Report of the Committee of Visitors of the Office of Workforce Development for Teachers and Scientists (WDTS) in the Department of Energy

May 17-19, 2010

Washington, DC

Overview

A Committee of Visitors (COV) participated in a review of the programs in the Workforce Development for Teachers and Scholars (WDTS) Division of the Office of Science (SC) over the years of 2007, 2008 and 2009. The mission of the WDTS program is to help ensure that DOE and the Nation have a sustained pipeline of highly trained Science, Technology, Engineering, and Mathematics (STEM) workers. The timing of the COV coincides with considerable program growth. The FY2010 budget request for WDTS is $20.678M, double the FY08 appropriation of $8.044M and nearly double the regular FY09 appropriation of $13.83M. WDTS also received $12.5 M of Recovery Act funds in FY09 to begin a new graduate fellowship program.

The charge of the COV was to assess (1) the efficacy and quality of the processes used to solicit, review, and reach decisions on proposals, document decisions, and monitor progress on funded proposals and (2) how the award process has affected the breadth and depth of portfolio elements, including the national and international standing of these elements within the boundaries of DOE missions and available funding. In addition to examining the existing WDTS programs over the past three years, the COV was requested to evaluate the plans for the new graduate fellowship program, specifically the efficacy and quality of the processes to be used to solicit, review, recommend, monitor, and document application and award actions. It was also asked to comment on current and future staffing needs of the Division.

Eight participants were involved in this review that took place in Washington DC, May 17-19, 2010. The COV members were selected by Chair Geraldine Richmond for their technical expertise in areas represented by the Office of Science and their recognized contributions to scientific workforce issues on a variety of topics including evaluation and assessment, graduate fellowship programs, university and DOE national laboratory experience with research students, and racial and ethnic diversity challenges in STEM fields. The programs in WDTS were divided into four categories: Graduate Fellows Program, Student Programs, Educator Programs and Miscellaneous Programs. Student programs include Science Undergraduate Laboratory Internships (SULI), Community College Institute of Science and Learning (CCI), Pre-Service Teachers (PST), National Science Bowl, and Real World Design Challenge (RWDC). Educator programs include Academies Creating Teacher Scientists (ACTS), Faculty and Student Teams (FaST), and the Albert Einstein Distinguished Educator Fellowships. The COV divided into four groups assigned to the initial assessment of the four programs. This assessment was shared with the full COV for further discussion, analysis and the development of recommendations. Additional consideration was given to issues of overall assessment strategies and staffing for WDTS that would provide leadership and stewardship of the identified programs determined to be of the highest priority.

After careful deliberations and discussions the Committee reached a strong consensus around the findings and recommendations given in this report. The Committee gave considerable thought to the impact of their recommendations, recognizing that this report comes at a critical junction in the future direction of the Office of WDTS. The COV members express their gratitude for all of the hard work and preparation that the WDTS personnel put into the COV. The materials that were provided and the presentations to the COV were highly organized and concise, greatly facilitating our understanding of the Office and important issues to be considered.

COV Members

Gilda Barabino, Associate Chair for Graduate Studies & Professor of Biomedical Engineering, Georgia Institute of Technology

Bill Hahn, Assistant Dean and Associate Research Professor of Biology, Georgetown University

Frances Lawrenz, Wallace Professor of Teaching and Learning, Department of Educational Psychology, University of Minnesota

Carl Lineberger, E. U. Condon Professor of Chemistry and Biochemistry, University of Colorado

Randall Ruchti, Professor of Experimental High Energy Elementary Particle Physics, Notre Dame University

Geraldine Richmond, Richard and Patricia Noyes Professor of Chemistry, University of Oregon (Chair)

Larry Snyder, Professor of Computer Science and Engineering, University of Washington

Linda Young, Division Director for the Argonne National Laboratory X-ray Science Division at the Advanced Photon Source, Argonne National Laboratory

A. Major Findings and Program Ratings

1. Student Programs

The Science Undergraduate Laboratory Internship (SULI):
Rating: Excellent but can be improved

This program is a longstanding one with considerable success in workforce development at DOE National Laboratories. Roughly 50% of SULI participants continue on to work at a national laboratory. Success stories such as Nobel laureates Thomas Cech and Bill Phillips are alumni of the SULI program. That said, improvements to the program should be considered. It is truly a unique and effective program for introducing science-oriented undergraduates to national labs (594 students in '09). The mentoring relationship is strong. Weaknesses are that it is poorly advertised and not particularly diverse. The inadequate assessment and evaluation makes it impossible to understand how it compares with similar programs like NSF-REU.

