

AGENDA ITEM # 7

TO: MEMBERS OF THE INDEPENDENT CITIZEN'S OVERSIGHT COMMITTEE (ICOC)

SUBJECT: Fiscal oversight and accountability: Discussion of best practices and State Controller Steve Westly's recommendations to the ICOC in establishing fiscal and performance measurement.

BACKGROUND

Under the California Stem Cell Research and Cures Initiative (the Initiative), the State Controller is named as the chairperson of the Citizen's Financial Accountability Oversight Committee (CFAOC). The Initiative further states:

- The California Institute for Regenerative Medicine (the Institute) shall annually commission an independent financial audit of its activities from a certified public accounting firm, which shall be provided to the State Controller, who shall review the audit and annually issue a public report of that review.
- The CFAOC shall review the annual financial audit, the State Controller's report and evaluation of that audit, and the financial practices of the institute.
- The CFAOC shall provide recommendations on the Institute's financial practices and performance.
- The CFAOC shall hold a public meeting, and shall evaluate public comments and include appropriate summaries in its annual report.

In light of the above responsibilities, it would be reasonable to expect the CFAOC to meet periodically to proactively identify measures to address its oversight responsibility over the financial audit and to evaluate and make recommendations about the Institute's financial practices and performance. However, based on the current provisions in the Initiative, it appears that the CFAOC may be able to conduct only one meeting per year. This meeting could only occur after the financial audit has been completed and the State Controller's Office has completed its review of the financial audit.

The Institute will spend significant sums of public funds. As such, it is critical that the Institute implement the appropriate measures to ensure the highest degree of accountability over the use of public funds. To assist the Institute with its implementation efforts, the Controller directed his staff to research the grant administration and fiscal practices of other organizations that, like the Institute, primarily engage in the award and oversight of publicly funded grants for scientific or medical research activities. By examining the grant administration and fiscal practices of similar organizations and reviewing the problems they encountered, the Institute can take proactive measures to provide the necessary checks and balances to ensure proper accountability.

OTHER ORGANIZATIONS SELECTED FOR THE RESEARCH EFFORT

Our research effort primarily focused on the following organizations.

The National Science Foundation (NSF)

NSF was created in 1950 as an independent federal agency. NSF has an annual budget of approximately \$5.5 billion, which funds about 10,000 new scientific research grants each year. It is the funding source for about 20% of all federally supported basic research conducted at America's colleges and universities.

The National Institutes of Health (NIH)

Founded in 1887, NIH is a part of the U.S. Department of Health and Human Services and is the federal government's focal point for medical research in the United States. NIH has an annual budget of approximately \$28.8 billion and is comprised of 27 separate institutes and centers. NIH conducts research in its own laboratories and provides research grant funding to non-federal scientists in universities, medical schools, hospitals, and research institutions.

Stem Cell Research Foundation (SCRF)

SCRF is a relatively new non-profit agency that receives all of its funding from private donations. Since 2000, SCRF has awarded more than \$1.2 million in research grants, with nine grants that are currently active. SCRF grants are normally awarded to individuals rather than to institutions.

We selected NSF and NIH because, like the Institute, both organizations are involved in dispensing large sums of public money to fund research projects through grant awards. Both agencies were established long ago and, as federal agencies, should have extensive guidelines and procedures regarding issuing grant awards, grant project administration, and use of grant funds. In addition, for each of the two agencies, an independent Office of the Inspector General has been established to conduct periodic audits and investigations of its programs and functions.

We selected SCRF because it awards grants to individuals rather than to organizations. Even though SCRF has awarded only a few grants over its relatively short period of existence, we believe that the Institute could benefit from reviewing SCRF's fiscal practices, should it decide to award research grants to individuals as well.

COMPARISON OF GRANT ADMINISTRATION AND FISCAL PRACTICES

Attachment A provides a comparison, in summary, of the grant administration and fiscal practices of the three organizations named above. The following are our observations concerning the key aspects of the practices.

