U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

PUBLIC HEALTH SERVICE

UPDATED JANUARY 2004

SMALL BUSINESS INNOVATION RESEARCH (SBIR) PROGRAM

AND

SMALL BUSINESS TECHNOLOGY TRANSFER (STTR) PROGRAM

GRANT APPLICATION - PHASE II

SUBMISSION DATES

APRIL 1, AUGUST 1, AND DECEMBER 1, 2004

National Institutes of Health (SBIR and STTR)

Centers for Disease Control and Prevention (SBIR)

Food and Drug Administration (SBIR)

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ESTIMATED PUBLIC REPORTING BURDEN

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless such collection displays a valid OMB control number. The PHS estimates that it will take approximately 40 hours to complete this application for a regular research project grant. This estimate does not include time for development of the scientific plan. Items such as Human Subjects and Vertebrate Animals are cleared and accounted for separately. Therefore, these items are also not part of the time estimate. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to: NIH, Project Clearance Office, 6705 Rockledge Drive MSC 7974, Bethesda, MD 20892-7974, ATTN: PRA (0925-0001). *Do not send applications to this address*.

If you have comments or concerns regarding the status of your individual submission of your application, write directly to:

Ms. Jo Anne Goodnight
SBIR/STTR Program Coordinator
6705 Rockledge Drive
Rockledge I, Room 3534
Bethesda, MD 20892
Phone: 301-435-2688
Fax: 301-480-0146
Email: jg128w@nih.gov

U.S. Department of Health and Human Services

SMALL BUSINESS INNOVATION RESEARCH (SBIR)
AND
SMALL BUSINESS TECHNOLOGY TRANSFER RESEARCH (STTR)

PHASE II GRANT APPLICATIONS

READ THE FOLLOWING IMPORTANT INFORMATION AND REMINDERS IN THIS SOLICITATION

CHANGES

REVISION OF THE PHS 398 AND PHS 2590 GRANT APPLICATION

SBIR and STTR applicants (Phase I, Phase II, and Phase I/Phase II Fast-Track) must use the Public Health Service Grant Application (PHS 398) forms for new/revised applications and the Progress Report for Public Health Service Grant (PHS 2590) for non-competing continuations (e.g., second year of Phase II) in accordance with the specific instructions *described in this Solicitation*. The current PHS 398 and PHS 2590 (http://grants.nih.gov/grants/forms.htm) maintain Office of Management and Budget (OMB) clearance through 05/2004. The National Institutes of Health Office of Extramural Research is embarking on revisions of the PHS 398 and the PHS 2590. The NIH will publish an announcement in the NIH Guide for Grants and Contracts when the new forms and instructions are available for use. There will be a transition period in which the current or revised forms will be accepted.

Submissions for April 1, 2004 receipt date. Applicants planning to submit new or revised SBIR or STTR grant applications ***on or before*** the April receipt date should use the current PHS 398 forms (See SBIR/STTR forms at http://grants.nih.gov/grants/funding/phs398/phs398.html#forms).

Submissions after April 1, 2004 receipt date. Applicants planning to submit new or revised SBIR or STTR grant applications **after** the April receipt date should check the NIH Small Business Funding Opportunities website http://grants.nih.gov/grants/funding/sbir.htm **for more specific details and instructions**.

SUBMISSION DATES

Effective January 1, 2004, CDC will accept applications for the **same** three submission dates as NIH and FDA: April 1, August 1, and December 1.

TYPE 2 COMPETING CONTINUATION AWARDS FOR PHASE II SBIR / STTR

Some NIH Institutes/Centers (ICs) now offer Phase II SBIR/STTR awardees the opportunity to apply for a type 2 competing continuation Phase II award. Some ICs previously announced this opportunity through the NIH Guide for Grants and Contracts, and some are using the Omnibus SBIR/STTR Grant Solicitation (see Part II: Topics).Only those small business concerns who have been awarded a Phase II are eligible to apply for a competing continuation Phase II award. Moreover, this opportunity is only for Phase II awardees that propose to continue the process of assessing and improving drugs or devices or propose to conduct preclinical studies of drugs or devices that ultimately require: 1) clinical evaluation, 2) approval of a Federal regulatory agency, and/or 3) continuing refinements to durable medical equipment (DME) designs such as cost reduction, testing for safety, durability, and reliability, and meeting or establishing standards. Such products include, but are not limited to, devices, drugs, vaccines, therapeutics, and medical implants related to the mission of the IC. The product being developed must be one for which Federal regulatory approval (e.g., FDA) is a required step toward commercialization. Prospective applicants are strongly encouraged to contact NIH staff prior to submission of a type 2 competing continuation application. Additional requirements and information (e.g., letter of intent) are available in these Phase II instructions, the PHS 2004-2 SBIR/STTR Omnibus solicitation (Part II: Research Topics http://grants.nih.gov/grants/funding/sbirsttr1/2004-2_SBIR-STTR-Topics.pdf), and in the specific IC Program Announcements (http://grants.nih.gov/grants/funding/sbir_announcements.htm). The following NIH ICs will accept applications for Type 2 Competing Continuation Phase II awards: NIAAA, NIA, NIAID (for a single application receipt date of January 16, 2004), NICHD, NIDA, NIMH (SBIR only), NHLBI (SBIR only), NIDCD, NINDS and NCI.

CLARIFICATION OF INSTRUCTIONS FOR PREPARING THE HUMAN SUBJECTS SECTION OF THE RESEARCH PLAN

Instructions for preparing the Human Subjects section of the application have been extensively rewritten. Refer to Section XII of this document if your proposed research will involve human subjects. These instructions include six possible scenarios and detailed instructions to assist you in completing Item e. of the Research Plan (Human Subjects Research).

SAMPLE SBIR/STTR APPLICATIONS

A sample Phase I and Phase II SBIR application is available (see http://www.niaid.nih.gov/ncn/sbir/app/) on the NIH National Institute of Allergy and Infectious Diseases website.

FDA RESOURCES AND USEFUL WEBSITES

The Food and Drug Administration offers various types of information to small businesses engaged in research projects that will ultimately require FDA approval. This information could be valuable in formulating research aims designed for this purpose, especially those in later stages of development (e.g. IND filing).

Useful Websites:

Small Business Assistance: http://www.fda.gov/cder/about/smallbiz/default.htm

Drug Approval Application Process: http://www.fda.gov/cder/regulatory/applications/

Center for Drug Evaluation and Research (CDER): http://www.fda.gov/cder/

Center for Biologics Evaluation and Research (CBER): http://www.fda.gov/cber/

Center for Devices and Radiological Health (CDRH): http://www.fda.gov/cdrh/

International Conference on Harmonisation of Technical Requirements for Registration of Pharmaceuticals for Human Use (ICH): http://www.ich.org

Guidance Documents: http://www.fda.gov/cder/guidance

Applicants need to be aware that not all information provided in the Guidances apply to drugs intended for use in patients with serious and life-threatening diseases (e.g. for refractory metastatic cancers).

Drug development, drug review, and post marketing activities:

The FDA's Drug Review Process: Ensuring Drugs are Safe and Effective. (7/2002). FDA Consumer magazine article.

From Test Tube to Patient: Improving Health Through Human Drugs (9/99). In-depth review of drug development and post-marketing activities.

New Drug Development in the United States. Online seminar provides healthcare professionals with an overview of FDA's role in the new drug development process.

SUMMARY OF POLICY CHANGES AND NOTIFICATIONS THAT HAVE BEEN IMPLEMENTED SINCE THE RELEASE OF THE LAST PHS 398 (05/01 VERSION)

Title	NIH Guide Link
REQUIREMENT OF DUNS NUMBER *A Dun and Bradstreet (D&B) Data Universal Numbering System (DUNS) number is required on applications for Federal grants or cooperative agreements.*	NOTICE: NOT-OD-03-055 http://grants1.nih.gov/grants/guide/notice-files/NOT-OD-03-055.html
REVISED NIH POLICY ON SUBMISSION OF A REVISED (AMENDED) APPLICATION *Eliminates the two-year time frame to submit up to two amended applications.*	NOTICE: NOT-OD-03-041 http://grants.nih.gov/grants/guide/notice-files/NOT-OD-03-041.html
REMINDER AND CLARIFICATION – DELIVERY OF COMPETING GRANT, COOPERATIVE AGREEMENT, AND FELLOWSHIP APPLICATIONS *Clarifies zip code for U.S. Postal Service express mail vs. courier service express mail.*	NOTICE: NOT-OD-03-040 http://grants.nih.gov/grants/guide/notice-files/NOT-OD-03-040.html NOTICE: NOT-OD-02-012 http://grants1.nih.gov/grants/guide/notice-files/NOT-OD-02-012.html
NOTICE OF LEGISLATIVE MANDATES CONTAINED IN THE FY 2003 CONSOLIDATED APPROPRIATIONS RESOLUTION P.L. 108-07; SIGNED FEBRUARY 20, 2003 *Acknowledgment of Federal Funding; Anti-Lobbying; Continued Salary Limitation; Ban on Funding of Human Embryo Research; Purchase of American-Made Equipment and Products; Limitation on Use of Funds for Promotion of Legalization of Controlled Substances Restriction on Distribution of Sterile Needles; Restriction on Abortions*	NOTICE: NOT-OD-03-035 http://grants.nih.gov/grants/guide/notice-files/NOT-OD-03-035.html *NIH updates this notice annually in the NIH Guide for Grants and Contracts.*

Title	NIH Guide Link
FINAL NIH STATEMENT ON SHARING RESEARCH DATA *Applications with direct costs greater than $500,000 in any single year must address data-sharing in the application.*	NOTICE: NOT-OD-03-032 http://grants.nih.gov/grants/guide/notice-files/NOT-OD-03-032.html
RESUBMISSION OF UNPAID RFA APPLICATIONS AND RESUBMISSION OF APPLICATIONS WITH A CHANGED GRANT ACTIVITY MECHANISM *Changes policy on new vs. amended applications.*	NOTICE: NOT-OD-03-019 http://grants.nih.gov/grants/guide/notice-files/NOT-OD-03-019.html
LABORATORY ANIMAL WELFARE: CHANGE IN PHS POLICY ON HUMANE CARE AND USE OF LABORATORY ANIMALS *Implements Just-in-Time policy for Institutional Animal Care and Use Committee (IACUC) Approval Date.*	NOTICE: NOT-OD-02-064 http://grants1.nih.gov/grants/guide/notice-files/NOT-OD-02-064.html
AMENDMENT: NIH POLICY AND GUIDELINES ON THE INCLUSION OF WOMEN AND MINORITIES AS SUBJECTS IN CLINICAL RESEARCH	NOTICE: NOT-OD-02-001 http://grants1.nih.gov/grants/guide/notice-files/NOT-OD-02-001.html
REQUIRED EDUCATION IN THE PROTECTION OF HUMAN RESEARCH PARTICIPANTS *Implements new requirement for education on the protection of human research participants for all individuals identified as Key Personnel.*	NOTICE: NOT-OD-01-061 http://grants1.nih.gov/grants/guide/notice-files/NOT-OD-01-061.html
NIH POLICY ON REPORTING RACE AND ETHNICITY DATA: SUBJECTS IN CLINICAL RESEARCH	NOTICE: NOT-OD-01-053 http://grants1.nih.gov/grants/guide/notice-files/NOT-OD-01-053.html

REMINDERS

SIMILAR, ESSENTIALLY IDENTICAL, OR IDENTICAL APPLICATIONS

The NIH will not accept similar grant applications with essentially the same research focus from the same applicant organization. This includes derivative or multiple applications that propose to develop a single product, process or service that, with non-substantive modifications, can be applied to a variety of purposes. Likewise, identical or essentially identical grant applications submitted by different applicant organizations will not be accepted. Applicant organizations should ascertain and assure that the materials they are submitting on behalf of the principal investigator are the original work of the principal investigator and have not been used elsewhere in the preparation and submission of a similar grant application. Applications to the NIH are grouped by scientific discipline for review by individual Scientific Review Groups and not by disease or disease state. The reviewers can thus easily identify multiple grant applications for essentially the same project. In these cases, application processing may be delayed or the application(s) may be returned to the applicant without review.

It is unlawful to enter into contracts or grants requiring essentially equivalent work or effort. "Essentially equivalent work or effort" occurs when (1) substantially the same research is proposed for funding in more than one contract proposal or grant application submitted to the same Federal agency; (2) substantially the same research is submitted to two or more different Federal agencies for review and funding consideration; or (3) a specific research objective and the research design for accomplishing an objective are the same or closely related in two or more proposals or awards, regardless of the funding source. If there is any question concerning essentially equivalent work or effort, it must be disclosed to the soliciting agency or agencies before award.

SUBMISSION DATES

Grant applications submitted *in response to this SBIR/STTR Omnibus Grant Solicitation* will be considered *"on time" if received by or mailed on or before the published receipt date and a proof of mailing is provided*. Proof of timely mailing consists of one of the following: a legibly dated U.S. Postal Service postmark or a dated receipt from a commercial carrier or the U.S. Postal Service. Private metered postmarks are not acceptable.