Community College Institute (CCI):
Rating: Good with potential for Excellence

This is a small but promising program (49 students in 2009) designed to attract community college's diverse population into science and engineering. It has greater ethnic and racial diversity among its students than SULI. Participants have a longer period of residence in the national labs, which is attractive to potential laboratory

sponsors and of benefit to the students.

Pre-Service Teachers (PST):

Rating: Poor

No presentation for this program.

National Science Bowl (NSB):

Rating: Excellent

This is the original National Science Bowl in the U.S. and has been copied in part by NOAA. Annually there are over 20,000 participants with 6000 volunteers and 525 finalists. The grassroots mechanism by which the concept started remains strong. In the current venue (the National 4H Center) for the final event, NSB is approaching saturation. Because participants are self-identified at the grassroots, the geographic coverage is arbitrary; seeking broader geographic coverage can leverage the investment. Outreach to underrepresented areas coupled with regional NSBs leading up to a final in DC might be an alternative. Due to the strong support of the First Lady and the Secretary of Energy at the final event, this may be a golden opportunity to introduce the fun of science to a very large population.

Real World Design Challenge (RWDC):

Rating: Poor

This is a small engineering and CAD design program in collaboration with Cessna and PTC to design low drag aircraft wings. It is not well aligned with the DOE mission and its value was not assessed.

2. <u>Educator Programs</u>

Academies Creating Teacher Scientists (ACTS):

Rating: Good/Fair

This is a laboratory oriented research program but with extensive time commitment of 8 weeks each in three successive years. Teachers who have time to do this tend to be in either the early or later stage of their careers. And minority teachers or teachers working in underserved communities are likely to be underrepresented in the pool. The program favors the teachers and schools local to the laboratories. The lack of continuity after relationships are established with the laboratory is a potential challenge for teachers located remotely.

One serious weakness is that the goals of the program aren't clear. Is it a research immersion program? Does content change in the classroom? What do the teachers bring back? More value to the school system? Would teams from schools be more effective than individuals? What is school system buy-in?

Evaluation is a second problem. Statistics used to measure success (such as number of students taught by participating teacher) is not a useful metric of success but is commonly used as such in this program.

Faculty and Student Teams (FaST):

Rating: Fair

This is a potentially important area to address and to do well in in order to promote institutional change. But…it needs work. To be successful significant groundwork between the lab and the college faculty member is necessary. Additionally instruction in teamwork and research preparation are central to making the program successful. The arrangements for working with the faculty member and the student participants must be sensitive to the needs and responsibilities of both. Evaluation is presently inadequate. The expected follow-up, to position the faculty partner to be successful in research and grant proposal submission, is quite challenging.

Einstein Fellows:
Rating: Very Good

This is generally a high quality experience for teachers. However there is potential for underutilization of talent if participants become merely "filler" to conduct tasks in an organization that are not consistent with the goals of the Einstein Fellows program. The various different goals for the program should be clearly articulated.

3. <u>Graduate Student Programs</u>
Graduate Fellows Program (SCGF):
Rating: Very Good with potential for Excellence

This new and welcome program is in its first year that promises to add another resource in DOE's portfolio of support for graduate education. WDTS reviewed approximately 2200 proposals and gave 150 awards. The applications were peer reviewed and winnowed (to 448) to be processed by on-site review, which were reduced to the elite list of winners. The first year's review process, according to the self-evaluation, was unwieldy, and will need to be streamlined in future years. This fellowship program will likely continue to be a good place for DOE support, especially if it is evaluated and assessed relative to the WDTS goals and the other graduate fellowship programs.