- Both NSF and NIH rely heavily on uniform guidelines and procedures governing all federal grant programs to establish parameters as to how grants should be administered and how grant funds are to be used and accounted for. These guidelines are industry specific, and

proposed changes are published in federal registers for public review and comment before being adopted as regulations. For NSF and NIH grants, the most common guidelines include:
OMB Circular A-21 *Cost Principles for Educational Institutions*

OMB Circular A-87 *Cost Principles for State, Local, and Indian Tribal Governments*

OMB Circular A-102 *Grant and Cooperative Agreements with State and Local Governments*

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

OMB Circular A-122 *Cost Principles for Nonprofit Organizations*

45 CFR, Part 74 Uniform Administrative Requirements for Awards and Sub-awards to Institutions of Higher Education, Hospitals, Other Nonprofit Organizations, and Commercial Organizations; and Certain Grants and Agreements with State, Local Governments, and Indian Tribal Governments

The cost principles provide guidelines governing which costs are eligible or ineligible for reimbursement, what constitutes direct or indirect costs, and different methodologies in calculating indirect cost rates. The uniform administrative requirements provide parameters governing numerous aspects of grant administration, including, but not limited to, minimum requirements for grant management systems, procurement standards and procedures, property rights, program monitoring, and use of program income.

- Both NSF and NIH employ a peer review process that involves having knowledgeable and respected scientists in the field evaluate the technical merits of the grant proposal before forwarding it to a second independent advisory group for review and final approval. Additional peer reviews could be conducted while the projects are in progress and/or upon completion of the project.
- Both NSF and NIH require their grantees to follow the audit requirements specified in OMB Circular A-133, *Audits of Institutions of Higher Education and Other Nonprofit Institutions*. The grantees that receive \$500,000 or more in federal grant funds must annually arrange for an entity-wide financial and compliance audit, commonly referred to as a “single audit,” by an independent audit firm or organization. In addition, the Office of the Inspector General for each agency conducts audits and investigations of selected grant programs and operations on a sample and/or as-needed basis.
- Unlike NSF and NIH, SCRF is not funded by public funds and does not have extensive requirements concerning grant administration. However, as the grant award for each grant project is limited to \$100,000 (up to \$50,000 per year for two years), the risk is relatively low. In addition, SCRF grant funds are limited to research only and do not allow for overhead costs, building construction, or capital equipment. Moreover, the grantees may not

use SCRF grant funds in conjunction with other grant funds on a project. According to its 2004 Annual Report, SCRF had nine projects that were ongoing during 2004. Given this limited number of grantees, SCRF presumably could closely monitor and track the status of the projects.

RECENTLY DISCLOSED PROBLEMS OF NSF AND NIH GRANTS

Despite having extensive guidelines and requirements governing awarding of grants, peer reviews, grant management systems, grant oversight, and use of grant funds, both NSF and NIH still periodically encounter problems that raise questions over the use of grant funds by some of the grantees. Most of the problems are identified through audits and investigations by the Office of the Inspector General for each of the two agencies. Attachment B provides a summary of recently completed audits and investigations. Over a six-month period, the Office of the Inspector General for NSF issued 10 reports that questioned a total of \$1.2 million in grant funds and referred three cases to the Department of Justice for legal consideration. Commonly noted problems include:

- NSF failed to properly incorporate statutory requirements into grant agreements or did not adequately monitor the activities of the grantees.
- Grantees did not have adequate internal control systems in place to provide proper accountability over grant funds.
- Grantees engaged in questionable fiscal practices.

The audits of grants awarded by NIH, conducted by the Office of the Inspector General for the federal Department of Health and Human Services, disclosed findings similar to those for NSF grants. In February 2004, Johns Hopkins University and one of its hospitals agreed to pay \$2.6 million to settle a lawsuit filed by the U.S. Attorney's Office for filing false information when applying for research grants sponsored by NIH. Similarly, in February 2003, Northwestern University agreed to pay \$5.5 million to settle allegations that the university violated the False Claims Act with regard to claims for NIH and other federal agencies' grants.

MATTERS THAT MERIT ICOC'S CONSIDERATION

Based on our research effort, we compiled a listing (see Attachment C) of internal control measures that are necessary to provide proper accountability over public funds. To implement these control procedures as expeditiously as possible, the ICOC may wish to pursue the following actions.

1. **Review and consider incorporating some of the federally adopted guidelines into the Institute's grant-making process.** Like NSF and NIH, the Institute is an agency responsible for dispensing large sums of public funds through grant awards. Rather than reinventing the wheel, the Institute could pattern at least some of its procedures after applicable guidelines that were developed after extensive comments by all interested parties. These guidelines and procedures have been fully tested over the years and should be used as a starting point for the Institute to develop its own guidelines and procedures. For example, the Initiative imposed a 25% limitation on the amount of indirect costs that could be claimed

by a grantee. The federal guidelines contain cost principles delineating acceptable means for determining indirect costs.

