Audit of Grants Management at Dakota State University

National Science Foundation Office of the Inspector General

> February 28, 2005 OIG 05-6004

Audit of Grants Management at Dakota State University

Dakota State University (DSU), located in Madison, South Dakota, is an institution specializing in computer management and computer information systems with a total enrollment of just over 2,000 students. DSU has a small research program, having only four National Science Foundation (NSF) awards since December 31, 1997 and only a few other federal or non-federal awards. As of December 31, 2003 DSU had disbursed the total amount on the four NSF awards, amounting to just over \$609,000. For purposes of the Single Audit Act of 1996, DSU was included in the single audit for the State of South Dakota.

In conjunction with an audit our office was conducting at the University of South Dakota (USD) of NSF award number ITR-0296091, hereafter referred to as the Rite Link grant, we audited the grants management program at DSU, as it was the original recipient of the Rite Link grant.⁴ The primary function of this award was to train rural residents with basic information technology (IT) skills so they could obtain IT jobs with firms in other states though the employee stays in South Dakota and works from their home computer or from a nearby center. DSU was responsible for developing and conducting this training. When the award was transferred to USD in September 2001, DSU continued to conduct the training under a subaward from USD. As DSU had such a significant portion of the award, we audited the incurred costs and internal controls to determine if the award was adequately managed and the costs incurred were reasonable, allowable, and allocable according to federal and NSF regulations. We conducted our audit in accordance with the Comptroller General's Government Audit Standards and included such tests of accounting records and other auditing procedures, as we considered necessary, to fully address the audit objectives. Our audit did not question any costs at DSU under the subject award however we did note that award administration overall at DSU could be improved.

Improvements Needed in Grants Management at DSU

The Office of Management and Budget (OMB) circular A-110 specifies the financial management requirements that a grantee should have in place when managing federal grants. ⁵ Examples of processes required by the OMB circular include determining allowability of costs, approving budget changes, monitoring subawards, and managing subcontracts.

³ DSU spent the following amounts on each respective grant: \$159,039 for DUE-9696106, \$147,243 for EPS-9720148, \$289,349 for EIA-0086076 and \$13,385 for DUE-0220766.

¹ Total enrollment in fall 2002: 2,263 students (2,035 Undergraduate, 228 Graduate)

² Only one of these awards was active after October 2002.

⁴ The Rite Link grant was originally awarded to DSU under award EIA-0086076, but was transferred in September 2001 to USD under ITR-0296091.

⁵ OMB Circular A-110, Uniform Administrative Requirements for Grants and Other Agreements with Institutions of Higher Education, Hospitals, and Other Nonprofit Organizations.

Although our audit found that DSU did not have documented policies and procedures to oversee federal grants, we found only two problem areas affecting the Rite Link grant. DSU needs to improve its reporting on grant progress and managing subcontracts. Specifically, we noted that DSU did not notify NSF of significant events affecting the successful completion of the project, issued an annual report that contained several misstatements of fact, and procured two subcontracts without developing statements of work and paid a voucher to a subcontractor without adequate support. These conditions were the result of DSU having neither an office responsible for sponsored research nor any written policies and procedures defining responsibilities for managing federal grants. The lack of effective grant management controls significantly increased the risk that federal grant funds could be misspent.

Instances of Insufficient and Inaccurate Reporting at DSU

NSF relies on notification and annual progress reports, required by federal requirements and its own grant conditions, to stay informed of grantee progress in meeting award objectives and goals. However, DSU did not notify the NSF program officer of problems that significantly decreased the likelihood of successful completion of the Rite Link grant and submitted an inaccurate annual report. Each of these is discussed below.

DSU Did Not Notify NSF of Problems on Rite Link Grant

OMB Circular A-110 requires the grantee to notify the federal awarding agency in the case of problems, delays, or adverse conditions that materially impair the ability of the grantee to meet the objectives of the award. This is reinforced in the NSF Grant Policy Manual, which requires grantee officials to notify the NSF program officer in the event there are problems, delays, or adverse conditions that will materially affect the grantee's ability to attain the objectives of the project.