4. <u>Miscellaneous Programs</u>
SERCH Poster Competition:
Rating: Poor

This is not a particularly unique or high impact program. Each laboratory has its own poster session that is very useful and they can take responsibility for sending their best to various professional meetings without the assistance of WDTS. Students would get better experience by going to professional meetings in their disciplines rather than this competition. Assessment is anecdotal.

Journal of Undergraduate Research:
Rating: Fair/Poor

Students would be better served to publish in national undergraduate research or regular scientific journals where this is a larger readership. No assessment has been conducted. Low impact for the amount of effort. If this journal is largely for marketing and PR, there are better ways to market the undergraduate research effort that does not involve pages of research that most staffers can't read anyway.

College Planning Guide:

Rating: Fair

There are many guides and it is not at all clear why this might be considered unique or valuable. No assessment has been done other than expressed appreciation by a few of those who have received it.

Lindau Awards:

Rating: Excellent

This is a fantastic experience for those students involved. And a great opportunity to meet emerging scientists from around the globe in addition to meeting Nobel laureates. Excellent connection with program officers at Germantown.

Equipment Donation Program:

Rating: Good

This is a good program to place scientific equipment/instruments/supplies in universities and colleges. However there is no significant follow-up to make sure equipment has been put to use. A report form after a year is requested but it is not mandatory and it is not clear that anyone looks at them anyway. Recently the program has expanded to high schools and middle schools with WDTS paying the shipping. There is no clear process in place to assure that these schools have appropriate space, safety and personnel to operate and maintain equipment. That needs to be changed and monitored.

5. <u>Evaluation and Assessment:</u>

Rating: Poor

A consistent finding across the program review is that there is very little evaluation of any program and where evaluation was found, it was generally anecdotal or no one was sure where the evaluation data was. There was certainly no evidence that the evaluations collected were being used to improve programs or decide whether programs should be continued. Overall it appears that the WDTS and ORISE have been working diligently to produce a rigorous evaluation plan that is linked to the goals of the program. The plan provides some innovative and concrete options for gathering work force information and for tracking participants. Given the specific goal of supplying manpower for energy research and development, however, the WDTS/ORISE evaluation plan is not particularly well conceived.

6. <u>Diversity Efforts:</u>

Rating: Poor

The representation of racial and ethnic minorities in DOE's workforce development programming pales in comparison to that of majority men and women. It is not clear that the WDTS programs as currently configured, have sufficient mechanisms in place to ensure the broadest and most representative pool of applicants is being reached. For example, limiting efforts to attract underrepresented minorities to approaching minority serving institutions and community colleges severely hampers success. It is also

not clear that staff are sufficiently conversant on the factors that contribute to academic and career success for underrepresented minorities.

7. Staffing:

Rating: Adequate for current programs but insufficient for the strongest research oriented programs (i.e. SULI, Graduate Fellows, CCI)

The COV finds that the current staff is dedicated to the work at hand with many highly devoted to their responsibilities. Bill Valdez as director has been able to lead the Office towards many successes in the past few years. We commend him and his staff on these successes. The shortcoming that we find however is that the current staffing has inadequate representation from Ph.D. level scientists with managerial experience; such persons would make important contributions to many of the strongest programs and would strengthen the ties between DOE Forrestal and DOE Germantown. Due to the current demographics of the Office, the COV anticipates that there will likely be several retirements in the coming years. These retirements present an opportunity to make hires that are more aligned with the future directions of the WDTS program. More discussion of this can be found in the Recommendation section below.

B. Recommendations of the COV

The following is a summary of our overall recommendations. More details about many of these recommendations follow this list.

We recommend that WDTS:

- Focus its efforts and its resources on its strong programs (SCGF, SULI, CCI, Einstein, Lindau, NSB) and work to improve and expand them to assure future success and impact.
- Redirect funds from the weak programs (ACTS, FaST, Undergraduate Research Journal, College Guide, RWDC, PST) to funding the recommended changes and expansions in the strong programs (listed above).
- Improve the procedures used in the solicitation and selection of the Graduate Fellows, building on the experience learned in the first year.
- Work diligently and strategically in all programs to increase the participation of students and scholars from underrepresented groups.
- Add Ph.D.-level scientists to the staff that have experience in scientific research, educational outreach, and grants program management.
- Increase the level of interaction, cooperation and coordination between staff in WDTS with programs and program officers in the Office of Science in Germantown.
- Develop and implement assessment and evaluation procedures for its programs that meet the standards of similar programs in other agencies such as NSF.
- Use these assessments on a regular basis to improve/modify existing programs.
- Follow the procedure that is routinely used in the Office of Science in developing

new programs: specifically, new program development should involve careful planning before implementation, including a national workshop and workshop report attended by stakeholders.

