CORE QUESTIONS and REPORT TEMPLATE
for
FY 2014 NSF COMMITTEE OF VISITOR (COV) REVIEWS

Guidance to NSF Staff: This document includes the FY 2014 set of Core Questions and the COV Report Template for use by NSF staff when preparing and conducting COVs during FY 2014. Specific guidance for NSF staff describing the COV review process is described in the "COV Reviews" section of NSF's Administrative Policies and Procedures which can be obtained at https://inside.nsf.gov/aboutnsf/hownsfworks/rolesresponsibilities/Pages/Committee-of-Visitors.aspx [1] .

NSF relies on the judgment of external experts to maintain high standards of program management, to provide advice for continuous improvement of NSF performance, and to ensure openness to the research and education community served by the Foundation. Committee of Visitor (COV) reviews provide NSF with external expert judgments in two areas: (1) assessments of the quality and integrity of program operations and program-level technical and (2) managerial matters pertaining to proposal decisions.

The program(s) under review may include several sub-activities as well as NSF-wide activities. The directorate or division may instruct the COV to provide answers addressing a cluster or group of programs – a portfolio of activities integrated as a whole – or to provide answers specific to the sub-activities of the program, with the latter requiring more time but providing more detailed information.

The Division or Directorate may choose to add questions relevant to the activities under review. NSF staff should work with the COV members in advance of the meeting to provide them with the report template, organized background materials, and to identify questions/goals that apply to the program(s) under review.

Suggested sources of information for COVs to consider are provided for each item. As indicated, a resource for NSF staff preparing data for COVs is the Enterprise Information System (EIS) –Web COV module, which can be accessed by NSF staff only at http://budg-eis-01/eisportal/default.aspx. In addition, NSF staff preparing for the COV should consider other sources of information, as appropriate for the programs under review.

For programs using section IV (addressing portfolio balance), the program should provide the COV with a statement of the program's portfolio goals and ask specific questions about the program under review. Some suggestions regarding portfolio dimensions are given on the template. These suggestions will not be appropriate for all programs.

Guidance to the COV: The COV report should provide a balanced assessment of NSF's performance in the integrity and efficiency of the ***processes*** related to proposal review. Discussions leading to answers of the Core Questions will require study of confidential material such as declined proposals and reviewer comments. ***COV reports should not contain confidential material or specific information about declined proposals.*** The reports generated by COVs are made available to the public.

We encourage COV members to provide comments to NSF on how to improve in all areas, as well as suggestions for the COV process, format, and questions. For past COV reports, please see http://www.nsf.gov/od/oia/activities/cov/.

[1] The COV Reviews section has three parts: (1) Policy, (2) Procedures, and (3) Roles & Responsibilities.

FY 2014 REPORT TEMPLATE FOR NSF COMMITTEES OF VISITORS (COVs)

The table below should be completed by program staff.

Date of COV: March 12-13, 2015
Program/Cluster/Section: NSF Scholarships in STEM (S-STEM) Program
Division: Division of Undergraduate Education
Directorate: Directorate for Education and Human Resources
Number of actions reviewed: 115 **Awards:** 22 **Declinations:** 93 **Other:** 0
Total number of actions within Program/Cluster/Division during period under review: **Awards:** 270 **Declinations:** 927 **Other:** 23
Manner in which reviewed actions were selected: The NSF staff randomly selected award jackets and declinations for the S-STEM COV review by sorting proposals according to the last digit of each proposal ID number. Each proposal ending in the number '1' was selected for COV review. This resulted in a list that comprised approximately 10% of all proposals submitted to S-STEM during FY 2011, 2012, and 2013. These proposals consisted of 22 awards and 93 declines. The selection process chosen for S-STEM was pre-approved by the Chair of the COV.

