

**SCIENCE TO ACHIEVE RESULTS (STAR)/GREATER RESEARCH OPPORTUNITIES (GRO)
FELLOWSHIP SUBCOMMITTEE**

**Conference Call Summary
Monday, April 3, 2006
3:00 p.m. – 5:00 p.m. Eastern Time**

Welcome and Roll Call

Dr. Clifford Duke, The Ecological Society of America, Subcommittee Chair

Dr. Clifford Duke, Subcommittee Chair, welcomed the STAR/GRO Fellowship Subcommittee members and did a roll call of participants. A list of participants is attached to this summary.

Administrative Procedures

Lorelei Kowalski, EPA/Office of Research and Development, Designated Federal Officer

Ms. Lorelei Kowalski reviewed the Federal Advisory Committee Act (FACA) procedures that are required for all Board of Scientific Counselors (BOSC) Executive Committee and Subcommittee meetings. As the Designated Federal Officer (DFO), she serves as the liaison between the Subcommittee and ORD. She stated that this was the third BOSC STAR/GRO Fellowship Subcommittee conference call. The two previous calls were held on January 26 and February 16, 2006. The Subcommittee also convened a public face-to-face meeting March 2-3, 2006, in Washington, DC.

During this conference call, items will be discussed according to the agenda, and a summary of the call will be made available to the public after certification by the Chair of the Subcommittee. Ms. Kowalski indicated that the draft report, which was prepared following the March meeting, was sent to the Subcommittee members on Friday, March 31, 2006.

All Subcommittee meetings involving substantive issues, whether in person, by phone, or by e-mail, must be open to the public. This applies to all group communications that include at least one-half of the Subcommittee members. The Subcommittee Chair and the DFO must be present at all meetings. A *Federal Register* notice must announce all meetings at least 15 calendar days in advance of any meeting. Issues that are preparatory or administrative in nature are exempt from this requirement. The Subcommittee information has been entered into the federal docket management system (<http://www.regulation.gov>, Docket ID EPA-HQ-ORD-2005-0562).

Ms. Kowalski has worked with EPA officials to ensure that all appropriate ethics regulations have been satisfied; each Subcommittee member has filed a confidential disclosure form and

completed the required ethics training. Ms. Kowalski noted that Drs. John Adgate and Costel Denson had recused themselves from parts of Subcommittee discussions.

Overview of Agenda

Dr. Clifford Duke, Subcommittee Chair

Dr. Duke reviewed the agenda, which included a welcome, roll call, and administrative procedures. The majority of the call will focus on the Subcommittee's review of the draft report. Dr. Duke will provide overview comments; then the Subcommittee will review the document page by page and provide feedback and suggestions. Dr. Duke stated that no members of the public had requested time to speak, but there will be an opportunity for members of the public to make comments during the call.

Discussion of Subcommittee Draft Report

Dr. Clifford Duke, Subcommittee Chair

Dr. Duke summarized the process the Subcommittee members used to produce the draft report. Drs. Nikola Garber, Richard Carson, and Costel Denson, and Ms. Claudia Sturges Scott sent information addressing their respective charge questions to Dr. Gary Barrett for the chapter addressing Charge Question 1, to Dr. John Adgate for the chapter addressing Charge Question 2, and to Dr. Donald Scavia for the chapter addressing Charge Question 3. Dr. Duke and Ms. Sturges Scott wrote the introductory and summary chapters. Because of similarities in the material, Dr. Duke combined the chapters on the GRO Graduate and Undergraduate Fellowship Programs into one chapter. Dr. Duke also reformatted the chapters and moved the recommendations in the text to a separate recommendation section at the end of each chapter.

Dr. Duke stated that the fellowship selection process sections essentially were identical in Chapters 2 and 3, with the exception of the discussion of the relevancy review in Chapter 2. He asked the Subcommittee members if the selection process discussion should be moved to Chapter 1. Similarly, the section on the utility of research to EPA and others for decision making is redundant in Chapters 2 and 3 and might be moved to Chapter 1. Dr. Garber stated that those sections should appear in only one chapter. The other Subcommittee members agreed. Dr. Duke will take those sections, eliminate any redundancy, and place them in Chapter 1 in a subsection that addresses the issues that were removed from Chapters 2 and 3.

