the COV members were welcome to look at more jackets if they wanted to.

### **COV Membership**

	Name	Affiliation
	Dr. Evelynn Hammonds	Harvard University
COV Chair or Co-Chairs:	Dr. Francisco C. Rodriguez	MiraCosta Community College District
	Dr. Carolyn Meyers	Jackson State University
COV Members:	Dr. Carlos Castillo-Chavez	Arizona State University
	Dr. Monica Cox	Purdue University

### INTEGRITY AND EFFICIENCY OF THE PROGRAM'S PROCESSES AND MANAGEMENT

Briefly discuss and provide comments for *each* relevant aspect of the program's review process and management. Comments should be based on a review of proposal actions (awards, declinations, and withdrawals) that were *completed within the past three fiscal years*. Provide comments for *each* program being reviewed and for those questions that are relevant to the program(s) under review. Quantitative information may be required for some questions. Constructive comments noting areas in need of improvement are encouraged.

#### I. Questions about the quality and effectiveness of the program's use of merit review

**process.** Please answer the following questions about the effectiveness of the merit review process and provide comments or concerns in the space below the question.

QUALITY AND EFFECTIVENESS OF MERIT REVIEW PROCESS	YES, NO, DATA NOT AVAILABLE, or NOT APPLICABLE
1. Are the review methods (for example, panel, ad hoc, site visits) appropriate?	YES
Comments:	
Methods appeared to be concise and consistent across reviewed proposals. Panel reviews seem to be an effective way to review methods; comments were constructive and appropriate to the program. The Program Director (PD) showed a deep understanding of the institutions, and effectively evaluated the background of the reviewers to create an efficient panel. Grants with larger budgets and personnel had a more diverse and larger set reviewers, which were quite appropriate, a decision that protected reviewers from being overburdened.	
2. Are both merit review criteria addressed	YES
a) In individual reviews? - YES	
b) In panel summaries? - YES	
c) In Program Officer review analyses? - YES	
Comments:	
Quality of reviews was variable in terms of depth and quality. This is a point where the management of the program is critical, specifically the role of the PD in overseeing the process. The assessment of review quality was handled in an	

executional manner	
exceptional manner.	
There were some inconsistencies in individual reviews regarding merit criteria. A few individual reviews required further elaboration, particularly with respect to the broader impacts component. Some reviews did not completely address the intellectual merit portion. Reviews did not always align with NSF questions.	
Panel summaries were thorough and well-assembled; the program review was the most comprehensive review of the panel activities.	
3. Do the individual reviewers giving written reviews provide substantive comments to explain their assessment of the proposals?	YES
Comments:	
Yes, most provided substantive, constructive comments while some elaborated more than others. Overall, their assessments were consistent with proposal ratings and the recommendation after reading the reviews was obvious to see. The reviews were typically consistent across individual reviewers. For example, if someone noticed a weak dissemination plan, all reviewers noted the same weakness.	
4. Do the panel summaries provide the rationale for the panel consensus (or reasons consensus was not reached)?	YES
Comments:	
The overwhelming majority of panel summaries did provide details for the rationale, but at least one was vague and some did not reflect any additional conversation within the panel when a consensus was not reached. While these were outliers, the clarity with which issues are raised could be improved in this situation, panel discussion should be reflected in the panel summary more than what was observed.	
For example, one evaluation was rated fair, which was in strong contradiction to the other reviews. The summary did explain what happened and the discrepancies were handled well and accounted for by the PD. The panel reviews tended to be diplomatic, particularly when there were discrepancies.	
5. Does the documentation in the jacket provide the rationale for the award/decline decision?	YES
[Note: Documentation in the jacket usually includes a context statement, individual reviews, panel summary (if applicable), site visit reports (if applicable), program officer review analysis, and staff diary notes.]	
Comments:	
Documentation in jacket was complete and did provide rationale.	

6. Does the documentation to the PI provide the rationale for the award/decline decision?	YES
[Note: Documentation to PI usually includes context statement, individual reviews, panel summary (if applicable), site visit reports (if applicable), and, if not otherwise provided in the panel summary, an explanation from the program officer (written in the PO Comments field or emailed with a copy in the jacket, or telephoned with a diary note in the jacket) of the basis for a declination.]	
Comments:	
Perhaps in a few declines there should have been more details but otherwise the information given to the Principal Investigator (PI) in this program is more detailed than what is received on average. The PI received the reviews, the panel summary, and a letter; the documentation often included information that would guide the PI into the next track or submission. This documentation allows for engagement and renewed focus on critical points.	
7. Additional comments on the quality and effectiveness of the program's use of merit review process:	
The PD did a marvelous job balancing and smoothing out the natural differences that arise in the review process. The PD engaged all the reviewers and demonstrated a professional approach at smoothing out inconsistencies.	