Background Behind these Recommendations

1. <u>Programs Recommended for Continuation/Improvement/Expansion</u>

a. Student Programs:

We enthusiastically recommend the continuation of the SULI program with its national/centralized application process. That said, improvements to the program should be considered. In particular: 1) the name recognition of SULI is significantly lower than that of the corresponding REU program run by NSF and better publicity and outreach would be appropriate; 2) the gender and ethnic diversity of SULI participants is poorer than that of the general science and engineering undergraduate population – and could be enhanced by targeted outreach.

The Community College Institute of Science and Learning (CCI) is a newer program with considerable potential. There is a large, untapped population of individuals attending Community Colleges that could play an important role at national laboratories – not necessarily as principal investigators, but as technicians, designers, information technologists, for example. Internships are provided either on a summer or semester basis. The more mature, motivated population and the longer period of stay makes these participants highly attractive to national laboratory sponsors. The CCI program participants have a higher degree of diversity than the national science and engineering undergraduate population. We recommend continuation of this program with an increased level of publicity and outreach.

For both SULI and CCI, we recommend that Ph.D. level scientist(s) be added to the WDTS staff to run these programs. More discussion of this follows in a later section on staffing.

b. Educator Programs:

There is strong interest by teachers in the Einstein Fellows program, and the COV recommends its continuance, but the goals of the program should better articulated. Efforts should be made to increase the diversity of participants. And care should be taken in matching participants with interesting and challenging roles during their year in Washington.

We recommend termination of the other programs (ACTS, FaST) due to uncertain goals, lack of national impact, and poor assessment and evaluation procedures to provide compelling evidence for their value. Future activities in this area must be based on careful study (such as a workshop and report) or partnering with other agencies with much more experience in this area. Any new program must have clear mission and goals established along with rigorous assessment.

c. Graduate Fellows Programs:

The SCGF program has yet to complete a full cycle, so a complete analysis of program design and operations is premature. However, there are a number of recommendations and suggestions that the COV felt would improve the program and review process. These recommendations originate in part from experiences that the COV members have had with similar programs at other agencies.

It is clear that DOE staff have done an admirable job running a high priority program on short notice with comparatively limited staff resources. Based on results from the inaugural competition, the program office has identified many problem areas requiring attention and has begun to take some steps toward rectification. These issues include clarification of language on eligibility and DOE relevance, panelist selection and distribution of applications to panelists, panelist review and scoring procedures, and relationships between program staff and other units at DOE. On almost all fronts, appropriate staffing (both in numbers and skills) is critical to the future success of the program. Future SCGF evaluation processes will require both additional staffing resources and the development of evaluation processes that focus on the critical decision areas. Beyond the external reviewers and panels, the SCGF staff will likely include program office staff within WDTS, personnel resourced from other units at DOE, and expanded contracted services to inform the evaluators and expedite the decision process.

Taking stock of lessons learned from the first iteration of the SCGF has helped better prepare for subsequent SCGF competitions. Among the key modifications are clarifications to the program solicitation language, development of a list of FAQ's, critical reviews of the application module, interface, and instructions to panelists, and an evaluation of outreach activities. The panelist selection process will stabilize as the program matures but continued input from other Office of Science programs will be required to assure reviews of the highest quality. Indeed, the increased and consistent presence of scientists from the Office of Science research areas as well as permanent appointments within WDTS will be important to future success of the SCGF.

The program should reevaluate the grouping of applicants by academic level such that undergraduates are not compared directly with first and second year graduate students. In terms of giving advice to the panels (recognizing limits due to non-FACA status), DOE should advise panelists on the nature of reviewing submission as fellowship applications (vs. research proposals) and on reasonable expectations for undergraduates vs. first and second year graduate students. Consideration of alternate approaches to matching application with panelists (e.g., electronic text mining to match literature citations and other data) is encouraged but this was deemed less critical.