Dr. Duke asked if the elimination of Master's students from eligibility for the STAR and GRO Graduate Fellowships was a consensus view of the Subcommittee and, if so, did the draft report provide sufficient support for that recommendation? Dr. Garber stated that the opportunity should not be eliminated for Master's students who want to do research because there are not many programs available for them. Dr. Carson stated that he did not think the Master's students should be eligible because of the difficulty of evaluating those applications relative to Ph.D. candidates, and many Master's programs do not offer research degrees, so applying for a research fellowship is not relevant.

Dr. Scavia stated that he favored removing Master's students from the STAR Fellowship Program; however, if the Subcommittee did not want to eliminate that option, he suggested that the eligibility requirements could be left open to Master's students, with a clear statement in the call for applications that those students would be competing against Ph.D. student applications.

Dr. Duke asked how that suggestion would fit with the present recommendation of forming separate panels to review Master's and Ph.D. applications. Dr. Carson responded that was one reason to eliminate the eligibility for Master's students.

Dr. Barrett stated he had mixed feelings about eliminating Master's students from the program. He stated that many Master's programs include an internship option and students are paid as part of the internship; however, Master's degrees are not always terminal degrees, and students may continue their education and obtain a Ph.D. Dr. Duke stated that he was undecided on the subject. For the ecological sciences, a Master's degree can be a productive and terminal degree; therefore, he was reluctant to exclude such candidates from the fellowship opportunities. Dr. Duke asked the Subcommittee members if a compromise might be reached by including language indicating that the Subcommittee was not unanimous in its recommendation. Ms. Sturges agreed with that plan. Dr. Denson stated that he would like to review such a statement before concurring. Dr. Garber stated that the Master's research students who could benefit from the program were capable of competing with Ph.D. students, and she was comfortable with eliminating the recommendation for separate review panels. Dr. Adgate agreed with Dr. Garber's suggestion, but he also requested an opportunity to review the revised text and provide feedback. Dr. Duke agreed to make the suggested changes, and stated that each Subcommittee member will have an opportunity to comment when he/she reviews the next draft of the report.

Dr. Duke stated that in the draft report he tried to be consistent in stating that 5 years was the length of time EPA should track the fellows after they have completed their fellowships; he wanted to confirm that this was the consensus of the Subcommittee members. Dr. Barrett stated that collecting followup data is difficult and that 5 years was a good recommendation. Dr. Carson stated that 5 years seemed fine to him, except that some of the fellows may just be entering their careers. If EPA could track them for 10 years, the Agency might be able to capture information on the impact that these fellows are making on environmental policy. This would help the Agency in justifying the fellowship program. Dr. Duke suggested using the language "at least 5 years" in reference to followup requirements. The Subcommittee members agreed.

Dr. Duke asked Ms. Kowalski if nonsubstantive text edits could be transmitted to him from the Subcommittee members by e-mail. Ms. Kowalski replied that they could. Dr. Duke asked that the Subcommittee members provide substantive comments during the call and send editorial comments to him by e-mail. Dr. Garber asked if the Subcommittee members would receive another draft after today's call and if they would be able to proofread and provide comments to Dr. Duke. Dr. Duke asked Ms. Kowalski if the Subcommittee could concur on the final draft by e-mail. Ms. Kowalski replied that it was permissible to get concurrence by e-mail; however, if the Subcommittee members had different viewpoints with regard to the next draft report, those would need to be addressed on a public call. Dr. Duke stated that he would make the changes discussed on the call as well as any text edits submitted to him and then provide the Subcommittee members with a revised draft with the changes highlighted.

Dr. Duke asked the Subcommittee members to follow along on a copy of the draft report sent to them on March 31, 2006. He went page by page and asked for comments from the Subcommittee members.