AWARD AMOUNTS AND BUDGET PERIODS (APPLICABLE ONLY TO NIH)

Not all types of biomedical and behavioral research can be completed within the statutory award amounts for Phase I ($100,000) or Phase II ($750,000) and statutory project periods (six months for Phase I; two years for Phase II). Applicants are encouraged to propose a reasonable, appropriate and justified budget and project period necessary to complete the Phase I or Phase II research project. Deviations from the statutory guidelines MUST be well justified and must be discussed with appropriate NIH staff listed in the Awarding Component/Agency Contact Information Table prior to submission of the application. Note: CDC and FDA do not make awards above the statutory guidelines.

STTR AGENCY SET-ASIDE AMOUNTS AND STTR AWARD AMOUNTS

Effective fiscal year 2004, the STTR set-aside percentage doubled from 0.15% to 0.30%. The statutory guideline for Phase II STTR awards increased from $500,000 to $750,000.

SUBMITTING YOUR PROGRESS REPORT

See http://grants.nih.gov/grants/funding/2590/2590.htm

Awardees who receive funding for multi-year projects and Fast-Track projects are strongly encouraged to review the above-referenced website regarding the PHS 2590 Non-Competing Progress Report. The PHS 2590 is the progress report to determine continued funding for multi-year projects. Progress reports to continue support of a PHS grant must be submitted to the awarding component's grants management office on the PHS 2590 two months before the beginning date of the next budget period.

COMMERCIALIZATION PLAN

All Phase II applications must include a succinct Commercialization Plan. For more detailed instructions, see Item j of the Research Plan: Commercialization Plan.

PHASE II DATA COLLECTION REQUIREMENT

Each Phase II SBIR/STTR applicant is required to provide information for the Small Business Administration Tech-Net Database System (http://technet.sba.gov). *Questions about this requirement may be submitted to SBA directly through the Tech-Net URL*. Each Phase II awardee is required to update the appropriate information on the award in the Tech-Net database upon completion of the last deliverable under the funding agreement or grant closeout document (e.g., Final Report, Financial Status Report, Invention Report) and is requested to voluntarily update the information in the Tech-Net database annually thereafter for a minimum period of 5 years.

ANIMAL STUDIES

The Institutional Animal Care and Use Committee (IACUC) verification of approval of proposed research involving vertebrate animals is not required at the time of application. It may be submitted with the application or in a "just-in-time" fashion prior to award (as is now permitted for IRB approval). Additional information is available from the following NIH Guide Notice: http://grants2.nih.gov/grants/guide/notice-files/NOT-OD-02-064.html. As part of the review process, the Scientific Review Group will continue to address the adequacy of animal usage and protection in applications. Therefore, be sure to address the points under "Vertebrate Animals" in your Research Plan.

REQUIRED EDUCATION IN THE PROTECTION OF HUMAN RESEARCH PARTICIPANTS

NIH requires education on the protection of human research participants for all investigators submitting NIH applications for grants or proposals for contracts or receiving new or non-competing awards for research involving human subjects. Information about this policy may be found at: http://grants.nih.gov/grants/guide/notice-files/NOT-OD-00-039.html. Frequently Asked Questions (http://grants.nih.gov/grants/policy/hs_educ_faq.htm) regarding this policy are also included in this *NIH Guide* announcement.

NIH GUIDE FOR GRANTS AND CONTRACTS

The *NIH Guide for Grants and Contracts* is a weekly electronic publication (http://grants.nih.gov/grants/guide) that contains announcements about funding opportunities such as Requests for Applications (RFAs) and Program Announcements (PAs) from NIH and other PHS agencies. The *Guide* also contains vital information about policies and procedures. Small business concerns are encouraged to subscribe to the *NIH Guide for Grants and Contracts* to learn of new and emerging small business research opportunities and to stay apprised of policy changes or updates. To receive weekly content notifications via email, subscribe to the NIH Guide Table of Contents Notification LISTSERV service (http://grants.nih.gov/grants/guide/listserv.htm). For a current list of PAs and RFAs that use the SBIR/STTR mechanisms, see http://grants1.nih.gov/grants/funding/sbir_announcements.htm.
Note that receipt dates for applications submitted in response to these specific PAs and RFAs may differ from the standard receipt dates.

SBIR/STTR LISTSERV

To get timely information about the SBIR/STTR Programs, send an email to LISTSERV@LIST.NIH.GOV with the following text in the message body: *subscribe SBIR-STTR <your name>* (e.g., *subscribe SBIR-STTR Jane Doe*). (The LISTSERV will retrieve your email address from the "From:" section of your email message.)

COLLABORATION OPPORTUNITIES AND RESEARCH PARTNERSHIPS (CORP)

Are you in need of a collaborator or researcher with specific scientific expertise to work on an SBIR/STTR project? The purpose of this site is to foster collaborative opportunities related to the SBIR/STTR Programs. If you are looking for a research partner or looking to partner with a small research firm, visit http://grants1.nih.gov/cfdocs/corp/add.htm to submit your needs or capabilities. Submissions considered appropriate for this site will be added to the CORP list (http://grants1.nih.gov/grants/funding/corp.htm).

PHASE III

The competition for SBIR/STTR Phase I and Phase II awards satisfies any competition requirement of the Armed Services Procurement Act, the Federal Property and Administrative Services Act, and the Competition in Contracting Act. Therefore, an agency that wishes to fund an SBIR/STTR Phase III project is not required to conduct another competition in order to satisfy those statutory provisions. As a result, in conducting actions relative to a Phase III SBIR/STTR award, it is sufficient to state for purposes of a Justification and Approval pursuant to FAR 6.302-5 that the project is a SBIR/STTR Phase III award that is derived from, extends, or logically concludes efforts performed under prior SBIR/STTR funding agreements and is authorized under 10 U.S.C. 2304(b)(2) or 41 U.S.C. 253(b)(2).

Quick References

Applicants New to NIH: Getting Started

grants.nih.gov/grants/useful_links.htm

Award Data

(CRISP, extramural research grants, award trends.)
grants1.nih.gov/grants/award/award.htm

Contact Information for an NIH Staff Person

directory.nih.gov
NIH locator: (301) 496-4000

Facilities and Administrative (F&A)/Indirect Costs and Audit Requirements

Division of Financial Advisory Services (DFAS) website: http://ocm.od.nih.gov/dfas/dfas.htm
Telephone: 301-496-2444

Grants Information

grants.nih.gov/grants/giwelcome.pdf
E-mail: GrantsInfo@nih.gov
Telephone: (301) 435-0714

Grant Writing Tips and Sample Applications

http://grants1.nih.gov/grants/grant_tips.htm

Office for Human Research Protections

(Human Subject Protections, Institutional Review Boards, or related assurances)
http://www.hhs.gov/ohrp
Telephone: (301) 496-7041; (866) 447-4777

Office of Laboratory Animal Welfare (OLAW)

(Animal Welfare and related regulations and assurances) **grants.nih.gov/grants/olaw/olaw.htm**
Telephone: (301) 496-7163

Receipt/Referral of an Application

Division of Receipt and Referral
Center for Scientific Review
http://www.csr.nih.gov/EVENTS/AssignmentProcess.htm
Telephone: (301) 435-0715; TTY: (301) 451-0088
Fax: (301) 480-1987

Specific Application: Before Review

Telephone or e-mail the Scientific Review Administrator named on the electronically-generated “notification of assignment” that is mailed to you upon assignment of your application.

Specific Application: Post Review

Telephone or e-mail the NIH Program Official named on the summary statement of your application.

I. INVITATION TO APPLY FOR SBIR/STTR PHASE II GRANT SUPPORT AND RELATED INFORMATION

The purpose of this Solicitation is to invite domestic small business concerns that have received an SBIR Phase I grant or an STTR Phase I grant to apply for SBIR or STTR Phase II funding, respectively, of that program. The objective of Phase II—the principal research and development (R&D) phase—is to continue the research efforts initiated in Phase I. Funding for Phase II is based on the results of Phase I (e.g., feasibility demonstration) and the scientific and technical merit and commercial potential of the Phase II application. An SBIR/STTR Phase I award must have been received in order to obtain a Phase II award. An SBIR Phase II award may be issued by a Federal agency other than the one that made the Phase I award. The Phase I and Phase II agencies should document their files appropriately, providing clear rationale for the transfer of the Phase II proposal to, and award by, the funding Federal agency.

A. Phase I Final Report, Financial Status Report and Commercialization Plan

PHASE I FINAL REPORT

Phase I grantees that (1) do not intend to seek Phase II support or (2) are not prepared to submit a Phase II application within four months following the expiration of the Phase I budget period, must submit a final report of their Phase I effort. *One original and two copies of the final report should be submitted to the Grants Management Officer identified on the Phase I Notice of Grant Award within 90 days of the expiration of the Phase I budget period*. Otherwise, the Phase I Final Report is a part of the Phase II application.

The Phase I report serves as an important source of material for staff of the awarding component in preparing annual reports, for planning purposes, and in communicating scientific accomplishments achieved through the SBIR/STTR program.

There is no "form page" for the Phase I Final Report. It may be typed on plain white paper (or you may use the PHS 398 Continuation Page). *The recommended length for the narrative portion is 10 pages*. See the instructions for completion of the "Research Plan" regarding the presentation of the accomplishments of the Phase I effort.

The format for the Phase I Final Report is as follows:

1. State the beginning and ending dates for the period covered by the SBIR Phase I grant.
2. List all key personnel who have worked on the project during that period, their titles, dates of service, and number of hours devoted to the project.
3. Summarize the specific aims of the Phase I grant and provide a succinct account of published and unpublished results, indicating progress toward their achievement. Summarize the importance of the findings. Discuss any changes in the specific aims of Phase I since the project was initiated.
4. List the titles and complete references to publications, manuscripts *accepted* for publication, patents, invention reports, and other printed materials, if any, that have resulted from the Phase I effort. Submit five copies of such items, except patent and invention reports, as an *Appendix*.

Discussion with and further information on completion of the report may be obtained from the program official listed on the Phase I Notice of Grant Award.

Phase I grantees may request no-cost time extensions to complete their Phase I effort. Requests for such extensions must be made in writing to and approved by the Grants Management Officer of the awarding component. Requests must state the reasons for the extension and be submitted before the expiration of the Phase I budget period.

FINANCIAL STATUS REPORT

A Financial Status Report (expenditures report) is required of all Phase I grantee organizations within 90 days of the expiration of the Phase I budget period. The Financial Status Report (FSR 269) form is available electronically at http://www.whitehouse.gov/omb/grants/index.html. The form should be submitted independently of either a Phase I Final Report or a Phase II application. It must indicate the exact balance of any unobligated funds. No award for Phase II support may be made until the Financial Status Report for Phase I is received and approved by the awarding

component. See Section VII, D, Reports and Related Information.

COMMERCIALIZATION PLAN

All Phase II applications must include a succinct Commercialization Plan. Specific details for preparing this section are described in Section IV of these instructions.

B. Amount and Period of Support

The stated Phase II award levels and project periods are statutory guidelines, not ceilings. Therefore, applicants are encouraged to propose a reasonable budget and project period that is appropriate for completion of the research project.

Deviations from the indicated statutory award amount and project period guidelines are acceptable, but must be well justified and should be discussed with NIH Program Staff *prior to submission* of the application. (CDC and FDA do not make awards greater than the stated guidelines.)

PHASE II: Full R/R&D Effort
~ $750,000 (SBIR/STTR)
~ 2 Years
Submit within 2 years of end of Phase I

SBIR and STTR Phase II awards normally may not exceed $750,000 total (direct costs, F&A costs, and profit/fee) for a period normally not to exceed 2 years.

Only Phase I awardees are eligible to obtain Phase II funding. Awardees identified via a "successor-in-interest" or "novated" or similarly-revised funding agreement, or those that have reorganized with the same key staff, regardless of whether they have been assigned a different tax identification number, are eligible to apply for Phase II funding. Agencies may require the original awardee to relinquish its rights and interests in an SBIR/STTR project in favor of another applicant as a condition for that applicant's eligibility to participate in the SBIR Program for that project.

Only one Phase II award may be made for a single SBIR/ STTR project.

You may submit a Phase II application either before or after expiration of the Phase I budget period, unless you elect to submit a Phase I and Phase II application concurrently under the Fast-Track procedure. *To maintain eligibility to seek Phase II support, a Phase I grantee organization should submit a Phase II application within the first six receipt dates following the expiration of the Phase I budget period*.

Only one Phase II award may be made for a single SBIR/ STTR project.

The competition for SBIR/STTR Phase II (and Phase I) awards satisfies any competition requirement of the Armed Services Procurement Act, the Federal Property and Administrative Services Act, and the Competition in Contracting Act. Therefore, an agency that wishes to fund an SBIR/STTR Phase III project is not required to conduct another competition in order to satisfy those statutory provisions. As a result, in conducting actions relative to a Phase III SBIR/STTR award, it is sufficient to state for purposes of a Justification and Approval pursuant to FAR 6.302-5 that the project is a SBIR/STTR Phase III award that is derived from, extends, or logically concludes efforts performed under prior SBIR/STTR funding agreements and is authorized under 10 U.S.C. 2304(b)(2) or 41 U.S.C. 253(b)(2).