**II. Questions concerning the selection of reviewers.** Please answer the following questions about the selection of reviewers and provide comments or concerns in the space below the question.

SELECTION OF REVIEWERS	YES , NO, DATA NOT AVAILABLE, or NOT APPLICABLE
1. Did the program make use of reviewers having appropriate expertise and/or qualifications?	YES
Comments:	
The program clearly selected experts in the field when appropriate - Research Initiation Awards (RIAs) - or a broad group of expert reviewers in programs where diverse expertise is required. There was not an overuse of reviewers (a small population). The number of reviewers was proportional to the size of the award. The reviewers selected were appropriate to the program and track. The home institutions of the reviewers were diverse, cutting across educational institutions, professional societies, policy agencies, and the like.	

2. Did the program recognize and resolve conflicts of interest when appropriate?	YES
Comments:	
The consistent and persistent reminders of the importance of this are handled very well.	
Additional comments on reviewer selection:	
The review process included strong representation of expertise in HBCUs. The representation of women is strong and commendable. The COV was impressed with demographics slide of provided during the program overview of the onsite COV meeting.	
The COV does wonder if there was cognizance of disability issues in the reviewer selection process. Reviewer selection must clarify efforts to select reviewers with disabilities.	

**III. Questions concerning the management of the program under review.** Please comment on the following:

### MANAGEMENT OF THE PROGRAM UNDER REVIEW

1. Management of the program.

Comments:

The size of the management team has been reduced while the number of grant submissions has increased by over 300%. Yet, the quality of the process and enthusiasm for the goals and objectives of the portfolio have remained. The committee is impressed by the program's thoroughness and attention to detail in spite of a reduction in management.

2. Responsiveness of the program to emerging research and education opportunities.

Comments:

The new Targeted Infusion (TI) grants program has experienced high growth in number of applications; an indication that the program is responding well to the community needs to strengthen departments. The RIAs appear to be a successful model for providing resources to mid-career faculty who engage in rigorous research.

The strength of the TI program is its ability to build research and capacity within individual departments. The COV was impressed that reviewers commented very specifically whether the research was backed with the latest references and discoveries in that area. Broadening STEM

projects within the HBCU portfolio have much potential to add to the body of knowledge and participation in the student body.

3. Program planning and prioritization process (internal and external) that guided the development of the portfolio.

Comments:

The program demonstrates a very deliberate effort to guide the development of the portfolio and to fulfill multiple missions (RIAs, Broader Impacts, and TI grants). An emphasis of involvement from the community and a reflection of national priorities are evident in the planning process.

There were no data or information on the strategic planning for this COV, but judging by the increase in budget, submissions, and successes, the planning seems timely and reasonable.

The COV would appreciate some clarification regarding the criteria for planning and prioritization, that is, a short history on "how we got here."

4. Responsiveness of program to previous COV comments and recommendations.

Comments:

Program response was timely, thorough, and appropriately addressed points or made commitments to follow through according to previous COV comments and recommendations.

**IV. Questions about Portfolio.** Please answer the following about the portfolio of awards made by the program under review.

RESULTING PORTFOLIO OF AWARDS	APPROPRIATE, NOT APPROPRIATE, OR DATA NOT AVAILABLE
1. Does the program portfolio have an appropriate balance of awards across disciplines and sub-disciplines of the activity?	APPROPRIATE
Comments:	
There appears to be a balance in success rates, diversity of fields, and institutions across tracks.	
2. Are awards appropriate in size and duration for the scope of the projects?	NOT APPROPRIATE

Comments:	
The awards seem appropriate for size and duration and largely follow the PI's budgetary requests. They are appropriate given the resources that are available for the whole program. However, the committee recommends increasing the amount of funding in a model where the number of awards remains constant in each category but with the duration of the RIA being extended to three years of awards instead of two. Given a more competitive environment, it is necessary to have three years as was done with the prior Minority Initiation Awards.	
cutting the number of awards. Getting the cooperation of the other three divisions in funding a third year would be fantastic.	
3. Does the program portfolio include awards for projects that are innovative or potentially transformative?	APPROPRIATE
Comments:	
<ul> <li>Yes, projects build on previously funded HBCU-UP projects and engage international strategy. The committee noted three innovative/transformative example proposals: <ol> <li>A particularly innovative proposal</li> <li>A rapid response grant funded to address an ongoing crisis related to shoreline oil spills</li> <li>A proposal that created a campus-wide initiative for sustainable energy and targeted all university students not just STEM students.</li> </ol> </li> </ul>	
The committee also noted a theme of ACE projects being innovative and transformative in nature.	
4. Does the program portfolio include inter- and multi-disciplinary projects?	APPROPRIATE
Comments:	
Significant multi-disciplinary overlap was observed, as mentioned in the proposals from the previous question. This was particularly true in Broadening Impacts projects. Substantial student engagement in the overwhelming majority of proposals in the portfolio is a natural indication of multi-disciplinary scope.	
RIAs were not typically multi-disciplinary; the committee notes that this may be a result of the culture in a given institution. Depending on the orientation of an institution's department, it may be difficult to implement multi- disciplinary projects for political or campus culture reasons.	
5. Does the program portfolio have an appropriate geographical distribution of Principal Investigators?	APPROPRIATE