There were no comments on pages 1-4.

On page 5, Dr. Scavia commented that the sentence that began “But according to...” should be connected to the first sentence of the paragraph about the Inspector General’s report.

There were no comments on page 6.

Dr. Denson stated that he was having a problem with his telephone, but he wanted to comment on the recommendation of \$10,000 for the expense account included on page 7, line 33 when he was able to resolve the problem. Dr. Duke replied that Dr. Denson could offer his comment when the problem was corrected.

Dr. Barrett asked that the words “and academic credit” be inserted after “financial support” in line 10 on page 7, and “if resources permit” be removed from line 33 on page 10. In addition, he asked if EPA would be able to use industry as a source of funding for the consortia in addition to the other possibilities listed in lines 14-16 on page 7. Ms. Kowalski stated that the Subcommittee members could ask if there are legal considerations but cannot ask EPA staff for their opinion on the recommendation. Ms. Willett stated that NCER has considered options to partner with private industry in providing grants; so far such a mechanism has not received support from the Agency’s legal advisors. Dr. Garber stated that the National Sea Grant College Program has similar difficulties in utilizing industry funding for its fellowship program.

There were no comments on page 8.

Dr. Duke said that he had a comment on lines 38 and 39 of page 9 that he would ask Dr. Denson to address when he returned to the call.

Dr. Barrett asked why the sentence on lines 36-37, page 10 was italicized. Dr. Duke replied that the formatting had come from the original material, and he forgot to change it. Ms. Sturges Scott stated that the recommendations should be italicized. Dr. Barrett responded that he had highlighted the recommendations in his chapter. Dr. Duke noted that the formatting had been removed when the recommendations were moved to the end of Chapters 2 and 3. Dr. Duke stated that he would italicize the recommendations in the summary chapter to make them stand out, but he would not italicize the recommendations at the end of Chapters 2 and 3 because they were presented in bulleted format.

There were no comments on pages 11-14.

Ms. Sturges Scott stated that the wording on line 29 of page 15 should be changed to “program appears to meet its purposes” because, with the gaps in data, the Subcommittee has insufficient information to assert conclusively that the program has met its goals.

Dr. Barrett questioned the use of the term “generously funded” to describe the STAR Program in lines 36-37 on page 16. Ms. Sturges Scott agreed that the report should be consistent in referring to the funding level of the fellowship programs. Dr. Carson stated that removing funds from the STAR Fellowship Program is difficult to justify when EPA can fund only half of the qualified applications. Ms. Sturges Scott agreed that STAR may not be overfunded but, in examining the overall fellowship program, it was clear that the STAR Fellowship Program is better funded than the GRO Fellowship Program. Dr. Duke stated that the statement on lines 35-38 of page 16 was not stated as a recommendation. Dr. Carson reiterated that the Subcommittee has not made a

case for the overfunding of the STAR Fellowship Program and, although he would agree that, with elimination of the Master's students, some fraction of STAR Fellowship funds could be considered to fund a consortium, that is not what is presented in the draft. Dr. Duke recommended removing lines 35-38 on page 16. Ms. Sturges Scott agreed.

Dr. Barrett stated that the ratio of Master's to doctoral students funded mentioned in lines 30-31 on page 17 should be consistent throughout the report. Dr. Duke agreed to check for that in his editorial review. For the sentence beginning "Students interviewed during the face-to-face meeting," Dr. Duke stated that he would change that to "A number of students interviewed during the face-to-face meeting." Dr. Barrett agreed to that change.

There were no comments on page 18.

Dr. Barrett requested that on page 19, line 20, the phrase "big enough" be changed to "significant." Ms. Sturges Scott stated that on page 20 the paragraph covering lines 4-9 was general information that was not specific to STAR and could be deleted. The Subcommittee members agreed.

There were no comments on pages 21-22.

Dr. Barrett stated that formatting of the bullets and recommendations on pages 23-26 could be better. Dr. Duke agreed to work on improving the formatting.