C. Supplemental Applications

Under special circumstances, requests for supplemental funds to existing NIH SBIR/STTR grants or requests for an extension of the period of support with funds may be considered. (*The awarding of supplemental funds applies to NIH ONLY, as CDC and FDA do not make awards greater than the stated guidelines*.)

ADMINISTRATIVE SUPPLEMENTS

An administrative supplement provides additional funding to meet increased costs that are within the scope of your approved application, but that were unforeseen when the new or competing continuation application was submitted. If you are contemplating supplemental funding, you must consult in advance with your designated Grants Management Officer and Program Official. It is important for you to submit a request before your grant expires. To be considered for an administrative supplement, you must submit a request in writing to the Institute/Center (IC) (not to CSR), signed by the principal investigator and the authorized Business Official, describing the need for additional funding and the categorical costs. In your letter, also be sure

to point out what you will NOT be able to accomplish if such a request is denied.

COMPETING SUPPLEMENTAL APPLICATION

A competing supplemental application may be submitted to request support for a significant *expansion* of a project's scope or research protocol. Applications for competitive supplements are **not appropriate** when the sole purpose is to restore awards to the full Scientific Review Group (SRG)-recommended level if they were administratively reduced by the funding agency. A supplemental application **should not be submitted** until after the original application has been awarded and **may not extend beyond the term of the current award period.**

Provide a one-page introduction at the beginning of the Research Plan that describes the nature of the supplement and how it will influence the specific aims, research design, and methods of the current grant. Any budgetary changes for the remainder of the project period of the current grant should be discussed under the budget justification. The body of the application should contain sufficient information from the original grant application to allow evaluation of the proposed supplement in relation to the goals of the original application.

If the supplemental application relates to a specific line of investigation presented in the original application that was not recommended for approval by the SRG, then the applicant must respond to the criticisms in the prior Summary Statement, and substantial revisions must be clearly evident and summarized in the introduction.

Applications for competitive supplements must be discussed with NIH program staff prior to submission.

C. SBIR/STTR Program Eligibility

Each concern submitting an SBIR/STTR Phase II grant application must qualify as a small business concern (SBC) for R/R&D purposes *at the time of award*. The following sections provide more details about these eligibility criteria.

ORGANIZATIONAL CRITERIA

A small business concern is one that, for both Phase I and Phase II agreements, meets all of the following criteria:

1. Is organized for profit, with a place of business located in the United States, which operates primarily within the United States or which makes a significant contribution to the United States economy through payment of taxes or use of American products, materials or labor;
2. Is in the legal form of an individual proprietorship, partnership, limited liability company, corporation, joint venture, association, trust or cooperative, except that where the form is a joint venture, there can be no more than 49 percent participation by foreign business entities in the joint venture;
3. Is at least 51 percent owned and controlled by one or more individuals who are citizens of, or permanent resident aliens in, the United States, except in the case of a joint venture, where each entity to the venture must be 51 percent owned and controlled by one or more individuals who are citizens of, or permanent resident aliens in, the United States; and
4. Has, including its affiliates, not more than 500 employees. The term "affiliates" is defined in greater detail in 13 CFR 121.3-2(a) and the term "number of employees" is defined in 13 CFR 121.3-2(t).

Business concerns, other than licensed investment companies, or State development companies qualifying under the Small Business Investment Act of 1958, 15 U.S.C. 661, et seq., are affiliates of one another when either directly or indirectly, (a) one concern controls or has the power to control the other, or (b) a third-party/parties controls or has the power to control both.

One of the circumstances that would lead to a finding that an organization is controlling or has the power to control another organization involves sharing common office space and/or employees and/or other facilities (e.g., laboratory space). Access to special facilities or equipment in another organization is permitted (as in cases where the awardee organization has entered into a subcontractual agreement with another organization for a specific, limited portion of the research project. *However, research space occupied by an SBIR/STTR awardee organization must be space that is available to and under the control of the SBIR/STTR awardee for the conduct of its portion of the proposed project*. Title 13 CFR 121.3 also states that control or the power to control exists when "key employees of one concern organize a new concern ... and serve as its officers, directors,

principal stockholders, and/or key employees, and one concern is furnishing or will furnish the other concern with subcontracts, financial or technical assistance, and/or other facilities, whether for a fee or otherwise." Where there is indication of sharing of common employees, a determination will be made on a case-by-case basis of whether such sharing constitutes control or the power to control.

For purposes of the SBIR Program, personnel obtained through a professional employer organization or other similar personnel leasing company may be considered employees of the awardee. This is consistent with SBA's size regulations, 13CFR 121.106 – Small Business Size Regulations.

Further information may be obtained by contacting the Small Business Administration (SBA) Size District Office at http://www.sba.gov/size/.

All SBIR/STTR grant applications will be examined with the above eligibility considerations in mind. If it appears that an applicant organization does not meet the eligibility requirements, NIH will request a size determination of your organization by the SBA. Under the circumstances in which eligibility is unclear, NIH will not make an SBIR or STTR award until the SBA provides a determination.

PRINCIPAL INVESTIGATOR CRITERIA

SBIR

Under the SBIR program, for both Phase I and Phase II, the primary employment of the principal investigator must be with the small business concern *at the time of award and during the conduct of the proposed project*. Primary employment means that more than one half of the principal investigator's time is spent in the employ of the small business concern. *Primary employment with a small business concern precludes full-time employment at another organization*. Occasionally, deviations from this requirement may occur. Such deviations must be approved in writing by the grants management officer after consultation with the NIH Program Coordinator.

As defined in 42 CFR 52, the principal investigator is the "single individual designated by the grantee in the grant application … who is responsible for the scientific and technical direction of the project." When the proposed principal investigator clearly does not have sufficient qualifications to assume this role, the application is not likely to receive a favorable evaluation.

If the application has the likelihood for funding, the awarding component will require documentation to verify the eligibility of the PI, if at the time of submission of the application, the principal investigator is a less-than-full-time employee of the small business concern, is concurrently employed by another organization, or gives the appearance of being concurrently employed by another organization, whether for a paid or unpaid position.

If the principal investigator is employed or appears to be employed by an organization other than the applicant organization in a capacity such as Research Fellow, Consultant, Adjunct Professor, Clinical Professor, Clinical Research Professor, or Associate, a letter must be provided by each employing organization confirming that, if an SBIR grant is awarded to the applicant small business concern, the principal investigator is or will become a less-than-half-time employee of such organization and will remain so for the duration of the SBIR project. If the principal investigator is employed by a university, such a letter must be provided by the Dean's office or equivalent; for other organizations, the letter must be signed by a corporate official.

This requirement applies also to those individuals engaged currently as the principal investigator on an active SBIR project. All current employment and all other appointments of the principal investigator must be identified in his or her "Biographical Sketch" required as part of the application. Be certain that correct beginning and ending dates are indicated for each employment record listed.

STTR

The principal investigator must commit a minimum of 10% effort to the project and the principal investigator must have a formal appointment with or commitment to the applicant small business concern, which is characterized by an official relationship between the small business concern and that individual. Such a relationship does not necessarily involve a salary or other form of remuneration. In all cases, however, the principal investigator's official relationship with the grantee must entail sufficient opportunity for the principal investigator to carry out his or her responsibilities for the overall scientific and technical direction of the project. *Documentation describing the official relationship of the principal investigator with the applicant small business concern should NOT be*

submitted with the grant application, but a copy must be furnished upon the request of the NIH awarding component.

Signatures on the Face Page and the Research Institution budget page certify that the principal investigator has a formal relationship with/commitment to the small business concern when the principal investigator is an employee of the RI.

The following are examples of situations describing the official relationship of the principal investigator with the applicant small business organization:

- Principal investigator with a full-time, university appointment may also have appointments with other organizations (with or without salary) and still appropriately consider his or her commitment to the university to be "full-time," consistent with the personnel policies and procedures of the university applied on a routine basis. The principal investigator's commitment to the university and other organizations (including the applicant small business concern) cannot exceed 100% of his or her total professional effort.
- Principal investigator with a full-time, 12-month appointment with a small business concern would be considered to have a commitment to the applicant organization of 100% of his or her total professional effort.
- Principal investigator who has a part-time appointment with a small business concern and has concurrent commitments or appointments with organizations in addition to the small business concern would deem each commitment as a portion of 100% of his or her total professional effort.

As responsible stewards of funds, the NIH is concerned that the principal investigator has the time available to carry out the proposed STTR research activities. Therefore, it should be clear on the application that the time proposed for the principal investigator on a particular project is reasonable and it should be clear that the principal investigator has sufficient time (*minimum 10% effort*) from among his or her total professional commitments to devote to this project.

The principal investigator should be paid by either the research institution or the small business, not both. Therefore, the principal investigator's name should not be listed on both the small business and the research institution budget pages.

The *NIH Grants Policy Statement* requires all grantees to establish safeguards to prevent any individuals who are involved in grant-supported activities from using their position for private financial gain for themselves, family members, or organizations with which they have financial ties, such as an employer.

The following example may raise concerns about the impartiality of individuals who are involved in grant-supported activities: The principal investigator (or co-principal investigator) is an employee at the research institution and the President/CEO of the small business. All research activities are proposed to be conducted in the principal investigator's lab at the university with "300 sq. ft. in one of the principal investigator's labs dedicated" for research conducted by the small business (e.g., one employee, post-doc). The possible conflict raised by this example is that the principal investigator or other employee of the collaborating research institution who also serves as the business official for the small business could appear to lack impartiality. The business official might appear to be acting without sufficient independence from his or her employer, the collaborating institution, which could possibly result in improper financial gain for the collaborating institution. To address this concern, the small business could appoint someone who is not an employee of the collaborating institution to serve as the business official.

SBIR/STTR Eligibility Checklist

- ☑ For- profit U.S. business firm.
- ☑ At least 51% U.S.-owned and independently operated.
- ☑ Small Business located in the U.S.
- ☑ Principal investigator's primary employment with small business during project (SBIR only).
- ☑ 500 or fewer employees.
- ☑ Small business concern is ALWAYS the applicant organization (SBIR or STTR application).

PERFORMANCE SITE CRITERIA

For both Phase I and Phase II, the SBIR/STTR research or R&D project activity must be performed in the United States. However, based on a rare and unique circumstance, for example, if a supply or material or the study design (e.g., patient population) is not available in the United States, NIH may allow that particular portion of the research or R&D work to be performed or obtained in a country outside the United States. Investigators must thoroughly justify the use of these sites in the application. These rare and unique situations will be considered on a case-by-case basis, and they should be discussed with NIH staff prior to submission of the application. Approval by the funding officer for such specific condition(s) must be in writing prior to issuance of an award. Whenever possible, non-SBIR/STTR funds should be used for other work outside of the United States which is necessary to the overall completion of the project.

CONTRACTUAL ARRANGEMENTS AND PERFORMANCE OF RESEARCH AND ANALYTICAL WORK BY THE APPLICANT ORGANIZATION

SBIR

In Phase II, normally, a minimum of one-half or 50% of the research or analytical effort must be carried out by the small business concern. The total amount of consultant and contractual arrangements to third parties for portions of the scientific and technical effort generally may not exceed 50% of the total Phase II amount requested (direct, indirect, and fee).

The signature of the authorized organizational official on the Face Page signifies that the applicant and all proposed consortium participants understand and agree to the following statement: The appropriate programmatic and administrative personnel of each organization involved in this grant application are aware of the NIH consortium agreement policy and are prepared to establish the necessary inter-organizational agreement(s) consistent with that policy.

The basis for determining the percentage of work to be performed by each of the cooperative parties in Phase II will be the total of direct and indirect costs attributable to each party, *unless otherwise described and justified in the "Contractual Arrangements" portion of the Research Plan section of the application*.

STTR

The small business concern is always the applicant and awardee organization on an STTR.

In Phase I and Phase II, at least 40% of the work must be performed by the small business concern and at least 30% of the work must be performed by the single partnering research institution. The basis for determining the percentage of work to be performed by each of the cooperative parties will be the total of direct and indirect costs attributable to each party, *unless otherwise described and justified in the "Contractual Arrangements" portion of the Research Plan section of the application*.

Certification showing the cooperative R&D arrangement must be submitted with the application using the STTR Research Institution Budget Form Page (Non-Modular STTR Applications) or STTR Research Institution Certification Format Page (Modular STTR Applications).

In addition, a small business concern must negotiate a written agreement between the small business and the research institution allocating intellectual property rights to carry out follow-on research, development or commercialization. See Model Agreement for the Allocation of Rights. This agreement is required to receive support under the STTR Program but is *NOT* submitted with the application. *By signing the Face Page of the grant application, the Official Signing for Applicant Organization (small business concern) certifies that the Agreement with the research institution will be effective at the time of award*. A copy of the Agreement must be furnished upon request of the NIH awarding component.

RESEARCH FACILITIES

The research and analytical work performed by the grantee organization is to be conducted in research space occupied by, available to, and under the control of the SBIR/STTR grantee for the conduct of its portion of the proposed project. However, when required by the project activity, access to special facilities or equipment in another organization is permitted, as in cases where the SBIR/STTR awardee has entered into a sub-contractual agreement with another institution for a specific, limited portion of the research project.