COV Membership

	Name	Affiliation
COV Chair or Co-Chairs:	Dr. Lillian M. Lowery (Chair) Dr. Thomas J. Cheatham (Co-Chair)	Maryland State Superintendent of Schools Middle Tennessee State University
COV Members:	Dr. Catherine Brawner Dr. Jason E. Miller Dr. Iraj B. Nejad	Research Triangle Educational Consultants California State University, Channel Islands Mt. San Antonio College

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? Comments: All reviews under this COV period were conducted via face-to-face panel reviews, which is a tried-and-true method for delivering high-quality reviews based on the merit review criteria. In the event that virtual reviews were conducted, the COV wanted to be sensitive to the effect that virtual reviews might have on review quality; however, virtual reviews did not begin until after the 2010-2013 review period. On rare occasions, there were ad hoc reviews when deemed necessary by Program Officers (POs). **Data Source: EIS/Type of Review Module**	YES
2. Are both merit review criteria addressed a) In individual reviews? b) In panel summaries? c) In Program Officer review analyses? Comments: Both merit review criteria appear to be consistently addressed by individuals in panel review summaries and in the PO review analyses. The "Instructions for	YES

Reviewers" document is very clear about how reviewers should write constructive and helpful proposal reviews. The Pre-Panel Webinar slides give clear guidance on how the merit review criteria should be applied to S-STEM proposals. Despite this, there were a small number of cases where the merit review criteria were not distinguished in panel summaries. Sometimes a reviewer identified strengths and weaknesses with respect to each review criterion. The COV agrees that this is an effective way to organize a review and panel summary. COV Recommendations: • Consider an online template in FastLane for panel summaries that highlights both merit review criteria and has dedicated space for responses. • Provide explicit sections to highlight strengths and weaknesses under each merit review criterion in the review template. **Data Source: Jackets**	
3. Do the individual reviewers giving written reviews provide substantive comments to explain their assessment of the proposals? Comments: Overall, individual reviewers provide substantive comments in their review of each proposal by addressing both Intellectual Merit and Broader Impacts and giving specific positive points and points of concern. The "Instructions for Reviewers" document provides clear guidance on how to prepare helpful review comments. Even then, the length of a proposal review can vary dramatically among panelists, especially for less competitive proposals, which tended to have shorter or incomplete reviews. COV Recommendation: • For less competitive proposals, the panelists should provide input or suggestions to better enhance the quality of a future submission to S-STEM. As NSF's Division of Undergraduate Education (DUE) adopts triage in the panel review process, it becomes increasingly important that panelist reviews are clear, constructive, and helpful to the Principal Investigator (PI) because these reviews are the only reviews that a triaged proposal will receive. See also: Related COV Recommendation under Section IV, Question 7. **Data Source: Jackets**	YES
4. Do the panel summaries provide the rationale for the panel consensus (or reasons consensus was not reached)? Comments:	YES

Panel summaries provided substantive information for the PI. Some panel summaries alluded to differences of opinion between reviewers, but most summaries conveyed a consensus on the panel. **Data Source: Jackets**	
5. Does the documentation in the jacket provide the rationale for the award/decline decision? [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: The PO review analyses clearly document the rationale for the award or decline decision. There is also evidence of a correspondence trail for funded proposals which addressed any panelist or PO concerns that arose during the review process. Such archives document when a PO used information about a proposal (e.g., performance history of PIs) that was not available to the panelists in order to support a final funding decision. **Data Source: Jackets**	YES
6. Does the documentation to the PI provide the rationale for the award/decline decision? [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: Rationales for the award/decline decisions were documented. If the PO disagreed with the panel's recommendations, the differences were documented in the written communication to the PIs along with the reasons for disagreeing with the panel. When the disagreement leads to a decline decision, the reasons are made clear to the PIs. For uncompetitive proposals, the PO's emails to the PI often lacked helpful information, pointing to panel reviews, which can be terse or lean. Awarded decisions clearly show back-and-forth communication between PO and PI. See also: COV comments in Section I, Question 3. **Data Source: Jackets**	YES
7. Additional comments on the quality and effectiveness of the program's use of merit review process:	

The POs provided reviewers with substantial information about, and orientation to, the merit review process and how it should be applied in the context of the S-STEM program. The COV feels this should continue, and POs should be persistent with panelists in advising them to write constructive reviews.	