In the recommendations section for Chapter 2 on page 24, lines 20-21, Ms. Sturges Scott requested that the networking opportunity provided by the conference be added. She also commented that the requirement for monthly progress reports (lines 6-8) is too difficult to enforce and monitor. Dr. Barrett stated that he has experience with programs that enforce such reports as part of the credit requirements; he did not think that monthly reports were too burdensome and they provide an opportunity to ensure that the research opportunities provided at EPA's facilities are a meaningful experience.

Dr. Garber asked what the focus would be of the alumni association mentioned on page 25, lines 31-32. Would the organization's goal be to raise money and educate Congress about the fellowship programs? EPA could not promote such an effort. Dr. Barrett replied that the statement was taken from his notes of the face-to-face meeting discussions. Dr. Garber stated that the purpose of the organization would be to communicate with and track the fellows, and she suggested strengthening that concept in lines 25-29 and deleting lines 31-32.

Dr. Barrett requested that the words "college, and public audiences" be added after "high school audiences" on page 26, line 7; the Subcommittee should not limit the presentation opportunities. Because fellows are being asked to speak only twice a year, Dr. Duke suggested that he change the phrase to "high school or college audiences."

Dr. Denson rejoined the call and asked if he could provide the comment he mentioned before he had to disconnect. Dr. Duke provided him the opportunity to speak to the pages already discussed by the Subcommittee members. Dr. Denson asked about the source and justification for the amounts provided on page 7 (\$10,000 for the expense account) and page 24 (also the \$10,000 for the expense account as well as an increase in STAR funding to \$12-13 million). Dr.

Duke responded that the importance of the expense account is highlighted on page 21, lines 42-45. Dr. Carson stated that the present amount of \$5,000 was set at the program's inception; its purchasing power is now limited. The discussions with past fellows during the presentations and poster sessions at the Subcommittee's March meeting indicated the importance of the expense account to the fellows' experiences.

Dr. Barrett concurred that the increase from \$5,000 to \$10,000 was discussed at the face-to-face meeting; the \$12-13 million number was in response to a comment from Ms. Sturges Scott to address concerns about a static funding level over the past 10 years. Dr. Denson agreed that, although the concerns are valid, the Subcommittee members do not have the authority or the knowledge to determine the amount; EPA should be directed to revisit the number. Dr. Garber cited concerns about the impact of a recommendation with vague language; providing an amount would indicate the importance of the recommendation. Dr. Denson agreed with the concern but stated that the Subcommittee must be credible if its recommendations are to be considered seriously.

Ms. Sturges Scott proposed using a constant dollar equivalent as a reference for recommending the increase in funding. Dr. Duke suggested recommending a substantial increase in the expense account fund. Dr. Carson emphasized that discussions with past fellows highlighted the importance of the expense account as unique to the EPA fellowships. Dr. Duke proposed incorporating additional emphasis on the importance of the recommendation without including a specific amount and suggesting adjustment based on inflation. Dr. Barrett supported a specific number and thought \$10,000 was appropriate based on the significant benefit of the expense account to the students. Dr. Denson agreed with emphasizing the expense account, but noted that asking for more money requires more justification. Dr. Garber stated that she would like to see the amount included and asked what that number would be based on inflation. Dr. Carson calculated that \$5,000 in 1996 was equivalent to \$6,069.12 in 2005, using a consumer price index adjustment. Dr. Duke acknowledged that the Subcommittee members had not reached consensus. Some of the Subcommittee members support a specific increase and others do not. Dr. Duke said that he would indicate that in the next draft of the report.

Public Comments

Dr. Duke asked if anyone would like to make a public comment. EPA received no requests for comment prior to the call, and no members of the public were on the call to comment.

Discussion of Subcommittee Draft Report (Continued)

Dr. Duke asked for clarification from Dr. Denson on the meaning of the statement on page 9 with regard to the ratio of Master's to Ph.D. degrees as a metric. Dr. Denson referenced the material on page 33, lines 5-9, as the source of the statement. Dr. Duke stated that he would rewrite the language to indicate the measure was the number of fellowships awarded to Master's students compared to those awarded to Ph.D. students. Dr. Denson concurred with Dr. Duke's revisions; he did not mean to suggest that a serial progression from a Master's degree to a Ph.D. was necessary.