However, DSU neither directly notified the NSF program officer nor adequately disclosed in the annual progress report economic developments and lack of business partner involvement that had a significant impact on the successful completion of the award. Specifically, the listed goal of the subject award was to "enable residents in remote rural communities to participate in the new information economy." The award was primarily to provide IT training to individuals living in rural areas to fill a perceived shortage of IT workers at the time the award was provided to DSU. However, shortly after the award was made in September 2000, the IT job market radically changed, as many IT companies failed and no longer needed workers. In addition, a key factor in DSU's award proposal was that the Principal Investigator (PI) had established three business partners to assist in developing the training and, presumably, hire the trainees.

NSF Grant Policy Manual, section 311.3, Significant Changes, Delays or Events of Unusual Interest.

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⁶ OMB Circular A-110 51 (f), Monitoring and reporting program performance.

Interviews with key personnel at DSU responsible for developing the training module revealed that there was little business partner involvement in this process.

The NSF program officer originally assigned to the grant told us that the PI did not inform him that the need for IT workers had changed or that business partner involvement was minimal. The PI acknowledged that he should have kept NSF better informed of the difficulties, but he, as well as others involved in the project, all had hope that the IT downturn was temporary and the need for IT positions would return, allowing the grant to be successful. If NSF had been properly notified of the difficulties on this grant, the project could have been changed to allow for better use of the funds or the funds could have been redirected to a more viable project.

Inaccurate Annual Reporting on the Rite Link Grant

NSF relies on annual reports to stay informed of grantee progress in meeting award goals. We reviewed the Rite Link grant annual report for the period September 2000 through August 2001 for accuracy. Specifically, we reviewed labor charges to the grant and attempted to verify or find support for the technical progress claimed in the report. Through interviewing key personnel at NSF, DSU and USD, and reviewing documentation, we found several inaccuracies in the report, as noted below.

- The annual report identified 9 individuals as each having contributed more than 160 hours on the grant during the one year reporting period, however we found one did no work on the grant and another worked only 135 hours. There were also three people that worked on the grant during the reporting period that were not mentioned in the report.
- The report also claimed, "The project personnel have also been working with numerous IT companies developing IT training...." However, according to the Co-PI and the Director of the Business Education Institute at DSU, who developed and conducted the training, there was a decided lack of support from IT companies. This was particularly significant because IT company involvement (via business partners) was a key part of the proposal.
- Regarding community profile meetings, DSU reported, "An estimated 2,500 people have participated in these meetings." We found this to be an exaggeration as the Co-PI, who attended the meetings, estimated the number of participants at closer to 700.
- The report also claimed, "The response from the IT employers has been
 positive in general and some businesses have requested an expedited
 schedule." According to key personnel at DSU tasked with canvassing IT
 businesses, very little positive feedback or support was received from the
 businesses contacted.

When NSF is not notified of significant problems and annual reports are not accurate, NSF's ability to make timely and accurate program or funding decisions is impeded. The PI acknowledged that he did not adequately verify the facts he included in the annual report. Also, DSU did not have a management structure in place to oversee the annual reporting process and as a result neither the Co-PI or anyone else was asked to review the report for accuracy. NSF may have been able to revise the project goals or to redirect the remaining funds on the grant to a more viable project had the Rite Link grant annual report been accurate.

Subcontract Management Needs Improvement

Federal grant regulations require primary awardees to oversee and monitor award funds passed to subrecipients and subcontractors. Specifically, OMB Circular A-110, states, "Recipients are responsible for managing and monitoring each ... subaward supported by the award." OMB Circular A-110 also contains the requirements of primary awardees for the management of subcontracts. Important elements of an effective subaward and subcontract oversight program include formal agreements defining work expectations and completion dates and reviews of supporting documentation as a basis for subaward and subcontract payments.

Overall, subcontract management on the Rite Link grant could have been improved. Specifically, we reviewed two subcontracts for \$107,141 and \$10,775, and found that neither of them had a detailed statement of work. Additionally, DSU paid a voucher on the first subcontract in the amount of \$17,784 even though the subcontractor did not provide detailed information supporting the expenses on the voucher. The PI provided substantial documentation created by the subcontractor and stated that he repeatedly tried to obtain a detailed breakdown of the \$17,784 but the subcontractor could not locate it. The subcontractor informed us that they did not keep any detailed breakdown of the costs, as the statement of work did not require it.

Because there was no detailed statement of work, it was difficult to determine what NSF got for the funds expended on the subcontract. Furthermore, if a voucher is paid without a detailed breakdown, the primary awardee may not be aware of what it's paying for and risks making duplicate payments for the same work. Also, the subcontractor could incur effort/costs not in line with grant objectives, overcharge for costs incurred, or delay project completion.