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? Comments: The balance of reviewers from different types of institutions of higher education appears consistent across years and reasonable. The balance of reviewers across various academic disciplines also appears to be consistent and reasonable. However, it is not clear to the COV that the expertise of the panelists matches the criteria in the management plan. Page 18 of the 2013 Pre-Panel Webinar slides says that reviewer composition will reflect the management plan, but data on reviewers shared with the COV cannot substantiate that. Few professional societies are represented, and there is not enough information to tell whether student support personnel, university administrators, or professionals from the education research community are represented. The COV has no basis to judge other qualifications of reviewers outside of their apparent attainment of doctorate degrees. Over ¾ of reviewers identify themselves with a title of "Dr."; an additional 67 identify as "Professor". <u>COV Recommendations</u>: • Finding reviewers from industry continues to be a challenge, with 12 of the 400 panelists identified as being from industry or "Other". The "Other" category includes three reviewers from the U.S. Military Academy. The COV recommends that POs include NSF SBIR and NSF STTR awardees, for example, as potential business/industry reviewers. • Consider casting a wider net for reviewers to find student services personnel, professional society members, industry personnel, and university administrators. In the case of university administrators, the COV acknowledges that administrators may have participated on the panel without being identified as such. For instance, a Department Chair may only be listed with his or her discipline. If this is the case, then perhaps "title" or "role" could be requested in addition to departmental affiliation. **Data Source: Jackets**	DATA NOT AVAILABLE

2. Did the program recognize and resolve conflicts of interest when appropriate? Comments: NSF and its awardees must be good stewards of public funds and the public trust, so identifying and resolving conflicts of interest (COI) is critical. The COV agrees that the program's process for identifying COIs is robust, and the POs do a good job of explaining to reviewers what activities may qualify as a COI and resolving any questions about COIs. These instructions are conveyed in the written "Instructions for Panel Chairs" document, the Pre-Panel Webinar slides (pp. 30-33), the Panel Orientation Session slides (pp.18-20), and a handout (not provided). As with many aspects of peer review, successfully identifying and resolving COIs depends on the integrity of the reviewers. The COV agrees that the program is taking all reasonable steps to recognize and resolve COIs. **Data Source: Jackets**	YES
Additional comments on reviewer selection: The COV has no additional comments.	

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:

Overall, the program appears to be well managed and meets its goals. The S-STEM solicitations (there were two in this review period) are clear about the components of a successful project description. Proposals are reviewed and PIs are notified in a timely manner. (Over the review period, dwell time of less than 6 months went from 62% to 77% of proposals, which is a significant improvement and exceeds the program management plan's goals.) POs appear to provide adequate details to PIs whose proposals are declined. Award progress is monitored via annual project reports to NSF, and that process is tied to data collection on S-STEM participants. The PI meeting in 2012 was an effective avenue for sharing best practices across projects. The program was responsive to issues raised in the previous COV by hosting a PI meeting, completing a case study, and collecting project data on S-STEM participants in a manner that was sensitive to PI needs.

NSF's management plan for the program from FY 2009-2011 says that "reviewers will include scientists, mathematicians, engineers, professionals from the STEM education research community, university administrators, student support personnel, personnel from professional societies, and S-STEM PIs." From the information provided to the COV, the disciplines represented by reviewers include few representatives outside of the STEM academic disciplines. Few professional societies are represented and there is no evidence of student support personnel, university administrators, or professionals from the education research community.

COV Recommendation:

- We note that the FY 2009-2011 program management plan for S-STEM identifies the equivalent of 2.6 full-time employees (FTE) POs committed to the program. As proposal volume increased, the FY 2012-2014 plan does not mention the FTE commitment. To maintain program quality, DUE should provide adequate and increased FTE support for the management of the program.