Whenever a proposed SBIR/STTR project is to be conducted in facilities other than those of the applicant organization, the awarding component will

request that the small business concern provide a letter from the organization stating that leasing/rental arrangements have been negotiated for appropriate research space. This letter, to be signed by an authorized official of the organization whose facilities are to be used for the SBIR/STTR project, must certify that the small business concern (awardee organization) will have access to and control over the research space. In addition, the letter must include a description of the facilities and, if appropriate, equipment that will be leased/rented to the grantee organization. (If the letter is included with the application, it is excluded from the page limitations.)

D. Similarities and Differences Between SBIR and STTR

SBIR and STTR are similar in that these programs are three-phased, both seek to increase the participation of small businesses in Federal R&D, and both seek to increase private sector commercialization of technology developed through Federal R&D. There are two major differences between these programs:

1. The STTR program *requires* that a small business concern formally partner with a non-profit research institution in the collaborative conduct of a project that has potential for commercialization. To be eligible for an STTR award, at least 40% of the work must be performed by the small business, and at least 30% of the work must be performed by a U.S. non-profit research institution through a formal cooperative R&D arrangement. Such institutions include universities, non-profit hospitals, and other non-profit organizations as well as Federally-funded research and development centers. (The same requirement is applicable for both Phase I and Phase II.)

   The SBIR program does not have this requirement; therefore, the small business concern may conduct the entire SBIR project without outside collaboration.

   STTR grants are awarded to the small business, which will receive all funding for the project and disperse the appropriate funds to the research institution.

2. The SBIR program *requires* that the primary employment of the principal investigator (greater than 50% of his/her time) be with the small business concern at the time of award and during the project period. Unlike SBIR, primary employment of the principal investigator with the small business concern is not stipulated under the STTR Program. Therefore, the principal investigator on an STTR project may be from the small business concern or the research institution as long as he/she has a *formal official relationship with or commitment to the applicant small business concern*.

For a more detailed comparison of the SBIR and STTR programs, refer to the "SBIR and STTR Comparison" table.

Applications proposing essentially the same project will not be accepted for review under both the STTR and SBIR programs.

SBIR and STTR Comparison

REQUIREMENTS	SBIR	STTR
Applicant Organization	Small Business Concern (SBC)	Small Business Concern (SBC)
Award Period*	Phase I – 6 months, normally Phase II – 2 years, normally	Phase I – 1 year, normally Phase II – 2 years, normally
Award Dollar Guidelines*	Phase I – $100,000, normally Phase II – $750,000, normally	Phase I – $100,000, normally Phase II – $750,000, normally
Principal Investigator*	Employed by company more than 50% of his/her time *during* award. Minimum level of effort on the project not stipulated.	Employment not stipulated. The principal investigator must spend a minimum of 10% effort on the project and have a formal appointment with or commitment to the SBC.

SBIR and STTR Comparison

REQUIREMENTS	SBIR	STTR
Subcontract/Consultant Costs*	Phase I – Total amount of contractual and consultant costs normally may not exceed 33% of total amount requested. Phase II – Total amount of contractual and consultant costs normally may not exceed 50% of total amount requested.	Phase I and Phase II – SBC must perform at least 40% of work and the single, partnering U.S. non-profit research institution must perform at least 30% of the work. Deviations are NOT permitted from these minimum requirements.
Performance Site	Must be entirely in U.S.* Part of research must take place in company-controlled research space.	Must be entirely in U.S.* Part of research must take place in company-controlled research space and part in that of partnering U.S. research institution.

**Deviations permissible with written justification and approval.*

II. AGENCY INFORMATION

The SBIR/STTR Phase II Grant application instructions and forms are available electronically at http://grants.nih.gov/grants/funding/sbir.htm. Small business concerns are encouraged to check the SBIR/STTR homepage for program updates. Any updates or corrections to the Solicitation will be posted there. If the small business concern has difficulty accessing the Solicitation, contact the PHS SBIR/STTR Solicitation Office (Section II. A).

A. Program Officials/Agency Contact Information

Applicants are strongly encouraged to contact NIH program staff prior to submitting an SBIR/STTR grant application. Questions regarding grant administration and business management should be directed to the Grants Management staff (see "Awarding Component Contact Information" table below).

Questions of a general nature about the NIH SBIR/STTR program should be directed to:

Ms. Jo Anne Goodnight
NIH SBIR/STTR Program Coordinator
6705 Rockledge Drive
Rockledge I, Room 3534
Bethesda, MD 20892
Phone: 301-435-2688, Fax: 301-480-0146
Email: sbir@od.nih.gov or jg128w@nih.gov

Ms. Kay Etzler
NIH SBIR/STTR Program Analyst
6705 Rockledge Drive
Rockledge I, Room 3522
Bethesda, MD 20892
Phone: 301-435-2713, Fax: 301-480-0146
Email: sbir@od.nih.gov or etzlerk@od.nih.gov

PHS SBIR/STTR Solicitation Office
13685 Baltimore Avenue
Laurel, MD 20707-5096
Phone: (301) 206-9385, Fax: (301) 206-9722
Email: sbirsttr@peacetech.com

The PHS agencies encourage applicants to communicate with staff (see table below) throughout the entire application, review and award process. Web site addresses and staff phone numbers of relevant NIH awarding components and other PHS awarding components are listed in the table below.

All inquiries regarding the assignment, review, or recommendation on funding of applications are to be made only to PHS officials.

BEFORE SUBMISSION

Contact program staff in the relevant awarding component *prior* to submitting an application:

- To determine whether your proposed application topic would fit into the NIH Institute/Center's (IC) or other non-NIH agency's programmatic area

- To learn about programmatic areas of interest to the IC or other non-NIH agencies
- To find out about research grant mechanisms
- To find out about requesting assignment to an IC or Scientific Review Group (SRG)
- To receive advice on preparing an application (e.g., format, structure)
- To discuss whether you should respond to an RFA

AFTER SUBMISSION

If the initial assignment to an IC or SRG seems inappropriate, the principal investigator/program director may request reassignment. Such requests should promptly be made in writing to:

Division of Receipt and Referral
Center for Scientific Review
National Institutes of Health
6701 Rockledge Drive, Suite 2030, MSC 7720
Bethesda, MD 20892-7720
Fax requests (301-480-1987) are also acceptable.

Although these requests will be carefully considered, the final determination will be made by the PHS agency.

Applicants must never contact reviewers regarding their applications because discussion of the scientific content of an application or an attempt to influence review outcome will constitute a conflict of interest in the review process. Reviewers are required to notify the Scientific Review Administrator if they are contacted by an applicant. Communication by the applicant to a reviewer will result in the return of the application without peer review.

AFTER ASSIGNMENT

Contact your Scientific Review Administrator to discuss the review assignment, to request permission to send additional/corrective materials, and/or to discuss any review concerns (e.g., expertise needed on your study section, conflicts, reviewers that may have bias).

AFTER PEER REVIEW

Feedback to applicants is very important. Once the principal investigator receives the Summary Statement, s/he may contact the appropriate awarding component program official (noted on the Summary Statement):

- To discuss the review outcome of the application and obtain guidance
- To get feedback and answers to any questions about the Summary Statement
- To find out the meaning of a numerical designation pertaining to human subjects or vertebrate animals on the Summary Statement
- To find out the funding status of an application

The following table includes points of contact information for each PHS awarding component. More detailed information on each of the NIH awarding components, as well as the CDC and FDA, are available electronically on the home pages cited in the table and in Part II – NIH, CDC, and FDA Program Descriptions and Research Topics (PDF or MS Word) of the solicitation.

B. Awarding Component Contact Information

AWARDING COMPONENT	PROGRAM CONTACT	GRANTS MGMT. CONTACT
National Institute on Aging http://www.nia.nih.gov	Dr. Michael-David A.R.R. Kerns Phone: 301-496-9322 Fax: 301-402-2945 Email: mk417e@nih.gov	Ms. Linda Whipp Phone: 301-496-1472 Fax: 301-402-3672 Email: lw17m@nih.gov
National Institute on Alcohol Abuse and Alcoholism http://www.niaaa.nih.gov	Dr. Karen Peterson Phone: 301-451-3883 Fax: 301-443-6077 Email: kpeterso@mail.nih.gov	Ms. Judy Fox Phone: 301-443-4704 Fax: 301-443-3891 Email: js182a@nih.gov

AWARDING COMPONENT	PROGRAM CONTACT	GRANTS MGMT. CONTACT
National Institute of Allergy and Infectious Diseases http://www.niaid.nih.gov	Dr. Gregory Milman Phone: 301-496-8666 Fax: 301-402-0369 Email: gmilman@niaid.nih.gov	Ms. Mary Kirker Phone: 301-496-7075 Fax: 301-480-3780 Email: mk35h@nih.gov
National Institute of Arthritis and Musculoskeletal and Skin Diseases http://www.niams.nih.gov/	Dr. Cheryl Kitt Phone: 301-594-2463 Fax: 301-480-4543 Email: kittc@mail.nih.gov	Ms. Melinda Nelson Phone: 301-435-5278 Fax: 301-480-5450 Email: mn23z@nih.gov
National Institute of Biomedical Imaging and Bioengineering http://www.nibib.nih.gov/	Mr. Todd Merchak Phone: 301-496-8592 Fax: 301-480-1614 Email: merchakt@mail.nih.gov	Ms. Florence Turska Phone: 301-496-9314 Fax: 301-480-4974 Email: turskaf@mail.nih.gov
National Cancer Institute http://www.nci.nih.gov or http://www.cancer.gov	Ms. Connie Dresser Phone: 301-435-2846 Fax: 301-480-2087 Email: cd34b@nih.gov	Mr. Ted Williams Phone: 301-496-8785 Fax: 301-496-8601 Email: tw133b@nih.gov
National Institute of Child Health and Human Development http://www.nichd.nih.gov	Dr. Louis A. Quatrano Phone: 301-402-4221 Fax: 301-402-0832 Email: lq2n@nih.gov	Ms. Annette Hanopole Phone: 301-496-5002 Fax: 301-402-0915 Email: ah23k@nih.gov
National Institute on Drug Abuse http://www.nida.nih.gov	Dr. Cathrine Sasek Phone: 301-443-6071 Fax: 301-443-6277 Email: csasek@nih.gov	Mr. Gary Fleming Phone: 301-443-6710 Fax: 301-594-6849 Email: gf6s@nih.gov
National Institute on Deafness and Other Communication Disorders http://www.nidcd.nih.gov	Dr. Lynn E. Luethke Phone: 301-402-3458 Fax: 301-402-6251 Email: luethkel@nidcd.nih.gov	Ms. Sara Stone Phone: 301-402-0909 Fax: 301-402-1758 Email: stones@nidcd.nih.gov
National Institute of Dental and Craniofacial Research http://www.nidcr.nih.gov	Dr. Eleni Kousvelari Phone: 301-594-2427 Fax: 301-480-8318 Email: kousvelari@de45.nidr.nih.gov	Ms. Mary Daley Phone: 301-594-4808 Fax: 301-480-3562 Email: md74u@nih.gov
National Institute of Diabetes and Digestive and Kidney Diseases http://www.niddk.nih.gov	Dr. Sanford A. Garfield Phone: 301-594-8803 Fax: 301-402-6271 Email: sg50o@nih.gov	Ms. Helen Y. Ling Phone: 301-594-8857 Fax: 301-480-3504 Email: lingh@extra.niddk.nih.gov
National Institute of Environmental Health Sciences http://www.niehs.nih.gov	Dr. Jerrold Heindel Phone: 919-541-0781 Fax: 919-541-5064 Email: heindelj@niehs.nih.gov	Ms. Carolyn Winters Phone: 919-541-7823 Fax: 919-541-2860 Email: winters@niehs.nih.gov
National Eye Institute http://www.nei.nih.gov	Dr. Ralph Helmsen Phone: 301-451-2020 Fax: 301-402-0528 Email: rjh@nei.nih.gov	Mr. William Darby Phone: 301-451-2020 Fax: 301-496-9997 Email: wwd@nei.nih.gov