2. **Consider incorporating the peer review requirement into the grant approval process.** As scientific and medical research grants often involve projects that are highly complex and technical in nature, it would be beneficial for a panel of independent experts in the field to evaluate the merit of the proposals before final consideration by the ICOC.
3. **Consider adopting some of the SCRF grant funding requirements for project awards that are of lesser amounts.** If the Institute should decide to award grants to individuals or small nonprofit organizations, it may not be feasible or practical for some of these grantees to comply with extensive requirements that may be appropriate for large research institutions. The SCRF grant funding requirements and restrictions provide an acceptable alternative, as long as the institute has control measures in place to periodically monitor and evaluate the progress and status of the projects.
4. **Clarify audit requirements for the Institute and its grantees.** The Initiative specifies that the institute shall annually commission an independent financial audit of its activities from a certified public accounting firm. However, what constitutes a financial audit could be interpreted differently, from a very limited-scope financial statement audit to a comprehensive financial and compliance audit. In addition, given that the Initiative specifies that the institute shall commission the audit “of its activities,” it is unclear as to whether the audit would include the activities of the grantees, which, in our opinion, pose a higher risk. Therefore, if the financial audit does not include the activities of the grantees, the Institute should make arrangements for such activities to be audited. One option would be to adopt the federal single audit requirement by having those grantees receiving grant funds in excess of a certain amount arrange for an independent audit. Another option would be to create an audit function within the Institute to perform grant audits. The Institute could also directly contract with other audit organizations for such audits.

Comparison of Grant Administration and Fiscal Practices

Application Process

	Stem Cell Research Foundation – Program of the American Cell Therapy Research Foundation (ACTRF)	National Institutes of Health (NIH)	National Science Foundation (NSF)
Type of Grantor (Foundation)	A publicly supported charitable organization funded by donor contributions.	A federal grantor agency (responsible to Congress and the U.S. taxpayers).	A federal grantor agency
Eligibility	Available to U.S. and international scientists.	Domestic or foreign, public or private, non-profit or for-profit organization, subject to the basis of statutory, regulatory, or published policy limitations, etc.	Public or private institutions of higher education or non-profit organizations whose primary purpose is the conduct of research or science education activities.
Grant Amounts	Grant amounts of \$100,000 (up to \$50,000 a year for two years)	NIH awards grants on the basis of reasonable and allowable costs consistent with the principles of sound cost management and in consideration of IC priorities (e.g., program relevance), constraints on the growth of average grant costs, and available funds.	Institutional specific – vary by grant types and projects
Types of Application	New and renewal (2nd year)	New, competing continuation, competing supplemental (increase in budget), revised, and non-competing grant progress report.	Institutional specific – but similar to NIH
Grant Period	Institutional specific	Institutional specific	Institutional specific
Application Deadline	Institutional specific	Institutional specific	Institutional specific

Application Process (Continued)

	Stem Cell Research Foundation – Program of the American Cell Therapy Research Foundation (ACTRF)	National Institutes of Health (NIH)	National Science Foundation (NSF)
Application, Forms, Contents, etc.	Institutional specific	<ul style="list-style-type: none"> • Institutional specific – but vary by form of support mechanism. • More detailed and extensive certification (proof of organizational eligibility, trainee and fellow eligibility and citizenship, or other eligibility information must demonstrate compliance (or intent to comply). 	Institutional specific
Deadline	Institutional specific	Institutional specific	Institutional specific
Peer Review Process	Not mentioned.	Competing applications for NIH grants are subject to peer review.	Institutional specific