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

Comments:

Like other DUE programs, S-STEM encourages proposals to be evidence-based, to build on best practices, and to produce evidence (research). Budget limitations make it difficult for S-STEM projects to produce new evidence. Although one emerging area of research and education is interdisciplinary STEM work, the program solicitation is silent on this group of projects.

COV Recommendation:

- The COV asks the S-STEM program to consider distinguishing between multi-disciplinary projects and interdisciplinary projects. At present, those two project categories are grouped

together, making it difficult for the program to identify the extent to which S-STEM is responding to emerging opportunities in interdisciplinary work. See also: Related COV Recommendation under Section IV, Question 4.

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

Comments:

The program solicitation changed from FY 2009 to 2012. One significant change was to remove the limitations on indirect costs. Wisely, the maximum budget is based on project direct costs, which means that indirect costs do not take away funds from scholarships and programming. The review process appears to be well planned and executed and proposal prioritization appears to be reasonable (looking at balance and other issues).

COV Recommendation:

- Allow additional support in the budget for student services and project evaluation.

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

Comments:

S-STEM program management has responded (or is responding) to all of the recommendations from the previous COV. They hosted a PI meeting in 2012 and did a case study. The POs persist in their effort to collect data on participants, even though that monitoring effort is difficult. Through these efforts, the data collection system has improved. POs monitor the data collection before approving the annual project reports. Program webinars for reviewers are a helpful practice.

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? Comments: The program portfolio has an appropriate distribution of disciplines and sub-disciplines. Given the increasing national need to fill computing jobs, it is good to see that the percentage of computing awards has increased from 4% to 12% during the COV period. Physics and chemistry awards continue to be low, but they may be represented in interdisciplinary proposals which make up over 50% of the awards. The number of proposals continues to increase and the funding rate continues to decrease. **Data Source: EIS/Committee of Visitors Module. From the Report View drop-down, select the Funding Rate module to see counts of proposals and awards for programs. The Proposal Count by Type Report View will also provide a summary of proposals by program.**	APPROPRIATE
2. Are awards appropriate in size and duration for the scope of the projects? Comments: Awards are appropriate in size and duration for the scope of the projects proposed. Most awards are around $600,000, the maximum amount allowed, and most are for five years. Longer awards provide more time to assess the outcomes, but provide fewer dollars per year for scholarships. **Data Source: EIS/Committee of Visitors Module. From the Report View drop-down, select Average Award Size and Duration.**	APPROPRIATE
3. Does the program portfolio include awards for projects that are innovative or potentially transformative? Comments: Yes, in so much as a scholarship program can be innovative. Some items that have been identified as innovative are partnerships between two-year and four-year institutions, evidence-based proposals that use best practices in STEM, and proposals that increase diversity in a discipline. One can argue	APPROPRIATE

that any program that enables STEM students to decrease the time to graduation is transformative for the students served. The solicitation's requirement that projects be evidence-based may have a transformative effect on the institutions that receive awards. The outcome of the program is to provide a higher percentage of awards to females and ethnically diverse students than their representation in their targeted fields; this has a potential to transform the workforce in these areas. **Data Source: Jackets**	
4. Does the program portfolio include inter- and multi-disciplinary projects? Comments: Yes, according to data provided, approximately 50% of the S-STEM proposals in this COV were interdisciplinary/multi-disciplinary. <u>COV Recommendation</u>: • In reports on the S-STEM program, the program uses inter- and multi-disciplinary interchangeably. Because interdisciplinary learning and research is an emerging opportunity in STEM, the COV recommends the program consider having S-STEM management distinguish between inter- and multi-disciplinary projects when it assigns them to disciplines. See also: Related COV Recommendation under Section III, Question 2. **Data Source: If co-funding is a desired proxy for measuring inter- and multi-disciplinary projects, the Co-Funding from Contributing Orgs and Co-Funding Contributed to Recipient Orgs reports can be obtained using the EIS/Committee of Visitors Module. They are available as selections on the Report View drop-down.**	APPROPRIATE
5. Does the program portfolio have an appropriate geographical distribution of Principal Investigators? Comments: Yes. However, the COV finds it unfortunate that several states are not submitting any S-STEM proposals. Also, some states appear to have a lower success rate than the funding rate overall. For instance, in Florida and Georgia the funding rates are around 12% and overall the funding rate was around 20% in the last year of the COV. <u>COV Recommendation</u>: • The COV suggests the program consider additional outreach initiatives to states with low submission rates to encourage proposals. **Data Source: EIS/Committee of Visitors Module. Select Proposals by State from the Report View drop-down.**	APPROPRIATE