AWARDING COMPONENT	PROGRAM CONTACT	GRANTS MGMT. CONTACT
National Institute of General Medical Sciences http://www.nigms.nih.gov/	Dr. Peter Preusch Phone: 301-594-5938 Fax: 301-480-2802 Email: preuschp@nigms.nih.gov	Ms. Linda Roberts Phone: 301-594-5141 Fax: 301-480-2554 Email: lr24v@nih.gov
National Heart, Lung, and Blood Institute http://www.nhlbi.nih.gov	Ms. Susan Pucie Phone: 301-435-0079 Fax: 301-480-0867 Email: sp34j@nih.gov	Ms. Suzanne White Phone: 301-435-0144 Fax: 301-480-3310 Email: sw52h@nih.gov
National Human Genome Research Institute http://www.genome.gov	Dr. Bettie J. Graham Phone: 301-496-7531 Fax: 301-480-2770 Email: bg30t@nih.gov	Ms. Jean Cahill Phone: 301-435-7858 Fax: 301-402-1951 Email: jc166o@nih.gov
National Institute of Mental Health http://www.nimh.nih.gov	Dr. Michael F. Huerta Phone: 301-443-3563 Fax: 301-443-1731 Email: mhuert1@mail.nih.gov	Mr. Brian Albertini Phone: 301-443-0004 Fax: 301-443-6885 Email: albertib2@mail.nih.gov
National Institute of Neurological Disorders and Stroke http://www.ninds.nih.gov	Dr. Thomas Miller Phone: 301-496-1779 Fax: 301-402-1501 Email: tm208y@nih.gov	Ms. Kathleen Howe Phone: 301-496-9231 Fax: 301-402-0219 Email: kh52x@nih.gov
National Institute of Nursing Research http://www.nih.gov/ninr	Dr. Yvonne Bryan Phone: 301-594-6908 Fax: 301-480-8260 Email: yb5y@nih.gov	Ms. Cindy McDermott Phone: 301-594-6869 Fax: 301-402-4502 Email: cm253t@nih.gov
National Center for Research Resources http://www.ncrr.nih.gov	Dr. Louise E. Ramm Phone: 301-435-0879 Fax: 301-480-3658 Email: lr34m@nih.gov	Ms. Kimberly Pendleton Phone: 301-435-0845 Fax: 301-480-3777 Email: kp190i@nih.gov
National Center for Complementary and Alternative Medicine http://nccam.nih.gov	Dr. Shan Wong Phone: 301-496-7498 Fax: 301-480-3621 Email: sw196c@nih.gov	Mr. Marc Milton Pitts, M.B.A. Phone: 301-594-9095 Fax: 301-480-1552 Email: mp384x@nih.gov
National Center on Minority Health and Health Disparities http://www.ncmhd.nih.gov	Mr. Vincent Thomas, MSW, MPA Phone: 301-402-2516 Fax: 301-480-4049 Email: vt5e@nih.gov	Mr. Bryan Clark, MBA Phone: 301-594-8412 Fax: 301-480-4049 Email: clarkb@od.nih.gov
National Library of Medicine http://www.nlm.nih.gov	Dr. Milton Corn Phone: 301-496-4621 Fax: 301-402-2952 Email: cornm@mail.nlm.nih.gov	Mr. Christopher Robey Phone: 301-496-4221 Fax: 301-402-0421 Email: jr58a@nih.gov
Centers for Disease Control and Prevention (CDC) http://www.cdc.gov	Mr. Curtis L. Bryant Phone: 770-488-2806 Fax: 770-488-2828 Email: ckb9@cdc.gov	Ms. Sharron Orum Phone: 770-488-2716 Fax: 770-488-2777 Email: sorum@cdc.gov

AWARDING COMPONENT	PROGRAM CONTACT	GRANTS MGMT. CONTACT
Food and Drug Administration (FDA) http://www.fda.gov	Ms. Rosemary Springer Phone: 301-827-7182 Fax: 301-827-7106 Email: rspringe@oc.fda.gov	Ms. Peggy Jones Phone: 301-827-7160 Fax: 301-827-7106 Email: pjones@oc.fda.gov

III. DEFINITIONS

Affiliate. This term has the same meaning as set forth in 13 CFR Part 121 – Small Business Size Regulations, §121.103, *"What is affiliation?"*

Animal. Any live, vertebrate animal used or intended for use in research, research training, experimentation, or biological testing or for related purposes at the applicant organization or any collaborating site or other performance site.

Applicant. The organizational entity that, at the time of award, will qualify as a Small Business Concern (SBC) and that submits a grant application for a funding agreement under the SBIR or STTR Program.

Child. NIH defines a child as an individual under the age of 21 years. It should be noted that the definition of child described above will pertain notwithstanding the FDA definition of a child as an individual from infancy to 16 years of age, and varying definitions employed by some states. Generally, state laws define what constitutes a "child," and such definitions dictate whether or not a person can legally consent to participate in a research study. However, state laws vary, and many do not address the age at which a child can consent to participate in research. Federal Regulations (45 CFR 46, subpart D, Sec.401-409) address DHHS protections for children who participate in research, and rely on state definitions of "child" for consent purposes. Consequently, the children included in this policy (persons under the age of 21) may differ in the age at which their own consent is required and sufficient to participate in research under state law. For example, some states consider a person age 18 to be an adult and therefore one who can provide consent without parental permission.

Clinical Research. NIH defines human clinical research as: *(1)* Patient-oriented research. Research conducted with human subjects (or on material of human origin such as tissues, specimens and cognitive phenomena) for which an investigator (or colleague) directly interacts with human subjects. Excluded from this definition are *in vitro* studies that utilize human tissues that cannot be linked to a living individual. Patient-oriented research includes: (a) mechanisms of human disease, (b) therapeutic interventions, (c) clinical trials, or (d) development of new technologies. *(2)* Epidemiologic and behavioral studies. *(3)* Outcomes research and health services research.

Studies falling under Exemption 4 for human subjects research are not considered clinical research by this definition.

Clinical Trial. The NIH defines a clinical trial as a prospective biomedical or behavioral research study of human subjects that is designed to answer specific questions about biomedical or behavioral interventions (drugs, treatments, devices, or new ways of using known drugs, treatments, or devices).

Clinical trials are used to determine whether new biomedical or behavioral interventions are safe, efficacious, and effective.

Behavioral human subjects research involving an intervention to modify behavior (diet, physical activity, cognitive therapy, etc.) fits this definition of a clinical trial.

Human subjects research to develop or evaluate clinical laboratory tests (e.g. imaging or molecular diagnostic tests) might be considered to be a clinical trial if the test will be used for medical decision-making for the subject or the test itself imposes more than minimal risk for subjects.

Biomedical clinical trials of experimental drug, treatment, device or behavioral intervention may proceed through four phases:

- *Phase I* clinical trials test a new biomedical intervention in a small group of people (e.g., 20-80) for the first time to evaluate safety (e.g., to determine a safe dosage range and to identify side effects).

- *Phase II* clinical trials study the biomedical or behavioral intervention in a larger group of people (several hundred) to determine efficacy and to further evaluate its safety.

- *Phase III* studies investigate the efficacy of the biomedical or behavioral intervention in large groups of human subjects (from several hundred to several thousand) by comparing the intervention to other standard or experimental interventions as well as to monitor adverse effects, and to collect information that will allow the intervention to be used safely.

- *Phase IV* studies are conducted after the intervention has been marketed. These studies are designed to monitor effectiveness of the approved intervention in the general population and to collect information about any adverse effects associated with widespread use.

- *NIH-Defined Phase III Clinical Trial*. For the purpose of the Guidelines an NIH-defined Phase III clinical trial is a broadly based prospective Phase III clinical investigation, usually involving several hundred or more human subjects, for the purpose of evaluating an experimental intervention in comparison with a standard or control intervention or comparing two or more existing treatments. Often the aim of such investigation is to provide evidence leading to a scientific basis for consideration of a change in health policy or standard of care. The definition includes pharmacologic, non-pharmacologic, and behavioral interventions given for disease prevention, prophylaxis, diagnosis, or therapy. Community trials and other population-based intervention trials are also included.

Co-investigator. An individual involved with the principal investigator in the scientific development or execution of the project. The co-investigator (collaborator) may be employed by, or affiliated with, the applicant/grantee organization or another organization participating in the project under a consortium agreement. This individual would typically devote a specific percent of effort to the project and would be identified as Key Personnel. The designation of a co-investigator, if applicable, does not affect the principal investigator's roles and responsibilities as specified in the *Grants Policy Statement*.

Collaborator. An individual involved with the principal investigator in the scientific development or execution of the project. These individuals would typically devote a specific percent of effort to the project and would be identified as key personnel. The collaborator may be employed by, or affiliated with, either the grantee organization or an organization participating in the project under a consortium or contractual agreement.

Commercialization. The process of developing markets and producing and delivering products for sale (whether by the originating party or by others). As used here, commercialization includes both government and private sector markets.

Consortium Agreement. A formalized agreement whereby a research project is carried out by the grantee and one or more other organizations that are separate legal entities. Under the agreement, the grantee must perform a substantive role in the conduct of the planned research and not merely serve as a conduit of funds to another party or parties. These agreements typically involve a specific percent of effort from the consortium organization's principal investigator and a categorical breakdown of costs, such as personnel, supplies, and other allowable expenses, including Facilities and Administrative costs.

Consultant. An individual who provides professional advice or services for a fee, but normally not as an employee of the engaging party. In unusual situations, an individual may be both a consultant and an employee of the same party, receiving compensation for some services as a consultant and for other work as a salaried employee. To prevent apparent or actual conflicts of interest, grantees and consultants must establish written guidelines indicating the conditions of payment of consulting fees. Consultants may also include firms that provide paid professional advice or services.

Consulting fees. The fee paid by an institution to a salaried member of its faculty is allowable only in unusual cases and only if both of the following conditions exist: (1) the consultation crosses departmental lines or involves a separate operation; or (2) the work performed by the consultant is in addition to his or her regular workload.

In all other cases, consulting fees paid to employees of recipient or cost-type contractor organizations in addition to salary may be charged to PHS grant-supported projects only in unusual situations and

when all of the following conditions exist: (1) the policies of the recipient or contractor permit such consulting fee payments to its own employees regardless of whether Federal grant funds are received; (2) the consulting services are clearly outside the scope of the individual's salaried employment; and (3) it would be inappropriate or not feasible to compensate the individual for these services through payment of additional salary.

For additional clarification on the allowance and appropriateness of consulting fees, refer to the *NIH Grants Policy Statement*.

Contract. An award instrument establishing a binding legal procurement relationship between a funding agency and the recipient, obligating the latter to furnish an end product or service and binding the agency to provide payment therefore.

Cooperative Agreement. A support mechanism that will have substantial Federal scientific and/or programmatic involvement. Substantial programmatic involvement means that after award, scientific or program staff will assist, guide, coordinate, or participate in programmatic activities beyond the normal stewardship responsibility in the administration of grants.

Employee. The number of employees of a firm is its average number of persons employed for each pay period over the firm's latest 12 months. Any person on the payroll must be included as one employee regardless of hours worked or temporary status. The number of employees of a firm in business under 12 months is based on the average for each pay period it has been in business.

Equipment. An article of tangible nonexpendable personal property that has a useful life of more than one year and an acquisition cost per unit that equals or exceeds the lesser of the capitalization threshold established by the organization or $5,000.

Essentially Equivalent Work. This term is meant to identify "scientific overlap," which occurs when (1) substantially the same research is proposed for funding in more than one contract proposal or grant application submitted to the same Federal agency; **or** (2) substantially the same research is submitted to two or more different Federal agencies for review and funding consideration; **or** (3) a specific research objective and the research design for accomplishing that objective are the same or closely related in two or more proposals or awards, regardless of the funding source.

Expanded Authorities. The operating authorities provided to grantees under certain research grant mechanisms that waive the requirement for NIH prior approval for specified actions. See the *NIH Grants Policy Statement* http://grants1.nih.gov/grants/policy/nihgps_2003/NIHGPS_Part7.htm#_Toc54600128 and the NIH Guide Notice (http://grants.nih.gov/grants/guide/notice-files/NOT-OD-01-070.html) which expanded the authorities (other than Phase I carry-over) to include Phase I SBIR/STTR.

Facilities and Administrative (Indirect) Costs. Facilities and Administrative (F&A) Costs are defined as costs that are incurred by a grantee for common or joint objectives and that, therefore, cannot be identified specifically with a particular project or program. See the Checklist Instructions and Checklist Form Page.

Feasibility. The extent to which a study or project may be done practically and successfully.

Foreign Component. The performance of any significant scientific element or segment of a project outside of the United States, either by the grantee or by a researcher employed by a foreign organization, whether or not grant funds are expended. Activities that would meet this definition include, but are not limited to: (1) the involvement of human subjects or animals; (2) extensive foreign travel by grantee project staff for the purpose of data collection, surveying, sampling, and similar activities; or (3) any activity of the grantee that may have an impact on U.S. foreign policy through involvement in the affairs or environment of a foreign country. Foreign travel for consultation is not considered a foreign component.

For Profit Applicant Organization: An institution, corporation, or other legal entity, which is organized for the profit or benefit of its shareholders or other owners. A "for profit" organization is considered to be a small business if it is independently owned and operated, if it is not dominant in the field in which research is proposed, and if it employs no more than 500 persons. Also see definition for Small Business Concern.

Full-Time Appointment. The number of days per week and/or months per year representing full-time effort at the applicant/grantee organization, as specified in organizational policy. The organization's policy must be applied consistently regardless of the source of support.

Funding Agreement. Any grant, contract, or cooperative agreement entered into between any Federal agency and any small business concern for the performance of experimental, developmental, or research work, including products or services, funded in whole or in part by the Federal Government.

Gender. Refers to the classification of research subjects into either or both of two categories: women and men. In some cases, representation is unknown, because gender composition cannot be accurately determined (e.g., pooled blood samples or stored specimens without gender designation).

Grant. A financial assistance mechanism providing money, property, or both to an eligible entity to carry out an approved project or activity. A grant is used whenever the NIH Institute or Center anticipates no substantial programmatic involvement with the recipient during performance of the financially assisted activities.