Comments:	
Yes, the portfolio reflects an increase in geographic diversity over time. Some institutions are not focused on STEM programs (they may focus on the liberal arts or may be traditional teaching institutions that do not align with research oriented interests), which explains why some institutions or areas have very few awards. The committee notes that it is reasonable for awards to be concentrated in the South because that is where the majority of HBCUs are located.	
6. Does the program portfolio have an appropriate balance of awards to different types of institutions?	APPROPRIATE
The portfolio shows a good balance of funding in HBCUs varying across Carnegie Classifications that emphasize STEM.	
7. Does the program portfolio have an appropriate balance of awards to new investigators?	APPROPRIATE
NOTE: A new investigator is an investigator who has not been a PI on a previously funded NSF grant.	
Comments:	
Data in charts indicates that 53-55% of awards from 2010-2012 have been to new investigators. RIA awards are critical because the process is part of the bigger mission of developing talent and skills. The NSF process and the constructive feedback that comes with it introduce PIs at HBCUs to grantsmanship, a unique and critical need that may not be available through other programs.	
8. Does the program portfolio include projects that integrate research and education?	APPROPRIATE
Comments:	
Yes, two proposals reviewed by the committee provided a good example of such integration. Within the proposals that are not research oriented, it is difficult to speak on the integration of education and research.	
9. Does the program portfolio have appropriate participation of underrepresented groups <sup>1</sup> ?	APPROPRIATE

<sup>&</sup>lt;sup>1</sup> NSF does not have the legal authority to require principal investigators or reviewers to provide demographic data. Since provision of such data is voluntary, the demographic data available are incomplete. This may make it difficult to answer this question for small programs. However, experience suggests that even with the limited data available, COVs are able to provide a meaningful response to this question for most programs.

Comments:	
Yes, programs strongly if not completely supported the participation of traditionally underrepresented groups, since most participants are African Americans at HBCUs. Additionally, in collaborative projects, including projects from two reviewed proposals, participation goes beyond the students in the funded institution.	
The committee recommends that the gender ratio in STEM programs be monitored with an effort to involve African American men.	
10. Is the program relevant to national priorities, agency mission, relevant fields and other constituent needs? Include citations of relevant external reports.	APPROPRIATE
Comments:	
The 2010 National Academy of Sciences Report by Freeman Hrabowski is a great source as it highlights the significance of the HBCU program. At the Joint Mathematics Meetings on January 15, 2014, Dr. Habrowski will discuss the status of this report with responses from Richard Tapia and James Sylvester Gates.	
PCASE Reports are relevant and critically important.	
11. Additional comments on the quality of the projects or the balance of the portfolio:	
The COV reiterates the need for an extension of RIAs from two to three years without compromising the budget.	

### OTHER TOPICS

# 1. Please comment on any program areas in need of improvement or gaps (if any) within program areas.

Increase funding for RIAs so that new investigators can apply for a third year of funding, this decision could have a very high impact.

# 2. Please provide comments as appropriate on the program's performance in meeting program-specific goals and objectives that are not covered by the above questions.

The committee found that the Program Director has excellent collaborations with other programs and continually pursues the co-funding of proposals. We hope that the Program Director could be empowered even more to leverage her portfolio for the benefit of the academy and the STEM enterprise. We hope to see an increase in the ability of this program to document and disseminate its successes in broadening participation more widely.

# 3. Please identify agency-wide issues that should be addressed by NSF to help improve the program's performance.

Promoting and participating in the support of the portfolio of this program through other NSF programs should be a priority through collaboration among the NSF directorates as well as programs within the institution. Directorates should feel obligated to support the success of other NSF programs.

The NSF should highlight successful contributions of this program and disseminate the results to other federal organizations, with an emphasis on the disproportionate contribution of HBCUs to the diversity of the STEM workforce.

#### 4. Please provide comments on any other issues the COV feels are relevant.

HBCUs provide a strong foundation for African American students that feed the STEM workforce. The NSF can bring value to this process by giving advocates concrete examples of successes and channeling these examples to policy makers and legislators.

## 5. NSF would appreciate your comments on how to improve the COV review process, format and report template.

The abundance of information provided in the eJackets is gratefully acknowledged. FastLane presented minor technical difficulties, albeit the staff was ready and willing to assist in resolving them. Improvement in accessing PI history is also necessary.

#### SIGNATURE BLOCK:

For the 2013 HBCU COV Dr. Carolyn Meyers Panel Chair