Dr. Duke asked for comments on Chapter 3 (beginning on page 27), which is the combination of the GRO Graduate and Undergraduate Fellowship Programs section of the draft report. Dr.

Barrett stated that “deliver” on line 16 should be changed to “graduate” because institutions graduate students rather than deliver them. He also requested that the words “in the field of environmental science” be added to the end of the sentence on page 28, lines 19-20, that begins “This degree could be a ...”

There were no comments on page 29.

Dr. Duke asked if a description of the different STAR and GRO categories was needed on page 30, lines 8-12. Dr. Barrett stated that language in Chapter 2 included some suggestions about broader categories. Dr. Scavia responded that it was not necessary to include a list of the categories at this point. The Subcommittee members agreed to remove this sentence.

Dr. Barrett asked to have “gambling on largely unproven students” removed on page 30, line 19, because the students are screened to increase the chance of success and he did not like the gambling terminology. Ms. Sturges Scott agreed.

Dr. Barrett asked for confirmation that the section on “Utility of Research to EPA and Others for Decision-Making and Policy” beginning on page 31 would be removed because it was redundant with the same section in Chapter 2. Dr. Duke confirmed that this material would be taken out of Chapters 2 and 3 and moved to a subsection of Chapter 1.

Ms. Sturges Scott stated that the bullets used for the text on page 32 were confusing because bullets were used previously for recommendations. Dr. Duke stated that he would address this and other formatting concerns in the next draft.

Ms. Sturges Scott stated that lines 26 and 27 on page 33 should be removed because they give a false impression about the funding for the programs. Dr. Duke asked EPA staff to confirm the different funding amounts for the fellowship programs: \$10 million (STAR fellowships), \$1.5 million (GRO Graduate fellowships), and \$650,000 (GRO Undergraduate fellowships). Ms. Willett confirmed that the amounts presented were correct. Dr. Garber stated that the fellowship funding was requested as one budget line item that includes STAR, GRO graduate and undergraduate, and a few other fellowship programs; staff salaries for the fellowship programs are provided via different funding. Ms. McClure stated that Dr. Garber’s statements were correct.

There were no comments on page 34.

Dr. Denson stated that he was surprised that other federal agencies such as the National Science Foundation were able to target minority-serving institutions for awards. Dr. Scavia stated that the National Oceanic and Atmospheric Administration also provides targeted awards; there is legislation that allows them to do so. Dr. Carson stated that the recommendation reads as if the Subcommittee is asking EPA to obtain a different legal ruling from its counsel, which is unlikely to happen. Dr. Scavia stated that he had originally written that the Agency should seek legislation to obtain the authority to provide fellowships targeted to minority-serving institutions. Dr. Carson suggested that the Agency review the intent of the GRO Fellowship Program. Dr. Duke asked Dr. Scavia to rewrite the sentence on page 35, lines 39-41. Dr. Garber commented that a focus on minority-serving institutions does not mean that minorities will receive the rewards because anyone attending those institutions could apply for the fellowships.

Dr. Duke stated that the two bullets on page 36, lines 12-21, will be rewritten to eliminate redundancy. Dr. Barrett asked that the Association of Ecosystem Research Centers be added to the examples listed on line 26 of page 36.

Dr. Garber stated that on page 37, line 3, the use of the term “contractual arrangements” suggests that the universities receive the funding rather than the students. Are the fellowships grants or contracts? Ms. McClure responded that fellowships are awarded to individual students, not to institutions; however, the institutions administer the tuition and expense account disbursements. Dr. Garber stated that such a mechanism may not provide for a legal option to require the universities to assist with tracking or providing information on the students following the completion of their fellowships. Ms. Kowalski stated that the recommendations will be reviewed by the Agency and ORD will prepare responses to each recommendation; she did not believe, however, that the EPA staff present on the call could speak to the legal issues surrounding any of the recommendations. Ms. Sturges Scott asked if the same award situation occurred for the STAR fellowships. Ms. McClure responded that this was the case.