Historically Underutilized Business Zone (HUBZone). A small business concern meeting the following criteria:

1. Located in a "historically underutilized business zone" or HUBZone area located in one or more of the following:
   a. A qualified census tract (as defined in section 42(d)(5)(C)(i)(l) of the Internal Revenue Code of 1986; or
   b. A qualified "non-metropolitan county" (as defined in section 143(k)(2)(B) of the Internal Revenue Code of 1986) with a median household income of less than 80 percent of the state median household income or with an unemployment rate of not less than 140 percent of the statewide average, based on U.S. Department of Labor recent data; or
   c. Lands within the boundaries of federally recognized Indian reservations.
2. Owned and controlled by one or more U.S. Citizens.
3. At least 35% of its employees must reside in a HUBZone.

Human Subject. A living individual about whom an investigator (whether professional or student) obtains for research purposes (1) data through intervention or interaction with the individual, or (2) identifiable private information. The regulations governing the inclusion of human subjects in research extend to the use of human organs, tissues, and body fluids from individually identifiable human subjects as well as to graphic, written, or recorded information derived from individually identifiable human subjects.

Intervention includes both physical procedures by which data are gathered (for example, venipuncture) and manipulations of the subject or the subject's environment that are performed for research purposes. Interaction includes communication or interpersonal contact between investigator and subject.

Private information includes information about behavior that occurs in a context in which an individual can reasonably expect that no observation or recording is taking place, and information that has been provided for specific purposes by an individual and that the individual can reasonably expect will not be made public (for example, a medical record). Private information must be individually identifiable (i.e., the identity of the subject is or may readily be ascertained by the investigator or associated with the information) in order for obtaining the information to constitute research involving human subjects.

The use of autopsy materials is governed by applicable state and local law and is not directly regulated by 45 CFR 46.

Innovation. Something new or improved, including research for (1) development of new technologies, (2) refinement of existing technologies, or (3) development of new applications for existing technologies. For the purposes of PHS programs, an example of "innovation" would be new medical or biological products for improved value, efficiency, or costs.

Institutional Base Salary. The annual compensation that the applicant organization pays for an employee's appointment, whether that individual's time is spent on research, teaching, patient care, or other activities. Base salary excludes any income that an individual may be permitted to earn outside of duties to the applicant organization. Base salary may not be increased as a result of replacing institutional salary funds with NIH grant funds.

Some PHS grant recipients are currently subject to a legislatively imposed salary limitation. Any adjustment for salary limits will be made at time of award. Applicants are encouraged to contact their offices of sponsored programs or see the *NIH Guide*

for Grants and Contracts for current guidance on salary requirements.

Intellectual Property. The separate and distinct types of intangible property that are referred to collectively as "intellectual property," including but not limited to: patents, trademarks, copyrights, trade secrets, SBIR/STTR technical data (as defined in this section), ideas, designs, know-how, business, technical and research methods, and other types of intangible business assets, and including all types of intangible assets either proposed or generated by an SBC as a result of its participation in the SBIR Program.

Joint Venture. An association of concerns with interests in any degree or proportion by way of contract, express or implied, consorting to engage in and carry out a single specific business venture for joint profit, for which purpose they combine their efforts, property, money, skill, or knowledge, but not on a continuing or permanent basis for conducting business generally. A joint venture is viewed as a business entity in determining power to control its management.

Key Personnel. In addition to the principal investigator, Key Personnel are defined as individuals who contribute to the scientific development or execution of the project in a substantive, measurable way, whether or not salaries are requested.

Typically, these individuals have doctoral or other professional degrees, although individuals at the masters or baccalaureate level should be included if their involvement meets the definition of Key Personnel. Consultants should also be included if they meet the definition of Key Personnel. Key Personnel must devote measurable effort to the project whether or not salaries are requested--"zero percent" effort or "as needed" are not acceptable levels for those designated as Key Personnel.

Principal Investigator, Program Director, or Project Director. The one individual designated by the applicant organization to direct the project or program to be supported by the grant. The principal investigator is responsible and accountable to the applicant organization officials for the proper conduct of the project or program.

Program Income. Gross income earned by the applicant organization that is directly generated by a supported activity or earned as a result of the award. The *PHS Grants Policy Statement* or *NIH Grants Policy Statement* (http://grants1.nih.gov/grants/policy/nihgps_2003/index.htm) contains a detailed explanation of program income, the ways in which it may be generated and accounted for, and the various options for its use and disposition.

Examples of program income include:

- Fees earned from services performed under the grant, such as those resulting from laboratory drug testing;
- Rental or usage fees, such as those earned from fees charged for use of computer equipment purchased with grant funds;
- Third party patient reimbursement for hospital or other medical services, such as insurance payments for patients when such reimbursement occurs because of the grant-supported activity;
- Funds generated by the sale of commodities such as tissue cultures, cell lines, or research animals;
- Patent or copyright royalties; and
- Registration fees generated from grant-supported conferences.

Generally, SBIR/STTR grantee organizations that earn program income may be authorized to have such income added to the grant account and used to further the objectives of the research project. Authorization must be requested from the Grants Management Officer of the appropriate PHS awarding component.

Prototype. A model of something to be further developed and includes designs, protocols, questionnaires, software, and devices.

Research or Research and Development (R/R&D). Any activity that is:

- A systematic, intensive study directed toward greater knowledge or understanding of the subject studied;
- A systematic study directed specifically toward applying new knowledge to meet a recognized need;
- A systematic application of knowledge toward the production of useful materials, devices, and systems or methods, including

design, development, and improvement of prototypes and new processes to meet specific requirements.

Research Institution. A United States research organization that is:

- A nonprofit college or university **or**
- A nonprofit research institution, including nonprofit medical and surgical hospitals (A "nonprofit institution" is defined as an organization that is owned and operated exclusively for scientific or educational purposes, no part of the net earnings of which inures to the benefit of any private shareholder or individual.) **or**
- A contractor-operated, Federally funded research and development center, as identified by the National Science Foundation in accordance with the Government-wide Federal Acquisition Regulation issued in accordance with section 35(c)(1) of the Office of Federal Procurement Policy Act (or any successor legislation thereto).

(Laboratories staffed by Federal employees do not meet the definition of "research institution" for purposes of the STTR program.)

SBIR/STTR Technical Data. All data generated during the performance of an SBIR/STTR award.

SBIR/STTR Technical Data Rights. The rights a small business concern obtains in data generated during the performance of any SBIR/STTR Phase I, Phase II, or Phase III award that an awardee delivers to the Government during or upon completion of a Federally-funded project, and to which the Government receives a license.

Significant Difference. For purposes of NIH policy, a "significant difference" is a difference that is of clinical or public health importance, based on substantial scientific data. This definition differs from the commonly used "statistically significant difference," which refers to the event that, for a given set of data, the statistical test for a difference between the effects in two groups achieves statistical significance. Statistical significance depends upon the amount of information in the data set. With a very large amount of information, one could find a statistically significant, but clinically small difference that is of very little clinical importance. Conversely, with less information one could find a large difference of potential importance that is not statistically significant.

Small Business Concern. A small business concern is one that, at the time of award for both Phase I and Phase II funding agreements, meets **all** of the following criteria:

1. is organized for profit, with a place of business located in the United States, which operates primarily within the United States or which makes a significant contribution to the United States economy through payment of taxes or use of American products, materials or labor;
2. is in the legal form of an individual proprietorship, partnership, limited liability company, corporation, joint venture, association, trust or cooperative, except that where the form is a joint venture, there can be no more than 49 percent participation by foreign business entities in the joint venture;
3. is at least 51 percent owned and controlled by one or more individuals who are citizens of, or permanent resident aliens in, the United States, except in the case of a joint venture, where each entity to the venture must be 51 percent owned and controlled by one or more individuals who are citizens of, or permanent resident aliens in, the United States; and
4. has, including its affiliates, not more than 500 employees, and meets the other regulatory requirements found in 13 CFR Part 121.

Business concerns, other than investment companies licensed, or state development companies qualifying under the Small Business Investment Act of 1958, 15 U.S.C. 661, et seq., are affiliates of one another when either directly or indirectly, (a) one concern controls or has the power to control the other; or (b) a third-party/parties controls or has the power to control both.

Control can be exercised through common ownership, common management, and contractual relationships. The term "affiliates" is defined in greater detail in 13 CFR 121.3-2(a). The term "number of employees" is defined in 13 CFR 121.3-2(t).

Business concerns include, but are not limited to, any individual (sole proprietorship), partnership, corporation, joint venture, association, or cooperative. Further information may be obtained by contacting the Small Business Administration Size District Office at http://www.sba.gov/size/.

Socially and Economically Disadvantaged Small Business Concern. A socially and economically disadvantaged small business concern is one that is at least 51% owned by (a) an Indian tribe or a native Hawaiian organization, or (b) one or more socially and economically disadvantaged individuals; **and** whose management and daily business operations are controlled by one or more socially and economically disadvantaged individuals.

Socially and Economically Disadvantaged Individual. A member of any of the following groups: Black Americans; Hispanic Americans; Native Americans; Asian-Pacific Americans; Subcontinent Asian Americans; other groups designated from time to time by the Small Business Administration (SBA) to be socially disadvantaged; or any other individual found to be socially and economically disadvantaged by SBA pursuant to Section 8(a) of the Small Business Act, 15 U.S.C. 637(a).

Subcontract. Any agreement, other than one involving an employer-employee relationship, entered into by a Federal Government prime contractor calling for supplies or services required solely for the performance of the prime contract or another subcontract.

United States. The 50 states, territories and possessions of the U.S., Commonwealth of Puerto Rico, Trust Territory of the Pacific Islands, and District of Columbia.

Valid Analysis. This term means an unbiased assessment. Such an assessment will, on average, yield the correct estimate of the difference in outcomes between two groups of subjects. Valid analysis can and should be conducted for both small and large studies. A valid analysis does not need to have a high statistical power for detecting a stated effect. The principal requirements for ensuring a valid analysis of the question of interest are: allocation of study participants of both sexes/genders (males and females) and from different racial/ethnic groups to the intervention and control groups by an unbiased process such as randomization; unbiased evaluation of the outcome(s) of study participants; and use of unbiased statistical analyses and proper methods of inference to estimate and compare the intervention effects among the gender and racial/ethnic groups.

Women-Owned Small Business Concern. A small business concern that is at least 51% owned by a woman or women who also control and operate it. "Control" in this context means exercising the power to make policy decisions. "Operate" in this context means being actively involved in the day-to-day management.

IV. PHASE II GRANT APPLICATION INSTRUCTIONS AND REQUIREMENTS

Your SBIR/STTR application should represent a sound approach to the investigation of an important biomedical research, behavioral research, technological, engineering or scientific question, and be worthy of support under the stated criteria of this program solicitation. It should be self-contained and written with the care and thoroughness accorded to papers for publication.

Review the application carefully to ensure that information essential for evaluation is included. The scientific and technical merit of the proposed research is the primary concern for all research supported by NIH, CDC and FDA. You are *strongly encouraged to contact agency program staff for pre-application guidance (particularly if you are submitting a revised application)*.

A firm must not propose market research, patent applications, or litigation. The research may be carried out through construction and evaluation of a laboratory prototype, where necessary.

A. Forms and Instructions

All SBIR and STTR applications (Phase I, Phase II, and Phase I/Phase II Fast-Track) must be submitted using the Public Health Service Grant Application Forms (PHS 398) in accordance with these instructions and the PHS 398 (HTML | PDF).

These instructions and requirements are based on the PHS 398.

The PHS 398 includes Form Pages *and* Format Pages. The Format pages are intended to *assist* in the development of specific sections of the application.

You may substitute computer-generated facsimiles for government-provided forms; however, they must maintain the exact wording and format of the

government forms, including all captions and spacing.

The following PHS 398 forms (MS Word | PDF) apply specifically to SBIR and STTR applicants:

FULL SET – (MS WORD | PDF)

INDIVIDUAL FORM FILES

- Form Page 1: Face Page (MS Word | PDF)
- Form Page 2: Description, Performance Sites, and Key Personnel (MS Word | PDF)
- Form Page 3: Research Grant Table of Contents (MS Word | PDF)
- Form Page 4: Detailed Budget for Initial Budget Period (MS Word | PDF)
- Form Page 5: Budget for Entire Proposed Period of Support (MS Word | PDF)
- Modular Budget Format Page (MS Word | PDF) (*for applications of $100,000 total costs or less*)
- Biographical Sketch Format Page (MS Word | PDF)
- Resources Format Page (MS Word | PDF)
- Checklist Form Page (MS Word | PDF)
- Personal Data Form Page (MS Word | PDF)
- Continuation Page (MS Word | PDF)
- Research Plan: There is *no form page*.
- Mailing Address, RFA and SBIR/STTR Labels (MS Word | PDF)

ADDITIONAL FORMS FOR STTR APPLICATIONS:

- STTR Research Institution Budget Form Page (MS Word | PDF)
- STTR Research Institution Certification Format Page (Modular STTR Only) (MS Word | PDF)
- STTR Model Agreement (*to be submitted upon request by NIH staff, not with the application*)

ADDITIONAL FORMS FOR RESEARCH THAT INVOLVES HUMAN SUBJECTS

- Targeted/Planned Enrollment Format Page (MS Word | PDF) (*if human subjects research is proposed*)
- Enrollment Report Format Page (MS Word | PDF) (*if human subjects research is proposed*)

REMINDER SHEET

Refer to the appropriate SBIR Reminder Sheet or STTR Reminder Sheet to ensure that the requirements for submission have been met.