OMB Circular A-110, sections .41 through .48 *Procurement standards*, requires that solicitations for goods and services provide for a clear and accurate description what is to be performed under the procurement.

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⁸ OMB Circular A-110, section .51(a) Reports and Records - Monitoring and reporting program performance.

No Clear Responsibilities for Oversight of Federal Awards Led to Reporting and Subcontract Issues

DSU's insufficient and inaccurate reporting and inadequate subcontract management occurred because it had not established clear responsibilities for oversight of federal grants. Specifically, at the time the Rite Link award was made to DSU, the PI for the grant was assigned to the Business Education Institute (BEI), which was a division of DSU devoted to local business outreach. At the time of our audit, BEI did not have anyone dedicated to account for or administer federal grant funds in accordance with federal or NSF regulations. As DSU had only a handful of federal grants, it had not established formality for administering and monitoring grants. Further, DSU did not have a dedicated office in support of sponsored research or a grant accountant. As a result, the responsibility of managing grant funds and keeping track of disbursements was shared by the BEI and DSU finance offices with no formal grant management policies and procedures to follow. Specifically lacking was written guidance related to reporting progress on annual reports and managing subawards and subcontracts.

As a result of our audit, according to the DSU Vice President for Business and Administrative Services, DSU had significantly improved its grants management program. For example, DSU created an office dedicated to sponsored research and named a director. DSU also established the position of Director of Budget and Grants Administration and folded BEI operations back into DSU so Federal grant management responsibilities would no longer be bifurcated.

Recommendation:

We recommend that the Directors, NSF Division of Grants and Agreements and Division of Institution and Award Support, follow-up with DSU to ensure that its new office dedicated to sponsored research has developed and implemented written policies and procedures involving managing federal grants in accordance with NSF Grant Conditions and OMB Circular requirements. Specifically, the guidance should address notifying NSF of significant events that affect any NSF funded project, accurately reporting grant progress, and adequately managing subcontracts.

Auditee's Response

DSU agreed with the recommendation and provided information indicating it had already taken steps to implement it. For example, DSU has established a Sponsored Programs office to assist in the pre-award process and a Grant Management office for post award management. Further DSU, has composed a set of policies and procedures for contracts and grants. DSU also stated that it felt the audit was very helpful in pointing out areas DSU needed to address in order to improve grant management and appreciated the time and effort the OIG team took to provide DSU with suggestions and advice. DSU disagreed with many of statements regarding the accuracy of the annual report but agreed

to establish new processes to allow management to verify the facts in the annual reports. DSU's entire response is attached as an appendix.

Auditors' Comments

We acknowledge and commend DSU for the proactive actions listed in DSU's response letter to address the weaknesses cited in this report with its grants management program. It appears these steps, if implemented, would adequately address the recommendation.



Dakota State University • 820 North Washington Ave. • Madison, SD 57042-1799

December 3, 2004

Office of the Inspector General National Science Foundation 4201 Wilson Boulevard Arlington, VA 22230

SUBJECT: Audit of Dakota State University's Grant Management Program

Dear ,

Thank you for providing to Dakota State the opportunity to review your draft report of the audit on the NSF Grants awarded to Dakota State University. In general, we understand the findings, but would like to point out a few discrepancies. As directed in your letter of November 4, 2004, I will go through each of the audit findings and provide our interpretation of the findings.

Improvements Needed in Grants Management at DSU

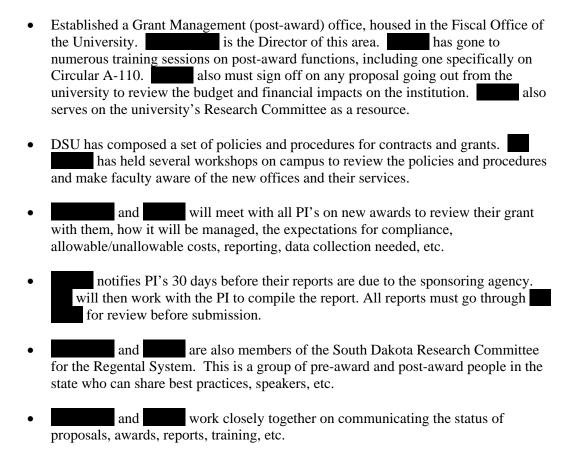
The Office of Management and Budget (OMB) circular A-110 specifies the financial management requirements that a grantee should have in place when managing federal grants. Examples of processes required by A-110 include determining allowability of costs, approving budget changes, monitoring subawards, and managing subcontracts.