Terms And Conditions of Grant Awards

Terms Of Funding	Stem Cell Research Foundation – Program of the American Cell Therapy Research Foundation (ACTRF)	National Institutes of Health (NIH)	National Science Foundation (NSF)
1. Funding Restrictions	<ul style="list-style-type: none"> • Funding is available for non-profit entities only. • Funds are limited to research project only and do not allow for overhead costs, building construction, or capital equipment. • Salary limitation – may pay a portion of salary for the principal investigator with justification. 	<ul style="list-style-type: none"> • Multiple grants/funding sources are available. • Certain limits on costs applied but, in general, follow cost principles of OMB Circulars A-21 and A-122, and Federal Acquisition Regulations. • Annual salary cap for an individual (Rates are legislatively mandated and, for 5 years, this limitation has been linked to Executive Level I of the federal pay scale.) 	<ul style="list-style-type: none"> • Federal allowable cost principles applied, based on the grantee's organizational type (OMB Circulars A-21, A-122, and A-87, Federal Acquisition Regulations, and 45 CFR Part 74, for hospitals). • Institutional specific, depending on the type of grants/projects.
2. Discontinuation of Funding for Breach of Terms and Obligations	Yes	Yes	Yes
3. Overlapping Grant Award and Penalty for Violation	No overlap grants allowed for the same project.	Cooperative allowed. Full disclosure required at time of application.	Cooperative allowed.
4. Restrictions on Human or Vertebrate-Animal Subjects	Yes	Yes – but subject to compliance with federal laws and policies.	Yes – must follow NSF institutional specific regulations.

Terms And Conditions of Grant Awards (Continued)

Terms Of Funding	Stem Cell Research Foundation – Program of the American Cell Therapy Research Foundation (ACTRF)	National Institutes of Health (NIH)	National Science Foundation (NSF)
5. Sharing Reagents	Yes	Yes – subject to federal regulations and policies, type of research, biomaterials, etc.	Yes – institutional specific
6. Public Education Program	Yes	Yes – subject to federal regulation and policies.	Yes – institutional specific
7. Publications	Yes	Yes – but institutional specific, subject to federal regulations/policies.	Yes – institutional specific
8. Grant Renewal	Yes	Yes – varies by types of grant/project, etc.	Yes – institutional specific

Terms And Conditions of Grant Awards (Continued)

Administrative Requirements	Stem Cell Research Foundation – Program of the American Cell Therapy Research Foundation (ACTRF)	National Institutes of Health (NIH)	National Science Foundation (NSF)
1. Patent and Intellectual Property Policy	Yes	Yes – must comply with a series of federal regulations and policies.	Yes – institutional specific and must comply with a series of federal regulations and policies.
2. Budget Revisions and Extensions of Grant Periods	Yes – must obtain prior written approval.	Yes – must obtain prior written approval (subject to expanded authorities, depending on grants and circumstances).	Yes – institutional specific
3. Transfer of Grant	Yes	Yes – but varies by type of grants, etc., and prior approval is required.	Yes – institutional specific
4. Financial Reports (Institutional Specific)	Yes	Institutional specific and single audit requirements	<ul style="list-style-type: none"> • Unless specified in the grant, annual project reports are required. • Final project reports are due 90 days after the expiration of the award. • Forms and contents are institutional specific.
5. Progress Reports	Yes	Yes – institutional specific	Yes – NSF requires technical project reports for all assistance awards. (The info in these reports is used in the NSF annual report to Congress.)

Terms And Conditions of Grant Awards (Continued)

Administrative Requirements	Stem Cell Research Foundation – Program of the American Cell Therapy Research Foundation (ACTRF)	National Institutes of Health (NIH)	National Science Foundation (NSF)
6. Reporting of In-Kind Contributions	Yes	Yes – institutional specific	Yes – institutional specific
7. Prior Approvals	No separate listing noted.	<ul style="list-style-type: none"> A specific listing of items/conditions in which prior approvals and length of advance notice are required, such as a change in project and budget, a change in key personnel and /or grantee organization, transferring amounts from trainee costs, capital expenditures, etc. 	Yes – institutional specific
8. Management System and Procedures	Not mentioned.	<ul style="list-style-type: none"> The grantees are expected to have systems, policies, and procedures in place by which they manage funds and activities. Systems must meet standards and requirements set forth in the Code of Federal Regulations (45 CFR, Part 74 or 92) and the NIHGPS (National Institutes of Health Grants Policy Statement) NIH may review the adequacy of those systems and take appropriate action, as necessary, to protect the federal government’s interests, including, but not limited to, use of special terms and conditions. 	Yes – similar to NIH guidelines. Office of the Inspector General of NSF also performs review of financial management review.