B. Limitations on Length of Application

PHASE II SBIR/STTR

Observe the page number limitations. Otherwise, application processing may be delayed or the application may be returned without review.

- *Items a-d* of the Phase II Research Plan are limited to 25 pages.
- "Introduction" (required when submitting a revised application) is limited to three (3) pages.
- Biographical Sketch Format Page(s) is limited to a *maximum* of 4 pages for each key person.
- Commercialization Plan is limited to 15 pages.

There is no further limitation on the total number of pages for the entire Phase II application; however, applicants are encouraged to be succinct.

C. Type Size, Photographs, and Images

FORMAT SPECIFICATIONS

Check type and font size on the *printed document* using a standard device for measuring type size, rather than relying on the font selected for a particular word processor/printer combination.

Prepare the application, single-sided and single-spaced. Use black type that can be photocopied; do not use photo reduction. Use English only and avoid jargon and unusual abbreviations. Draw all graphs, diagrams, tables, and charts in black ink.

Font sizes on some of the PHS 398 form pages vary due to field or space limitations. The PHS 398 Form pages as provided in MS Word and Portable Document File (PDF) are acceptable by NIH. All other sections of your application (e.g., Biographical Sketch; Introduction, if necessary; Literature Citations; and the Research Plan) must conform to all of the following requirements:

1. The height of the characters must not be smaller than 10 points. **NIH-suggests** using a Helvetica or Arial, 12-point font (as using a 10-point font provides no guarantee that the type will satisfy the required specifications of characters per inch or lines per inch).
2. Type density, including characters and spaces, must be no more than 15 characters per inch (cpi). For proportional fonts, the average for any representative section of text must not exceed 15 cpi.
3. Type size used in figures, charts, tables, figure legends, and footnotes may be a smaller type size but **must** be readily legible.
4. There must be no more than 6 lines of type within a vertical inch.
5. All page margins (i.e., top, bottom, left and right), *including continuation page margins*, must be at least ½ inch.

Follow type size, character limitations, and format specifications. Otherwise, application processing may be delayed, or the application may be returned to the applicant without review.

Adherence to type size, type density, and vertical line spacing requirements is necessary for several reasons. No applicant should have an advantage over other applicants by providing more content in his/her application by using smaller, denser type. Small type sizes may also make it difficult for reviewers to read the application. See "Answers to FAQs About Grant Application Format" (http://grants1.nih.gov/grants/funding/sbirsttr1/FAQs_format.rtf).

The NIH Center for Scientific Review (CSR), Division of Receipt and Referral has the responsibility and authority to make the final determination of legibility; this decision is final and not appealable. Further inquiries should be directed to the:

CSR, Division of Receipt and Referral
Phone: (301) 435-0715; Fax: (301) 480-1987

PHOTOGRAPHS AND IMAGES

Do not include photographs or other materials that are not printed directly on the application page in the body of the application. Pictures or other materials that are pasted onto application pages are incompatible with the current duplication/scanning process. You may include black-and-white or color images in the six (6) submitted copies provided such images are printed directly on the application page and are critical to the content of the application.

You may submit pertinent photographs or other materials that cannot be photocopied as five collated sets as part of an appendix. In these circumstances, the original application must include black-ink images so as not to circumvent the page limitations for SBIR/STTR applications.

Applications not meeting all of these requirements may be significantly delayed in the review process.

D. Specific SBIR/STTR Grant Application Instructions and Requirements

1. FACE PAGE (MS WORD | PDF)

The entire Face Page must be printed on a single page.

The information provided on the Face Page of the application and the fiscal information, including the calculation of F&A costs, must be verified by the official signing for applicant organization.

Item 1. Title of Project

Do not exceed 56 characters, including the spaces between words and punctuation. Choose a descriptive title that is specifically appropriate. *The SBIR/STTR Phase II application should carry the same title as the Phase I grant*.

A competing continuation or revised application should have the same title as the previous grant or application, but if the specific aims of the project have significantly changed, choose a new title.

Item 2. Response to Specific Request for Application (RFA) or Program Announcement (PA) or Solicitation

Check "Yes."

Number. Provide the number of the Phase I grant award (e.g., 1R43HL12345-01A1). If the application is a type 2 competing continuation Phase II application, insert the Phase II grant award (e.g. 5R44HL12345-03). If the application is submitted in response to an RFA or a PA issued through the NIH Guide for Grants and Contracts, identify the appropriate announcement number (e.g., PA-03-007). *Type "Fast-Track," if appropriate. Do not type PHS 398 in this line*.

Title. Type "Phase II SBIR" or "Phase II STTR," as appropriate.

If the application is submitted in response to an RFA or a PA issued through the *NIH Guide for Grants and Contracts*, check "Yes," and identify the appropriate announcement title of the PA or RFA.

If the application is a type 2 competing continuation Phase II, type "T2CC SBIR" or "T2CC STTR," as appropriate.

Item 3. Principal Investigator

New Investigator. Check "Yes" in the "New Investigator" box only if the principal investigator has not previously served as such on any PHS-supported research project. *If the principal investigator is not a new investigator, check "No*."

Item 3a. Name of Principal Investigator

Name the *one* person responsible to the applicant small business concern for the scientific and technical direction of the project. *PHS staff conduct official business only with principal investigators and institutional officials*. A supplemental application *must* have the same principal investigator as the currently funded grant.

> Reminder: Under the SBIR Program, routinely the primary employment (more than 50 percent time) of the principal investigator must be with the small business concern *at the time of award* and during the conduct of the proposed project. Under the STTR Program, primary employment with the small business concern is not stipulated.

Item 3b. Degrees

Indicate up to three academic and professional degrees or other credentials, such as licenses (e.g., R.N.).

Item 3c. Position Title

Provide the academic or professional title of the principal investigator/program director. If more than one title, indicate the one most relevant to the proposed project (e.g., Director of Research).

Item 3d. Mailing Address

Provide complete information (including room number, building, and street address) necessary for postal delivery. The PHS agencies will use this address for all written communications with the principal investigator. For electronic mail, enter the appropriate email address (not the website URL).

Item 3e. Department, Service, Laboratory, or Equivalent

Indicate your organizational affiliation, such as Department of Medicine, Materials Research Laboratory, or Social Sciences Institute.

Item 3f. Major Subdivision

Indicate your school, college, or other major subdivision, such as medical, dental, engineering, graduate, nursing, or public health. *If there is no such subdivision, enter "None*."

Item 3g. Telephone and Fax Numbers

Provide a daytime telephone number and, if available, a fax number.

Item 4. Human Subjects

Questions in this section pertain to Section XII: Supplemental Instructions for Preparing the Human Subjects Section of the Research Plan.

Does your proposed research involve Human Subjects?

Blood or tissue samples may be considered human subjects research.

No Human Subjects. Check "No" if activities involving human subjects are not planned at any time during the proposed project period (as indicated in *Item 6*). The remaining parts of Item 4 are then not applicable.

Human Subjects Involved. Check "Yes" if activities involving human subjects are planned at any time during the proposed project period (as indicated in *Item 6*), either at the applicant organization or at any other performance site or collaborating institution. "Yes" should be checked even if the research is exempt from regulations for the protection of human subjects (see Exemption Categories).

Item 4a. Exemptions from Federal Human Subjects Regulations

Is your proposed research described by one of the exemptions in the Federal regulations?

Check "Yes" if the activities proposed are exempt from the regulations. Insert the exemption number(s) corresponding to one or more of the six exemption categories listed in Section XII: Supplemental Instructions for Preparing the Human Subjects Section of the Research Plan. If the proposed research corresponds to one or more of the exempt categories then the remaining parts of Item 4 of the Face Page are not applicable.

OHRP guidance states that Exemptions should be independently determined (http://www.hhs.gov/ohrp/humansubjects/guidance/wirbproc.pdf). Institutions often designate their IRB to make this determination. Because NIH does not require IRB approval at time of application, the exemptions designated in item 4a often represent the opinion of the principal investigator, and the justification provided for the exemption by the principal investigator is evaluated during peer review.

Inappropriate designations of the noninvolvement of human subjects or of exempt categories of research may result in delays in the review of an application or the return of the application without review. The PHS will make a final determination as to whether the proposed activities are covered by the regulations or are in an exempt category, based on the information provided in the Research Plan. In doubtful cases, consult with the OHRP by accessing their website http://www.hhs.gov/ohrp/ for guidance and further information.

Human Subjects Activities Not Exempt from Federal Human Subjects Regulations. Check "No" if the planned activities involving human subjects are not exempt, and complete the remaining parts of Item 4.

Item 4b. Human Subjects Assurance Number

If the applicant organization has a current approved Federal Wide Assurance (FWA), Multiple Project Assurance (MPA), Single Project Assurance (SPA) Number or Cooperative Project Assurance Number on file with the OHRP (http://www.hhs.gov/ohrp/) that covers the specific activity, insert the number in the space provided.

Insert "None" in Item 4b if the applicant organization does not have an approved assurance on file with OHRP. In this case, the applicant organization, by the signature on the Face Page, is declaring that it will comply with 45 CFR 46 and proceed to obtain a human subject assurance (see http://www.hhs.gov/ohrp). *Do not insert the human subjects assurance number of any collaborating institution in the space provided*.

Item 4c. NIH-Defined Phase III Clinical Trial

Does your proposed research meet criteria for an NIH-Defined Phase III Clinical Trial?

Check "Yes" or "No" to indicate whether the project is an NIH-Defined Phase III clinical trial. See Section III, Definitions, for definitions of clinical research and NIH-Defined Phase III Clinical Trial.

Item 5. Vertebrate Animals

Check "No" if activities involving vertebrate animals are not planned at any time during the proposed project period. The remaining parts of Item 5 are then not applicable.

Check "Yes" if activities involving vertebrate animals are planned at any time during this *proposed* project period, either at the applicant organization or at any other performance site or collaborating institution.

Even if the animal activity is to take place at another institution, you still MUST complete section f. Vertebrate Animals of the Research Plan.

Item 5a. IACUC Approval Date

NIH no longer requires Institutional Animal Care and Use Committee approval of the proposed research before NIH peer review of an application. See Section XI, Vertebrate Animals, and http://grants1.nih.gov/grants/guide/notice-files/NOT-OD-02-064.html. See also the Just-In-Time Policy.

This field is not necessary for application submission. However, the data must be submitted to NIH consistent with the "just-in-time" process prior to award.

If the verification of IACUC approval is not submitted with the application, applicant organizations with "full" Animal Welfare Assurances on file with the Office of Laboratory Animal Welfare (OLAW) should enter "Pending" in the box requesting IACUC approval date. Following NIH peer review, applicants and their institutions will be notified of the need for IACUC review and verification for the proposed animal activity. The verification of IACUC approval from an official signing for the applicant organization must then be sent to and received by the Grants Management Office identified in the notice requesting IACUC verification. This IACUC verification must include: the PHS application number, title of the project, name of principal investigator/ program director, institution, Animal Welfare Assurance number, date of IACUC approval, and appropriate signatures.

Any modification of the Research Plan section of the application, required by the IACUC, must be submitted with the follow-up verification. It is the responsibility of the principal investigator/program director and the applicant organization to submit the follow-up verification.

Item 5b. Animal Welfare Assurance

If the applicant organization has a full Animal Welfare Assurance of Compliance on file with the Office of Laboratory Animal Welfare (OLAW), enter the Assurance number of the applicant organization in Item 5b. (To determine if your organization holds an Animal Welfare Assurance, see http://grants.nih.gov/grants/olaw/olaw.htm#assur.)

Insert "None" in Item 5b *if the applicant organization does not have an approved Animal Welfare Assurance* on file with OLAW. *Do not insert the Animal Welfare Assurance of any collaborating institution in the space provided*. By inserting "None," and by the signing on the Face Page, the applicant organization is declaring that it will comply with PHS policy regarding the care and use of animals by establishing an IACUC and submitting an Animal Welfare Assurance and certification of IACUC approval when requested to do so by OLAW.

Small business organizations will typically fall into one of three (3) categories:

(1) The small business concern does not have and never plans to establish its own animal facilities but will always rely on the programs and facilities of larger organizations and universities. In this scenario, always enter "None" where the Assurance number is required and complete the Vertebrate Animals section of the Research Plan.

(2) The small business concern has animal programs and facilities of their own *and* has a full Animal Welfare Assurance of Compliance on file with OLAW. Ordinarily, IACUC approval is valid for three years from the time of IACUC review. In this scenario, indicate your Assurance Number and IACUC approval date on the Face Page or you may provide IACUC approval in a "just-in-time" fashion prior to award. You *MUST* complete the Vertebrate Animals section of the Research Plan.