Although our audit found that DSU did not have documents policies and procedures to oversee federal grants, we found only two problem areas affecting the Rite Link grant — insufficient and inaccurate communication of grant progress and inadequate subcontract management. Specifically, we noted that DSU did not notify NSF of significant events affecting the successful completion of the project, issued an annual report that contained several misstatements of fact, and procured two subcontracts without developing statements of work and paid a voucher to a subcontractor without adequate support. These conditions were the result of DSU having neither an office responsible for sponsored research nor any written policies and procedures defining responsibilities for managing federal grants. The lack of effective grant management controls significantly increased the risk that federal grant funds could be misspent.

DSU agrees with the assessment that at the time of the Rite Link grant, DSU did not have a grants management office that had oversight for all grants on campus, nor did the institution have written policies and procedures for grant management. However since that time, I have been hired as the new Vice President for Administration and Business Services, and DSU has a new President. In the last two years, we have made a concerted effort to develop adequate controls for grants on the campus. To that end, we have:

•	Established a Sponsored Programs (pre-award) office, with	
	Director. Dr. Layton is well-versed in grant writing, policies and procedures of gran	nt
	submission, and reporting. All grants written by DSU personnel must go through	
	for review and approval. also reviews proposals for compliance	
	with human subjects and other internal review board concerns.	

university's Research Committee as a resource and advisor to faculty on the Committee.



DSU believes it has now organized and staffed a competent and reliable sponsored program office on campus that will be able to meet the standards required by NSF or any other federal agency. We will continue to look for ways to improve this function and will continue to seek out best business practices and additional training.

Instances of Insufficient and Inaccurate Reporting at DSU

NSF relies on notification and annual progress reports, required by federal requirements and its own grant conditions, to stay informed of grantee progress in meeting award objectives and goals. However, DSU did not notify the NSF program officer of problems that significantly decreased the likelihood of successful completion of the Rite Link grant and submitted an inaccurate annual report. Each of these is discussed below.

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DSU Did Not Notify NSF of Problems on Rite Link Grant

OMB Circular A-110 requires the grantee to notify the federal awarding agency in the case of problems, delays or adverse conditions that materially impair the ability of the grantee to meet the objectives of the award. This is reinforced in the NSF Grant Policy Manual, which requires grantee officials to notify the NSF program officer in the event there are problems,

delays or adverse conditions that will materially affect the grantee's ability to attain the objectives of the project.

However, DSU neither directly notified the NSF program officer nor adequately disclosed in the annual progress report economic developments and lack of business partner involvement that had a significant impact on the successful completion of the award. Specifically, the listed goal of the subject award was to "enable residents in remote rural communities to participate in the new information economy." The award was primarily to provide IT training to individuals living in rural areas to fill perceived shortage of IT workers at the time the award was provided to DSU. However, shortly after the award was made in October 2000, the IT job market radically changed, as many IT companies failed and no longer needed workers. In addition, a key factor in DSU's award proposal was that the PI had established three business partners to assist in developing the training and, presumably, hire the trainees. Interviews with key personnel at DSU responsible for developing the training module revealed that there was little business partner involvement in this process.

The NSF program officer originally assigned to the grant told us that the PI did not inform him that the need for IT workers had changed or that business partner involvement was minimal. The PI acknowledged that he should have kept NSF better informed of the difficulties, but he, as well as others involved in the project, all had hope that the IT downturn was temporary and IT positions would return, allowing the grant to be successful. If NSF had been properly notified of the difficulties on this grant, the project could have been changed to allow for better use of the funds or the funds could have been redirected to a more viable project.

DSU does not dispute the fact that the PI should have kept NSF better informed on the status of the project. One fact we would like to point out is that the annual report (September 2000-August 2001) was requested to be submitted early by the NSF project manager at the time (). The PI prepared the report and submitted it April 30, 2001, obviously many months before the actual end of the grant year. At the time of submission, the report was accurate to the extent of the knowledge held at that time.