6. Does the program portfolio have an appropriate balance of awards to different types of institutions? Comments: The program has an appropriate balance of awards to different types of institutions. The distribution of awards has been relatively consistent. However, the funding rate of proposals from community colleges declined from 32% to 16% while the number of such proposals increased from 62 to 92 – a 50% increase. For two COVs in a row, the percentage of funding for master's-level proposals continued to decline. Over 40% of the proposals are from private institutions, and funding rates for these institutions are roughly equal to those for public institutions. The funding rate for Minority-Serving Institutions is roughly the same as the overall S-STEM funding rate. **Data Source: EIS/Committee of Visitors Module. Select Proposals by Institution Type from the Report View drop-down. Also, the Obligations by Institution Type will provide information on the funding to institutions by type.**	APPROPRIATE
7. Does the program portfolio have an appropriate balance of awards to new investigators? NOTE: A new investigator is an investigator who has not been a PI on a previously funded NSF grant. Comments: Yes, roughly 50% of proposals each year are submitted by new investigators and the percentage of new PIs among all awards averages around 35%. New PIs are funded at a lower rate than the average, as might be expected. <u>COV Recommendation</u>: • Because such a high proportion of S-STEM proposals are submitted by new PIs, it is important that panel reviews and summaries are complete, constructive, and provide rationale for decline decisions. The COV recommends that POs continue to advise reviewers to write constructive and substantive reviews for all proposals, even those viewed as uncompetitive. (See also: Related COV Recommendation under Section I, Question 3. **Data Source: EIS/Committee of Visitors Module. Select Funding Rate from the Report View drop-down. After this report is run, use the Category Filter button to select New PI for the PI Status filter or New Involvement (PIs & coPIs) = Yes.**	APPROPRIATE
8. Does the program portfolio include projects that integrate research and education?	APPROPRIATE

Comments: Yes, as much as a scholarship program can integrate research and education. Several proposals offer undergraduate research as an option, but it cannot be required. The table of Foci of Awards on p. 281 of the COV binder classifies zero (0) awards as "research" awards. COV Recommendation: • If a larger proportion of an S-STEM project's budget were allowed to support project evaluation and action research, then there would be an increase of integration of research and education. The COV recommends that program management explore the possibility of allowing a project to use a greater proportion of funds for administration, student support, project evaluation, and action research. **Data Source: Jackets**	
9. Does the program portfolio have appropriate participation of underrepresented groups[2]? Comments: Yes, the percentage of African-American and Hispanic PIs ranged from 6% to 10% across the period examined by this COV, yet their funding rate mirrored the overall S-STEM funding rate. Excluding Asians and those not reporting, the ratio of underrepresented to white participants in S-STEM is 7 to 22. The S-STEM portfolio shows a higher level of participation by underrepresented minority students as compared to national enrollment data. For example, 2010 data (from the *2014 Science and Engineering Indicators*) show that of all students pursuing STEM degrees in the U.S., 8.6% are African-American, 9.1% are Hispanic, and 0.7% are American Indian/Alaskan. In contrast, the portfolio of S-STEM participants is 18.8% African-American, 25% Hispanic, and 2.4% American Indian/Alaskan during the COV review period. This shows that the S-STEM portfolio is broadening participation in STEM. In contrast, while about half the students studying STEM are women (*2014 Science and Engineering Indicators*), the "Scholarship Student Demographic Data" provided to the COV shows that only 39% of S-STEM participants were women. However, the table "S-STEM, Number of Students by Academic Year and intended Major" suggests that the proportion of women in each degree program exceeds that of the national average for that program. The COV sees this as appropriate for the S-STEM program. **Data Source: EIS/Committee of Visitors Module. Select Funding Rate**	APPROPRIATE