Perhaps this most obvious area for improvement involves the use of normalized scoring and a triage approach that removes lower ranked applications earlier in the review process. This will both improve objectivity of the selection process and greatly reduce program office workload. DOE should employ a method to normalize reviewer numerical scores (e.g. Z-scores) to equilibrate scoring profiles among reviewers. Once scores are standardized, the program office should use numerical score and categorical data (e.g., high, medium, low or equivalent) data from the 3-4 online panelist reviews to create an initial ranking (rank order or categorical).

We provide one example of a process that uses the above ranking, reduces staff time and likely improves the selection process. Using the above rankings, the lowest 50-75% of these ranked applications would be rejected without further evaluation. Then a much more thorough evaluation can be concentrated on the top tier (25-50%) applications. Final determination of awardees would then be made from a much-reduced list, thereby significantly reducing the WDTS workload. At the same time, decisions made "at the margin" can be used to enhance the "broader impacts" goals of the SCGF program.

The uniqueness and identity of the SCGF relative to other fellowship programs within DOE and other federal agencies should be explored. Many lessons have been learned by these other programs and it is not clear that WDTS has fully appreciated the nature of processes employed by these programs. Relationships to other DOE fellowship programs such as the Computational Science Graduate Fellowship program are of particular relevance and should be distinguished from the SCGF in the program solicitation and other relevant documents. Many elements of this program are comparable to the SCGF but comparatively little coordination among the programs is evident.

WDTS must develop a more explicit plan for evaluation and assessment of the SCGF. The materials provided do not offer adequate descriptions of methods to be employed, comparison datasets, measures of success, or any number of other details necessary for a meaningful assessment of program performance.

e. Award Competitions

Award Competitions is a collective term for two meritorious programs: National Science Bowl and Lindau Program. These programs, though successful, can be further enhanced as WDTS moves forward.

- NSB has a long track record and is highly regarded. Its grassroots character makes it an especially good use of WDTS support; it also implies that the demographics be studied to insure that all of the U.S. be covered by the program. Assuming that covering all of the U.S. results in an expansion of the program held in Washington DC, consider adding a second tier of regional competitions prior to the national competition in DC.
- Lindau Program produces high quality participants that more than repay the small amount of WDTS investment required to implement it. Continuing the program is recommended.

The management of these programs should require only a moderate amount of staff support.

2. <u>Diversity Efforts</u>

The Graduate Fellows Program, SULI and CCI provide a strategic opportunity for DOE to contribute to the development of a diverse technically and culturally competent workforce capable of solving today's complex societal problems. Ensuring diversity associated with race and ethnicity, gender, ableness and other areas of underrepresentation will require concerted and proactive approaches to include, but not

limited to targeted recruitment, partnerships and interactions with minority serving institutions and organizations and institutions and organizations with demonstrated records of success with underrepresentation, an understanding of the issues that hinder diversification, and implementation of identified best practices that enhance attraction and retention of members from underrepresented groups (e.g. critical mass, presence of role models, professional development opportunities).

3. Future Staffing and Operations for Priority Programs

Ph.D. research scientists with educational activity and program management experience need to be added to the WDTS staff to manage the Science Graduate Fellowship, Science Undergraduate Laboratory Internship (SULI), and Community College Institute of Science and Technology (CCI) programs. Continuation and expansion of programs that impact highly motivated graduate students, undergraduate four-year college students and undergraduate community college students, require close association with domain and interdisciplinary scientists at national laboratories and universities and coordination with scientific program officers at DOE Germantown. These research experiences afford students access to the nation's forefront scientists and research facilities and the programs should be managed by individuals with the appropriate research credentials. Such programs should be led by Ph.D. scientists at WDTS, to set program goals, establish the review process for applications, and provide program oversight. The management team could be drawn from a combination of federal employees, laboratory detailees and university-based scientists as rotators. Refreshing this management on a regular basis would add strength and vitality to these important WDTS efforts.