As of April 30, 2001 the PI and Co-PI as well as other key people were not yet aware of significant problems with the IT market. At the time of the report the response from IT employers was generally favorable. There did not appear to be a problem. In hindsight, we know now the IT bubble was about to burst.

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Inaccurate Annual Reporting on the Rite Link Grant

NSF relies on annual reports to stay informed of grantee progress in meeting award goals. We reviewed the Rite Link grant annual report for the period September 2000 through August 2001 for accuracy. Specifically, we reviewed labor charges to the grant and attempted to verify or find support for the technical progress claimed in the report. Through interviewing key personnel at NSF, DSU and USD, and reviewing documentation, we found several inaccuracies in the report, as noted below.

• The annual report identified 9 individuals as each having contributed more than 160 hours on the grant during the one year reporting period, however, we found one did not work on the grant and another worked only 135 hours. There were also three people that worked on the grant during the reporting period that were not mentioned in the report.

Again, at the time the annual report was submitted (April 30, 2001) the work-plan through the summer was accurately reflected in the report. Several personnel were to contribute time during the summer months and were included in the report with language stating that they will be working on the project during the summer. As the summer progressed, changes were made in who was actually able to do the work. The PI did not know until after the report was submitted and accepted that would not be able to contribute time during the summer and another individual would only work 135 hours instead of 160 as anticipated. The Co-PI at that point had the work completed by other personnel. These personnel were reported in the next report made to NSF. We agree the information in the report does not match with what people actually worked, but at the time it was submitted, it was accurate to the best of the PI's knowledge and ability.

• The report also claimed, "The project personnel have also been working with numerous IT companies developing IT training..." However, according to the Co-PI and the Director of the Business Education Institute at DSU, who developed and conducted the training, there was a decided lack of support from IT companies. This was particularly significant because IT company involvement (via business partners) was a key part of the proposal.

The draft audit report also claims that the statement "The project personnel have also been working with numerous IT companies developing IT training..." is untrue.

the then Director of Business and Education Institute, reported to the PI that he had been working with the IT companies listed. The PI trusted that had accurately represented what was doing. As of July 1, 2001, employment was terminated by DSU.

• Regarding community profile meetings, DSU reported "An estimated 2,500 people have participated in these meetings." We found this to be a significant exaggeration as the Co-PI, who attended the meetings, estimated the number of participants at closer to 700.

The draft report also claims that the reported statement "An estimated 2,500 people have participated in these meetings" is a significant exaggeration. This is not an exaggerated number of attendees. The 2,500 number is the estimate of the number of people that attended the *first* informational meeting held in 14 communities. The 547 participants included in the report, along

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with demographic data, were those attending the second community meeting and were actually interested in participating in the training. The annual report clearly details the community meeting process and states, "During the months of February through April the research team has conducted an initial community meeting and follow-up meeting with residents that are interested in pursuing the IT-training program in those communities." The report goes on to explain the process: "Individuals that attend the initial meeting and are interested in potentially participating are asked to go on line and complete an IT-aptitude test, personality test and provide general demographic information focusing on education and current computer skills." The demographic data collected up to the time the report was filed was included in the report. The report also states that the number of people attending the initial informational meeting ranged from 250 in Miner County to 20 in Todd County. The number of people that attended the second meeting in those communities reported in the 2002 annual report shows that 145 of the 250 people in Miner County attended the second meeting and 12 of the 20 Todd County participants attended the second meeting. As you would expect the number of participants (2,500) at the first informational meeting would be significantly higher than the number of people that completed the three tasks prior to the second meeting (547) and were actually interested in participating in the training.

The report also claimed, "The response from the IT employers has been positive in general and some businesses have requested an expedited schedule." According to key personnel at DSU tasked with canvassing IT businesses, very little positive feedback or support was received from the businesses contacted.

As was reported in an earlier section, this portion of the report was prepared by who is no longer with DSU. Mr. Martin had been working with various IT employers and the downtown in the industry had not yet been felt.

When NSF is not notified of significant problems and annual reports are not accurate, NSF's ability to make timely and accurate program or funding decisions is impeded. The PI acknowledged that he did not adequately verify the facts he included in the annual report. Also, DSU did not have a management structure in place to oversee the annual reporting process and as a result neither the Co-PI or anyone else was asked to review the report for accuracy. NSF may have been able to revise the project goals or to redirect the remaining funds on the grant to a more viable project had the Rite Link grant annual report been accurate.