[2] 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.

from the Report View drop-down. After this report is run, use the Category Filter button to select Women Involvement = Yes or Minority Involvement = Yes to apply the appropriate filters.	
10. Is the program relevant to national priorities, agency mission, relevant fields and other constituent needs? Include citations of relevant external reports. Comments: Yes, there is a national priority to increase the number of students who graduate with a STEM degree and enter the workforce. While programs may not track students to graduation, S-STEM scholarships make it possible for students to focus on their studies and graduate sooner. The S-STEM program provides an important incentive for students to pursue STEM study. Below are two examples of reports on national priorities that make S-STEM important: *Engage to Excel: Producing One Million Additional College Graduates with Degrees in Science, Technology, Engineering, and Mathematics* President's Council of Advisors on Science and Technology February 2012 https://www.whitehouse.gov/sites/default/files/microsites/ostp/pcast-engage- to-excel-final_2-25-12.pdf *Rising Above the Gathering Storm* Committee on Prospering in the Global Economy of the 21st Century: An Agenda for American Science and Technology, National Academy of Sciences, National Academy of Engineering, Institute of Medicine 2007 http://www.nap.edu/catalog/11463/rising-above-the-gathering-storm-energizing-and-employing-america-for **Data Source: Jackets**	APPROPRIATE
11. Additional comments on the quality of the projects or the balance of the portfolio: Overall, S-STEM projects support STEM students in their pursuit of STEM degrees.	

OTHER TOPICS

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

The program does not encourage S-STEM Scholars to complete undergraduate research, but this is a proven best practice for retention of STEM students.

COV Recommendations:

- The program should consider allowing an increase in funding for other evidence-based practices targeted to S-STEM participants. Examples include, but are not limited to, advising communities, mentoring, learning centers, and undergraduate research.

- More resources should be allowed for higher quality project evaluations.

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.

Generally, S-STEM does a good job of meeting the four stated goals in the program solicitation. However, tracking students to degree achievement has been difficult to assess and may require additional time and resources.

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

The impact of need-based financial aid on student success in STEM programs is important to S-STEM and other NSF programs. The COV noted one specific example, a 2013 award that is tracking 1,800 low-income students in S-STEM and STEP to degree completion; these results will be invaluable to the program.

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

Continue to collect intermediate and graduation data to assess the overall impact of the S-STEM program.

COV Recommendation:

- Based upon the COV's review of several declined proposal submissions from institutions with prior S-STEM funding, we recommend that S-STEM solicitations provide instructions specifically addressing any unique proposal requirements or project restrictions that apply to institutions with prior funding. For instance: (1) request that previously funded S-STEM awardees show in the new proposal what was learned from the previous award; and (2) explain that a student cannot participate in concurrent S-STEM awards, and request that proposals demonstrate how the project will prevent this, if applicable. The COV points to the former STEP program solicitation for an example of how prior funding may be addressed.

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

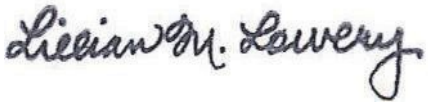
The POs and NSF staff have been very responsive to questions and helpful in providing data needed by the COV reviewers.

COV Recommendation:

- Make the review materials available to COV reviewers at least two weeks before the onsite meeting. The COV booklet was helpful; however, it would be more helpful if the program could also provide data tables in Excel format so the COV could more easily search program data.

SIGNATURE BLOCK:

Thomas J. Cheatham
Co-Chair, S-STEM Subpanel



Lillian M. Lowery
Chair, Noyce and S-STEM COVs