One of the difficulties in the operation of WDTS is its limited connections with program officers at Germantown. We believe that this is due in part to the geographical separation in addition to the current lack of Ph.D. scientists/educators on the WDTS staff. One model that should be explored is to have a WDTS presence (office) in Germantown, for the WDTS scientists and some staff, in addition to space in Forrestal. We believe that the highly visible programs such as the Einstein Fellows Program, NSB, and Lindau should maintain their home base in Forrestal.

As noted below, more expertise however is needed in the area of assessment and evaluation beyond what currently exists.

4. Evaluation and Assessment

Management overview, evaluation and assessment of programs will be important in the future of WDTS. There is a definite need for improved evaluation and assessment activities. The COV sees two possible mechanisms by which this improvement could be accomplished.

The first mechanism involves selecting a fairly senior person who would work cooperatively with Bill Valdez to help administer the programs and monitor all of them to optimize their success. This approach would require careful consideration of the evaluation process currently being proposed. Modifications need to be made in this evaluation process to be better aligned with the specific goals of each of the programs. This would streamline the amount of data to be collected and would require measurement

expertise to guarantee that the instruments used to collect data are of the highest quality. The monitoring would range from more formative assessments of newer programs to more summative and impact oriented evaluations of more mature programs. This way a schedule of evaluation ideas can progress from output to outcome to impact. Much of the evaluation presently is at the output level. Self-report is valuable but not sufficient information for outcomes or impact. The anticipated impact of the programs also has to be clearly specified so that the evaluation can concentrate on collecting the appropriate data.

The second possible mechanism would utilize a less senior person who would concentrate on conducting comparative evaluations of DOE programs with other similar programs. These comparisons would be conducted using data already available for the other programs; hence development of new evaluation procedures and instruments would not be required. This less senior person however must have expertise or experience in program evaluation and assessment.

In either scenario, careful consideration should be given to using contractors to assist in the evaluation, coupled with adequate DOE oversight.

AGENDA
Office of Science
Committee of Visitors for the
Office of Workforce Development for Teachers and Scientists
May 17-19, 2010

Monday May 17, 2010				
Time	Activity	Committee Members	Division Staff	Location
6:30 PM	Buffet Dinner (continue through working dinner)	All	Bill Valdez, Sue Ellen Walbridge	Embassy Suites Hotel, Chevy Chase I
6:45 PM	Welcome and Charge to COV Geri Richmond, COV Chair John Hemminger, BESAC Chair	All	Bill Valdez, Sue Ellen Walbridge	Embassy Suites Hotel, Chevy Chase I
7:00 PM	Overview of WDTS Discussion Agenda/Goals for Tuesday	All	Bill Valdez Sue Ellen Walbridge Geri Richmond	Embassy Suites Hotel, Chevy Chase I
Tuesday May 18, 2010				
Time	Activity	Committee Members	Division Staff	Location
7:30 AM	Travel from Hotel to DOE HQ in the Forrestal Building (1000 Independence Ave. SW Washington, DC)	All	Drivers/Vans	Embassy Suites Hotel Lobby
8:00 AM	Check-in at DOE HQ* Group check-in with Vera O'Connor (table in lobby next to L'Enfant Ave. entrance)	All	Vera O'Connor (Vera.OConnor@science.doe.gov or 202-368-0791)	Forrestal Lobby
8:15 AM	Introductions and set-up	All	WDTS Staff	3F-071
8:30 AM	Review of Educator Programs (1) Overview and Questions (45 min) Evaluation of Programs	Lawrenz Ruchti	Brian O'Donnell	3H-083
8:30 AM	Review of Student Programs (2) Overview and Questions (45 min) Evaluation of Programs	Young Snyder Barabino	Sue Ellen Walbridge	3H-051
8:30 AM	Review of Graduate Fellows Program (3) Overview and Questions (45 min) Evaluation of Programs	Hahn Lineberger	Bill Valdez/Julie Carruthers	5B-110