Terms And Conditions of Grant Awards (Continued)

Administrative Requirements	Stem Cell Research Foundation – Program of the American Cell Therapy Research Foundation (ACTRF)	National Institutes of Health (NIH)	National Science Foundation (NSF)
8. (continued)		<ul style="list-style-type: none"> • Oversees the grantee’s systems as part of its routine post-award monitoring. • The grantee’s systems are subject to audit (see item 10). 	
9. Financial Management System Standards	Not mentioned.	<ul style="list-style-type: none"> • Grantees must comply with financial management system standards and requirements set forth in 45 CFR 74.21 or 92.20, as applicable. • Cannot support the research unless adequate accounting and internal control systems are in place. • Must notify NIH when problems are identified. • Failure to establish adequate control systems constitutes a material violation of the terms of the award and any of a range of actions may be taken. 	Yes – similar to those of NIH. OIG may also perform a review of the system.

Terms And Conditions of Grant Awards (Continued)

Administrative Requirements	Stem Cell Research Foundation – Program of the American Cell Therapy Research Foundation (ACTRF)	National Institutes of Health (NIH)	National Science Foundation (NSF)
10. Monitoring and Audits	Not mentioned.	<ul style="list-style-type: none"> • Subject to the audit requirements of OMB Circular A-133. • For foreign grantees and for-profit grantees, specific audit requirements are addressed in the NIHGPS. • May request additional audits necessary to carry out their responsibilities under federal law or regulation. 	<ul style="list-style-type: none"> • NSF or the U.S. Comptroller shall have access to records for review/audit at any time. • NSF or its representative shall have rights to make on-site visits to review projects, financial management controls, etc. • Grantees are also subject to the audit requirements of OMB Circular A-133.
11. Program Income	Yes	Yes – institutional specific	Yes – institutional specific
12. Sale of Real Property, Equipment, Supplies	Not mentioned.	Describes in detail, but in general follows the guidelines as specified in 45 CFR 74.34 or 92.32.	Yes – institutional specific (similar to those of NIH).
13. Public Policy Requirement		<ul style="list-style-type: none"> • Because NIH is a federal agency, its requirements and guidelines are extensive and some requirements are similar to those of other federal programs (such as a public policy requirement, including a drug-free workplace, etc.) These policies and requirements are not listed. However, printouts are available for review. 	Same as NIH.

Terms And Conditions of Grant Awards (Continued)

Compliance and Oversight	Stem Cell Research Foundation – Program of the American Cell Therapy Research Foundation (ACTRF)	National Institutes of Health (NIH)	National Science Foundation (NSF)
Compliance and Oversight Unit		<ul style="list-style-type: none"> • Conducts proactive compliance site-visits (for example, 6 sites were visited in 2004, 5 sites in 2003, and 8 sites in 2002, etc.).* • The Division of Grants Compliance and Oversight in the Office of Policy for Extramural Research Administration within NIH is responsible for monitoring and overseeing the grantee’s compliance. 	<ul style="list-style-type: none"> • OIG is responsible for monitoring, reviews, and audits to ensure grantee’s compliance.

* Only a compendium of Findings and Observations published for site visits in FY 2000-02 is available for download.

Common Findings Audits and Investigations

I. Office of the Inspector General, National Science Foundation

According to its semiannual report to Congress for the six-month period ending September 30, 2004, the Office of the Inspector General (OIG):

- Issued 10 audit reports that questioned costs of \$1.2 million and made recommendations that would put \$174,000 in NSF funds to better use.
- Recovered \$522,000 through investigations.
- Referred 3 cases to DOJ and forwarded 15 administrative cases to NSF management for action.
- In an effort to minimize waste, abuse, and fraud, conducted outreach activities to inform grantees of the compliance responsibility of accepting federal grants. For example, OIG co-hosted a workshop, *Accountability in Science Research Funding*, to present and discuss models of monitoring and auditing science and engineering projects and to share best practices among the participating organizations. Among the presenters were the Inspector General and the Associate Inspector General for Audits, as well as the NSF Chief Financial Officer.