Dr. Duke asked if the contractor would add the charge as an appendix to the report. Ms. Kowalski responded that SCG would add the charge as an appendix. She asked if Dr. Duke wanted to reference the appendix in Chapter 1 rather than including the charge in the text. Dr. Duke responded that he did not.

Dr. Duke asked if the Subcommittee members had comments on the section in Chapter 2 about diversity outreach within the STAR Fellowship Program. Dr. Denson responded that he had found little information on diversity outreach and the effectiveness of outreach in the STAR Fellowship Program; he was surprised that there was not much information on diversity in the STAR Fellowship Program. Dr. Denson agreed to reconsider and possibly attempt to rewrite this section.

Dr. Barrett stated that the information on page 4 of the Summary was repeated in the introduction; he asked if Dr. Duke was going to prepare an Executive Summary. Dr. Duke responded that the BOSC Executive Committee uses the term Summary rather than Executive Summary. The Summary section of the report is a little longer than a typical Executive Summary and it includes more introductory language so that it can be a stand-alone document.

Dr. Barrett asked if the recommendation for separate review panels for Master’s degree students is going to be retained in the report. Dr. Duke responded that it would.

Ms. Kowalski indicated that the draft report would be needed 3 weeks prior to the June 1-2, 2006 BOSC Executive Committee meeting, which is the second week of May. Ms. Kowalski asked Dr. Duke to confirm that no substantive issues arose in response to the next draft report that would need to be addressed on another public conference call. Dr. Duke agreed to determine if any of the comments involved substantive issues that would necessitate another public conference call.

Action Items

- ✧ Dr. Scavia will rewrite the sentence on page 35, lines 39-41.
- ✧ Dr. Denson will consider adding information to or clarifying the section in Chapter 2 that addresses outreach for diversity.
- ✧ Dr. Duke will complete the Inspector General's report reference.
- ✧ Dr. Duke will make consistent the reference to the tracking of fellows for at least 5 years.
- ✧ Dr. Duke will move the fellowship selection process and utility of the fellowship research to EPA to a new section in Chapter 1.
- ✧ Subcommittee members will send their nonsubstantive text edits to Dr. Duke by the close of business on Wednesday, April 5, 2006.
- ✧ Dr. Duke will send the next draft report to the Subcommittee members by Friday, April 7, 2006.
- ✧ The Subcommittee members will respond to Dr. Duke with comments on the second draft report by Friday, April 14, 2006.
- ✧ Dr. Duke will review the comments to determine if any include substantive issues that need to be addressed in another public conference call. He will inform Ms. Kowalski if another call is necessary.

PARTICIPANTS LIST

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APPENDIX A: Teleconference Agenda

SCIENCE TO ACHIEVE RESULTS (STAR)/GREATER RESEARCH OPPORTUNITIES (GRO) FELLOWSHIP SUBCOMMITTEE

AGENDA

**Monday, April 3, 2006
3:00 – 5:00 pm Eastern Time**

CONFERENCE CALL

Participation by Teleconference Only

3:00-3:05 pm	Welcome/Roll Call	Dr. Cliff Duke, Subcommittee Chair
3:05-3:10 pm	Administrative Procedures	Lori Kowalski, DFO
3:10-3:30 pm	Subcommittee Draft Report - Overview - Report Summary and Organization	Dr. Cliff Duke, Subcommittee Chair
3:30-4:15 pm	Discussion of Report Chapters	STAR/GRO Subcommittee
4:15-4:25 pm	Public Comments	
4:25-4:50 pm	Discussion Continued	STAR/GRO Subcommittee
4:50-5:00 pm	Outstanding Issues/Action Items	Dr. Cliff Duke, Subcommittee Chair
5:00 pm	Adjourn	