DSU points to the new processes we have established. DSU believes we now have the ability to verify facts and have a management structure to oversee the annual reporting process.

Subcontract Management Needs Improvement

Federal grant regulations require primary awardees to oversee and monitor award funds passed to subrecipients and subcontractors. Specifically, OMB Circular A-110 states, "Recipients are responsible for managing and monitoring each . . . subaward supported by the award," and OMB Circular A-1333 provides specific guidance to award recipients for monitoring their subrecipients. OMB Circular A-110 also contains the requirements of primary awardees for the management of subcontracts. Important elements of an effective

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subaward and subcontract oversight program include formal agreements defining work expectations and completion dates and reviews of supporting documentation as a basis for subaward and subcontract payments.

Overall subcontract management on the Rite Link grant could have been improved. Specifically, we reviewed two subcontracts for \$107,141 and \$10,775 and found that neither of them had a detailed statement of work. Additionally, DSU paid a voucher on the first subcontract in the amount of \$17,784 even though no detailed information was provided as to

what the funds were paying for. The PI provided substantial documentation created by the subcontractor and stated that he repeatedly tried to obtain a detailed breakdown of the \$17,784 but the subcontractor could not locate it. The subcontractor informed us that they did not keep any detailed breakdown of the costs, as the statement of work did not require it.

Because there was no detailed statement of work, it was difficult to determine what NSF got for the funds expended on the subcontract. Furthermore, if a voucher is paid without a detailed breakdown, the primary awardee may not be aware of what it's paying for and risks making duplicate payments for the same work. Also the subcontractor could incur effort/costs not in line with the grant objectives, overcharge for costs incurred, or delay project completion.

DSU agrees that the paperwork on the subaward could and should have been improved. The audit provided good feedback to our accounting office from which we are now using to ensure bills do not get paid on federal grants without the proper documentation. As part of the PI training and review by the Director of Grant Management, the PI should also be well-versed in ensuring the bills are paid only with the proper documentation.

No Clear Responsibilities for Oversight of Federal Awards Led to Reporting and Subcontract Issues

DSU's insufficient and inaccurate reporting and inadequate subcontract management occurred because it had not established clear responsibilities for oversight of federal grants. Specifically, at the time Rite Link award was made to DSU, the PI for the grant was assigned to the Business Education Institute (BEI), which was a division of DSU devoted to local business outreach. At the time of our audit, BEI did not have anyone dedicated to account for or administer federal grants in accordance with federal or NSF regulations. As DSU had only a handful of federal grants, it had not established formality for administering and monitoring grants. Further, DSU did not have a decided office in support of sponsored research or a grant accountant. As a result, the responsibility of managing grant funds and keeping track of disbursements was shared by the BEI and DSU finance offices with no formal grant management policies and procedures to follow. Specifically lacking was written guidance related to reporting progress on annual reports and managing subawards and subcontracts.

As a result of our audit, according to the DSU Vice President for Business and Administrative Services, DSU had significantly improved its grants management program. For example, DSU created an office dedicated to sponsored research and named a director. DSU also established the position of Director of Budget and Grants Administration and folded BEI

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operations back into DSU so Federal grant management responsibilities would no longer be bifurcated.

As noted in this audit report and in our first response above, DSU has implemented several corrective actions to ensure that awards, subawards, and subcontracts are managed in accordance with federal and NSF guidelines. As a side note, the Business Education Institute (BEI) has been dissolved; all grants are run directly through the new centralized structure DSU created. With this change in organization at DSU, there is no longer any possibility of bifurcated responsibilities.

Recommendation:

We recommend that the Directors, NSF Division of Grants and Agreements and Division of Institution and Award Support, follow-up with DSU to ensure that its new office dedicated to sponsored research has developed and implemented written policies and procedures involving managing federal grants in accordance with NSF Grant Conditions and OMB Circular requirements. Specifically, the guidance should address notifying NSF of significant events that affect any NSF funded project, accurately reporting grant progress, and adequately managing subcontracts.

DSU agrees with this recommendation and would welcome any additional comments by NSF to improve our administration of sponsored research. We believe this audit was very helpful in pointing out areas DSU needed to address in order to improve grant management. We sincerely appreciate the time and effort and his team took to provide us with suggestions and advice.

Please let me know if you require any additional information from Dakota State University on this matter.