9:15 AM	Review of Misc Program (4) Overview and Questions (45 min) Evaluation of Programs	Richmond (+ others when available)	Cindy White	3F-071
11:00 AM	Break for Coffee/General Discussion	All	COV Executive Session	3F-071
11:30 AM	Continued Review Preparation of Report-Out of Programs 1-4 for Committee Discussion	All	COV Executive Session	3F-071
12:30 PM	Lunch	All	Valdez, Walbridge, Carruthers	3F-071
1:30 PM	Report out on Findings and Discussion	All	COV Executive Session	3F-071
3:30 PM	Break	All	COV Executive Session	3F-071
3:45 PM	Discussion of overall WDTS Program Staffing issues, priorities WDTS Program Recommendations Discussion of Format for Report Goals for Wednesday	All	COV Executive Session	3F-071
~5:30 PM	Return to Hotel Dinner plans to be determined		COV Executive Session	Hotel

Wednesday May 19. 2010				
Time	**Activity**	**Committee Members**	**Division Staff**	**Location**
7:30 AM	Travel from Hotel to DOE HQ at Forrestal Building (1000 Independence Ave SW, Washington, DC)	All	Drivers/Vans	Fairfield Inn Lobby
8:00 AM	Check-in at DOE HQ* Group check-in with Vera O'Connor (table in lobby next to L'Enfant Ave. entrance)	All	Vera O'Connor (Vera.OConnor@science.doe.gov or 202-368-0791)	Forrestal Lobby
8:30 AM	Updated Findings, Recommendations, Ratings of Individual Programs	All	COV Executive Session	Sub-Panel Rooms
9:30 AM	Discussion of Recommendations for Overall WDTS Program (Staffing, priorities…)	All	COV Executive Session	3F-071

10:30 AM	Writing of Report/Preparation of BESAC Presentation	All	COV Executive Session	3F-071
12:00 AM	Working Lunch	All	COV Executive Session	3F-071
1:00 PM	Closeout Session with COV and BES Senior Management	All	Bill, Sue Ellen, other WDTS staff as requested	3F-071
2:00 PM	Adjourn			
Thank-you!				

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JOHN C. HEMMINGER, DEAN
SCHOOL OF PHYSICAL SCIENCES
OFFICE OF THE DEAN

IRVINE, CALIFORNIA 92697-4675
Phone 949-824-6022 Fax 949-824-2261
JCHEMMIN@UCI.EDU
HTTP://SURFSCI.PS.UCI.EDU

September 18, 2010

Dr. William F. Brinkman
Director
Office of Science
U.S. Department of Energy
1000 Independence Avenue
Washington, D.C. 20585

Dear Dr. Brinkman:

On behalf of the Basic Energy Sciences Advisory Committee (BESAC), I am forwarding to you the report of the 2010 Committee of Visitors (COV) for the Office of Workforce development for Teachers and Scientists (WDTS). The COV met for two days in May 2010 to address the efficacy and quality of the processes used to solicit, review, recommend, monitor, and document application, proposal, and award actions and the quality of the resulting portfolio. Dr. Geri Richmond of the University of Oregon chaired this committee.

I would like to take this opportunity to bring to your attention several issues of concern to members of the committee of visitors and to the entire membership of BESAC. First and foremost is the importance of maintaining funding for the new Office of Science Graduate Fellowship program –this program is viewed by the energy sciences community as critical to the workforce development that is so important to our energy future. With regards to the operations and staffing of WDTS, there is a strong consensus that the Division should focus its efforts on its strongest programs as identified in the COV report, and that more direct connection between WDTS and Ph.D. level program managers in Germantown should be established to help direct and guide these program. Third, the Office of WDTS needs to develop and implement assessment and evaluation procedures for its programs that meet the standards of similar programs in other federal agencies, and that are used routinely to assess the continuation or termination of existing programs.

The recommendations of the COV and the contents of this report were unanimously accepted and endorsed by the members of BESAC at our August 2010 meeting.

I would like to thank you for the opportunity to involve BESAC in this very important review process.

Sincerely,

John C Hemminger

Digitally signed by John Hemminger
DN: cn=John Hemminger, o=University of California, ou=School of Physical Sciences, email=jchemmin@uci.edu, c=US
Date: 2010.09.29 08:48:11 -07'00'

John C. Hemminger
Chair
Basic Energy Sciences Advisory Committee

cc: Geri Richmond, University of Oregon
Patricia Dehmer, SC-2
Harriet Kung, SC-22
Katie Perine, SC-22