Audit Findings

1. Inadequate Monitoring and Oversight by NSF and Its Grantees

- NSF failed to monitor the timeliness of the grantee's reporting.
- In one case, NSF and three federal agencies failed to incorporate essential statutory requirements into the grant statement. As a result, those requirements were not implemented.
- Of 88 desk reviews of the federally required single audits from the grantees, 71 reports contained reportable conditions and noncompliance findings. The total questioned cost for the review period between FYs 2001 and 2003 was about \$1.2 million, which included grant money embezzled by a university employee. (Grantees who receive more than \$500,000 in federal grants are subject to an annual single audit in accordance with the OMB Circular A-133; these are commonly referred to as A-133 audits.)
- In one case, NSF provided 87% of the research and operational funds of the grantee, when originally it was to provide only 25%. Moreover, the grantee failed to exercise any oversight over \$10.3 million in subawards to 14 entities.
- Beginning in October 2004, the OIG community conducted a government-wide project to assess and provide a baseline measurement of single audit quality. The project will perform quality control reviews (QCRs) of a statistically representative sample of A-133 audits.

2. Questionable Cost Practices

- Grantees improperly billed indirect costs and/or claimed indirect costs as direct costs of the contract; they included unsupported travel costs in the indirect cost pools, which resulted in overstated indirect cost rates.
- Grantees claimed overhead and general and administrative (G&A) costs that exceeded the limitations specified in the contract agreement.

- Grantees claimed fringe benefit costs that exceeded what was allowable.
- The auditors could not determine whether claimed costs were spent on the projects.
- Grantees lacked source documentation to support costs charged to the NSF project.
- Employee activities were not accounted for as required by federal cost principles, to ensure that actual labor costs were fairly charged to federal awards.
- In one audit, the university allowed the faculty members to be paid up to 25% above their full-time academic year salary from federal funds without prior federal approval.

3. Poor Internal Control System

- Accounting control weaknesses related primarily to cost sharing, sub-grantee monitoring, and labor activity reporting.
- Grantees lacked an adequate financial management system for recording receipt and expenditure of funds for projects supported by NSF.
- Grantees lacked adequate internal controls.
- Grantees lacked source documentation to support costs charged to the NSF project.
- Because approximately 20% of the \$5 billion in costs incurred annually by NSF grantees, or \$1 billion, is for indirect costs, OIG considers this type of expense to be significant and more at risk.

4. Civil and Criminal Investigations

- A small business owner submitted false statements in Small Business Innovation Research (SBIR) proposals and research reports, and converted award funds to his personal use.
- A university admitted to mischarging technical salaries to NSF grant awards.
- A university employee embezzled grant money (and was sentenced to prison).
- Researchers (including Co Principal Investigator) committed research misconduct and plagiarism by submitting proposals and/or associated ideas plagiarized from a confidential research proposal submitted to another agency.
- A post-doctoral researcher knowingly and intentionally fabricated data in multiple analyses to make it appear that replicate experiments had been completed, when, in fact, only a single analysis had been performed.

II. National Institutes of Health

- Grantees claimed unsupported or incorrectly charged salaries and related fringe benefits and indirect costs that did not meet federal regulations.
- Grantees claimed salaries and benefits of scientists who did not meet the grant requirements.
- Grantees claimed expenditures that were unrelated to the grant project.
- Grant expenditures were not supported.
- Grantees misused federal research and training grants.
- Grantees used research grant money for general-purpose equipment without prior NIH approval.
- Grantees misled the government as researchers applied for NIH research grants.
- Grantees billed erroneous fringe benefit amounts for research personnel.

- Grantees overstated the percentage of its researchers' work effort that they were able to devote to the proposed projects.
- Grantees failed to comply with federal government requirements.
- Grantees submitted false information for indirect costs.
- Grantees collected/charged to the research grant, monies for scientists (or post-doctoral fellows) who did not work on the grant projects.

Matters for Consideration by the Independent Citizens Oversight Committee (ICOC)

In order to effectively carry out its roles and responsibilities, the Institute must first establish and maintain sound financial and project management systems. A strong internal control system will enable the Institute to effectively monitor grantee compliance and ensure that taxpayers' money is spent in accordance with the initiative's intent.

General Grant Guidelines

Among other general guidelines, the Institute should:

- Establish a uniform grant application process.
- Establish a peer review process for review and approval of research grant applications.
- Establish uniform reporting forms and other reporting requirements.
- Establish deadlines for annual applications and for periodic and annual reporting requirements.
- Establish the funding process, i.e., payment draw down and/or reimbursement process, and the timeliness of fund disbursements.
- Establish an internal audit function. The internal auditor shall perform desk reviews and/or conduct post-award audits/reviews to ensure grant compliance.
- Establish an internal reporting structure.
- Identify the types of allowable costs, to avoid any potential ambiguity in interpretation, which may result in misuse of grant funds.
- Establish and define courses of remedy and cost-recovery measures for breach of the grant agreement and for civil and/or criminal violations.
- Determine whether cooperative agreements and transfers or carryovers of grant funds are allowed.
- Determine how program income should be allocated.
- Determine the patent and property rights of projects funded by the Institute and/or by cooperative agreements.
- Establish the policies and procedures for patent and property rights.
- Provide training to grantees to ensure grant compliance.
- Establish clear instructions and guidelines to avoid any ambiguity.
- Publish the courses of remedial action for breach of agreement, to deter unacceptable practices.

Application Process

The grant agreement should include the following criteria.

- The grantee shall establish and maintain sound financial and project management systems, which are subject to the Institute's review and approval.
- For projects funded by the Institute, the Institute or its designated representatives shall have access to the site for review and monitoring of project progress and for examination of financial records.
- The Institute or its designated representatives shall have access and authority to conduct audits of expenditures for which Institute money was claimed.

Financial Management System

At a minimum, the grantee should be required to:

- Establish and maintain a financial management control system, to adequately ensure that grant funds are spent in accordance with the grant agreement. Such a system shall be subject to the Institute's review and approval.
- Submit periodic financial reports summarizing expenditures incurred in relation to progress of the proposed project. The organization officials and the principal investigator (PI) should certify the accuracy of the reported information.
- Submit annual audited financial and compliance reports. The audited reports should include the grantee's project progress and the milestones accomplished.

Post-Award Monitoring

The Institute should:

- Establish an annual audit requirement, regardless of the grant amount. If the grant award amount is not significant enough to warrant an audit performed by an independent certified public accountant, the Institute should perform a detailed review/audit to ensure small-grantee compliance.
- Establish an internal audit/oversight unit to perform post-award monitoring.
- Conduct routine or periodic desk reviews of financial reports to ensure that grant funds are properly used and indirect costs are properly allocated.
- Periodically assess the progress of the proposed project.
- Establish a quality control review (QCR) project to assess the audited reports of external auditors submitted by the grantees. The QCR process provides a baseline measurement of the audited information and ensures the quality of the reports.

Matters for Consideration

To implement these control measures as expeditiously as possible, the ICOC may wish to pursue the following actions:

1. **Review and consider incorporating some of the federally adopted guidelines into the Institute's grant-making process.** Like NSF and NIH, the Institute is an agency responsible for dispensing large sums of public funds through grant awards. Rather than reinventing the wheel, the Institute could pattern at least some of its procedures after applicable guidelines that were developed after extensive comments by all interested parties. These guidelines and procedures have been fully tested over the years and should be used as a starting point for the Institute to develop its own guidelines and procedures. For example, the initiative imposed a 25% limitation on the amount of indirect costs that could be claimed by a grantee. The federal guidelines contain cost principles delineating acceptable means for determining indirect costs.
2. **Consider incorporating the peer review requirement into the grant approval process.** As scientific and medical research grants often involve projects that are highly complex and technical in nature, it would be beneficial for a panel of independent experts in the field to evaluate the merit of the proposals before final consideration by the ICOC.

3. **Consider adopting some of the SCRF grant funding requirements for project awards of lesser amounts.** If the Institute decides to award grants to individuals or small nonprofit organizations, it may not be feasible or practical for some of these grantees to comply with extensive requirements that may be appropriate for large research institutions. The SCRF grant funding requirements and restrictions provide an acceptable alternative, as long as the Institute has control measures in place to periodically monitor and evaluate the progress and status of the projects.
4. **Clarify audit requirements for the Institute and its grantees.** The initiative specifies that the Institute shall annually commission an independent financial audit of its activities from a certified public accounting firm. However, what constitutes a financial audit could be interpreted differently, from a very limited-scope financial statement audit to a comprehensive financial and compliance audit. In addition, given that the initiative specifies that the Institute shall commission the audit “of its activities,” it is unclear as to whether the audit would include the activities of the grantees, which, in our opinion, pose a higher risk. Therefore, if the financial audit does not include the activities of the grantees, the Institute should make arrangements for such activities to be audited. One option would be to adopt the federal single audit requirement by having those grantees receiving grant funds in excess of a certain amount arrange for an independent audit. Another option would be to create an audit function within the Institute to perform grant audits. The Institute could also directly contract with other audit organizations for such audits.