(3) The small business concern is in the process of establishing programs and facilities of their own for animals use *but does not* have an Assurance yet. In this scenario, insert "NONE" where the Assurance Number is required on the Face Page and insert "Pending" for the IACUC date. You *MUST* complete the Vertebrate Animals section of the Research Plan. The applicant organization remains responsible for submission of the follow-up IACUC verification whether that verification is submitted to the SRA prior to peer review or to the NIH or other PHS agency funding component prior to award.

Item 6. Dates of Proposed Period of Support

Routinely, SBIR and STTR Phase II awards do not exceed two years. Under special circumstances, applicants to NIH may propose longer periods of time for completion of the research project (e.g., feasibility demonstration). Such requests that deviate from the guidelines must be thoroughly justified.

Project duration deviations apply to NIH ONLY, as CDC and FDA do not make awards for periods longer than the stated guidelines.

To select an appropriate beginning date for a *new* application, consult the following schedule:

SBIR AND STTR SUBMISSION DATES PHASE I AND PHASE II	ESTIMATED AWARD DATE
April 1	November 1
August 1	March 1
December 1	July 1

For AIDS and AIDS-related applications, use the same estimated award dates.

Item 7. Costs Requested for Initial Budget Period

All amounts requested in Items 7 and 8 and on the budget pages must be in U.S. dollars.

Item 7a. Direct Costs Requested for Initial Budget Period

Do *not* include amount requested for fee/profit. Enter the "Total Direct Costs for Initial Budget Period" from Form Page 4.

Item 7b. Total Costs Requested for Initial Budget Period

Enter the *sum* of (a) the "Total Direct Costs for Initial Budget Period" from Form Page 4; (b) the requested Fee on Form Page 4, and (c) the F&A/indirect costs (from the Checklist Form Page).

Item 8. Costs Requested for Entire Proposed Period of Support

Item 8a. Direct Costs Requested for Proposed Period of Support

Enter the "Total Direct Costs for *Entire* Project Period" from Form Page 5.

Item 8b. Total Costs Requested for Proposed Period of Support

Enter the *sum* of (a) the "Total Direct Costs for *Entire* Project Period" from Form Page 5; (b) the requested "Total Fee for Entire Proposed Project Period" on Form Page 5; and (c) the F&A/indirect costs (from the Checklist Form Page).

Item 9. Applicant Organization

Name the small business concern that will be legally and financially responsible for the conduct of activities supported by the award. *The small business concern is ALWAYS the applicant organization for an SBIR or STTR award*.

Enter the NIH-assigned Institutional Profile File (IPF) number.

Item 10. Type of Organization

Check "Small Business" under "For Profit." Check the boxes designating the small business as "woman-owned" or "socially and economically disadvantaged," if appropriate. (See Section III. Definitions.)

Small Business Certification. The applicant organization must certify that it will qualify as a small business concern at the time of award. The capture of information on socially and economically disadvantaged small business concerns and women-owned small business concerns is strictly for statistical purposes (as requested by the Small Business Administration).

Item 11. Entity Identification Number, DUNS Number, Congressional District

Entity Identification Number. Enter the 12-digit Entity Identification Number (EIN) assigned to the applicant organization by the Department of Health and Human Services Payment Management System for payment and accounting purposes. This number is an expansion of the 9-digit EIN assigned by the IRS. If you have not yet been assigned a number, enter either (1) the organization's Internal Revenue Service employer identification number (nine digits) or (2) the words "Applied for" to indicate that the organization does not have an EIN but has applied to the local office of the IRS for one. DO NOT ENTER YOUR SOCIAL SECURITY NUMBER as it is not appropriate for this item.

Data Universal Numbering System (DUNS) number. Enter the DUNS number. Applicants must provide a DUNS number when applying for Federal grants or cooperative agreements. The DUNS, a Universal Identifier number, is a nine-digit number assigned by Dun and Bradstreet Information Services. If the organization does not have a DUNS number, complete the electronic US D&B D-U-N-S Number Request Form or contact Dun and Bradstreet by telephone directly at **1-866-705-5711 (toll-free)** to obtain one. A DUNS number will be provided immediately by telephone at no charge.

Congressional District. Enter the number of the Congressional District of the applicant organization. To locate your district visit http://www.congress.org/congressorg/dbq/officials/?lvl=L.

Item 12. Administrative Official to Be Notified If Award Is Made

Name the small business applicant organization administrative official to be notified if an award is made. Provide a complete address for postal delivery and the telephone, fax, and email address for the administrative official.

Item 13. Official Signing for Applicant Organization

Name an individual authorized to act for the applicant organization and to assume the obligations imposed by the Federal laws, requirements, and conditions for a grant or grant application, including the applicable Federal regulations. Provide a complete address for postal delivery and the telephone, fax, and e-mail address for the signing official.

Item 14. Principal Investigator/Program Director Assurance

An original signature, in ink, is required. "Per" or "For" signatures are not acceptable. Date of signature must be included.

Item 15. Applicant Organization Certification and Acceptance

An original signature, in ink, is required. "For" signatures are acceptable; however, "Per" signatures are not acceptable. Date of signature must be included. *In signing the application Face Page, the duly authorized representative of the applicant organization certifies that the applicant organization will comply with all applicable assurances and certifications referenced in the application*.

The applicant organization is responsible for verifying the accuracy, validity, and conformity with the most current institutional guidelines of all the administrative, fiscal, and scientific information in the application, including the Facilities and Administrative rate. Deliberate withholding, falsification, or misrepresentation of information could result in administrative actions, such as withdrawal of an application, suspension and/or termination of an award, debarment of individuals, as well as possible criminal penalties. The signer further certifies that the applicant organization will be accountable both for the appropriate use of any funds awarded and for the performance of the grant supported project or activities resulting from this application. The grantee organization may be liable for the reimbursement of funds associated with any inappropriate or fraudulent conduct of the project activity.

Assurances/Certifications

Each application to the PHS requires that the following assurances and certifications be verified by the signature of the Official Signing for Applicant Organization on the Face Page of the application. Definitions are provided in the *NIH Grants Policy Statement* (http://grants1.nih.gov/grants/policy/nihgps_2003/index.htm) and in Sections X and XI of this solicitation.

- Human Subjects
- Research on Transplantation of Human Fetal Tissue
- Women and Minority Inclusion Policy
- Inclusion of Children Policy
- Research Using Human Embryonic Stem Cells
- Vertebrate Animals
- Debarment and Suspension
- Drug-Free Workplace
- Lobbying
- Non-Delinquency on Federal Debt
- Research Misconduct
- Civil Rights
- Handicapped Individuals
- Sex Discrimination
- Age Discrimination
- Recombinant DNA and Human Gene Transfer Research
- Financial Conflict of Interest
- Certification of Research Institution Participation (*STTR only*)

SBIR/STTR applicants also certify by the signature of the Official Signing for the Applicant Organization on the Face Page of the application that it is a Small Business Concern, and if so indicated, is a Woman-owned/Socially and Economically Disadvantaged

Small Business Concern, and meets the definition(s) as stated in the program announcement or that it will meet that definition at the time of award. If selected for an award, grants management staff will require small business concerns to verify that they meet the eligibility criteria for an SBIR or STTR award.

2. DESCRIPTION, PERFORMANCE SITES, AND KEY PERSONNEL FORM PAGE 2 (MS WORD | PDF)

Do NOT insert additional pages between Form Page 1 and Form Page 2.

Description (Abstract of Research Plan)

State the application's broad, long-term objectives and specific aims, referring to the health relatedness of the project. Describe concisely the research design and methods for achieving these goals. Discuss the *potential* **technological innovation**, the **anticipated results/outcomes**, and provide a brief summary of the **potential commercial applications** of the research. Avoid summaries of accomplishments and the use of the first person. If the proposed project involves human embryonic stem cells, include the registry number of the specific cell line(s) as part of this description.

This abstract is meant to serve as a succinct and accurate description of the proposed work when separated from the application. *DO NOT EXCEED THE SPACE PROVIDED*.

Do not include proprietary, confidential information or trade secrets in the description section. If the application is funded, the project description will be entered into an NIH database (CRISP) and will become public information.

Performance Sites

Indicate where the work described in the Research Plan will be conducted. *One of the sites indicated must be that of the applicant small business concern*. If there is more than one performance site, list all the sites and provide an explanation on the Resources Format Page of the application.

State if a consortium/contractual arrangement is involved with one or more collaborating organizations for the conduct of a portion of the work described in the Research Plan. If a performance site is participating in research using human subjects, it is the responsibility of the applicant organization to assure that the performance site complies with the regulations in 45 CFR Part 46 and other NIH human subject related policies described in the PHS 398 and the Grants Policy Statement. For research involving vertebrate animals, the applicant organization must ensure that all performance sites hold OLAW-approved assurances.

The research or R&D project activity must be performed in the United States. In those rare circumstances that necessitate that a portion of the research or R&D work be performed or obtained in a country outside of the United States because of the study design (e.g., patient populations), investigators must thoroughly justify the use of these sites on the Resources Format Page of the application. Similarly, in those rare circumstances that necessitate the purchase of materials from other countries, investigators must thoroughly justify the request. These rare and unique situations will be considered on a case-by-case basis, and they should be discussed with NIH staff prior to submission of the application. Approval by the funding officer for such specific condition(s) must be in writing prior to issuance of an award.

Key Personnel

In addition to the principal investigator, Key Personnel are defined as individuals who contribute to the scientific development or execution of the project in a substantive, measurable way, whether or not salaries are requested.

Typically, these individuals have doctoral or other professional degrees, although individuals at the masters or baccalaureate level should be included if their involvement meets the definition of key personnel. *Consultants should also be included if they meet the definition*."

Key Personnel must devote measurable effort to the project whether or not salaries are requested -- "zero percent" effort or "as needed" are not acceptable involvements for someone designated as Key Personnel.

Start with the principal investigator. List the principal investigator, last name first. All other Key Personnel should be listed in alphabetical order, last name first. For each individual provide: name, organization name (their institutional affiliation), and role on the project. Under role on the project, indicate how the individual will function on the proposed project. Use additional pages as necessary.

Disclosure Permission Statement

Check "*Yes*" or "*No*:" *If this application does not result in an award, is the Government permitted to disclose the title of your proposed project, and the name, address, telephone number and email address of the official signing for the applicant organization, to organizations that may be interested in contacting you for further information (e.g., possible collaboration, investment)?*

3. RESEARCH GRANT TABLE OF CONTENTS FORM PAGE 3 (MS WORD | PDF)

Provide the page number for each category listed on the Table of Contents. Place page numbers at the bottom of each page, and consecutively number pages throughout the application. Do not include unnumbered pages and do not use suffixes, such as 5a, 5b. NUMBER ALL PAGES.

Identification of Proprietary Information. You are discouraged from submitting information considered proprietary unless it is deemed essential for proper evaluation of the application. However, when the application contains information that constitutes trade secrets, information that is commercial or financial, or information that is confidential or privileged, *include a legend on Form Page 3 to identify the appropriate page numbers. Also identify the information by asterisks (*) and page number in the Research Plan*. For additional information concerning the inclusion of proprietary information, see Section VII. E. Innovations, Inventions and Patents.

4. BUDGET INSTRUCTIONS

Total Costs. Routinely, total costs for the entire proposed Phase II period do not exceed $750,000 for SBIR and STTR projects. However, under special circumstances, applicants may propose greater amounts of funds necessary and appropriate for completion of the project.

The ability to deviate from the statutory guidelines applies to NIH ONLY— Phase II applications to CDC and FDA are limited to $750,000 (total of direct, F&A/indirect and fee).

Contractual/Consultant Costs. The total amount of contractual costs and consultant fees normally may not exceed 50% of the total costs requested on a Phase II SBIR project. Contractual arrangements for scientific or technical services (e.g., laboratory testing of biological materials, clinical services) may involve costs such as personnel, supplies, and any other allowable expenses, including indirect costs.

STTR projects require that the single partnering research institution perform at least 30% of the R/R&D. Costs pertaining to the portion of the project to be conducted by the research institution are contractual costs to the small business concern.

Guidance on Preparation of SBIR and STTR Budgets. Included here is a table summarizing the necessary budget forms for both modular and non-modular applications. Use this chart to ensure that you have submitted the correct forms appropriate to your specific type of application.

Guidance on Preparation of SBIR and STTR Budgets

	FORM PAGE 4	FORM PAGE 5	STTR RESEARCH INSTITUTION BUDGET FORM PAGE	STTR RESEARCH INSTITUTION CERTIFICATION PAGE
SBIR Budget				
Small Business	X	X		N/A
Subcontracts	X	X		N/A
STTR Budget				
Small Business	X	X		N/A
Research Institution		X (future yrs.)	X (initial yr.)	N/A
Other Subcontracts	X	X		N/A

5. BUDGET INSTRUCTIONS

Budget for Initial Budget Period Form Page 4 (MS Word | PDF)

Budget for Entire Proposed Period of Support, Form Page 5 (MS Word | PDF)

Following are budget instructions for the "Initial Budget Period" and the "Entire Proposed Period of Support." These instructions pertain to all SBIR/STTR Phase II applications.

Detailed categorical budget information is to be submitted with the application.

- Submit Form Page 4 and Form Page 5, and follow the specific non-modular instructions for SBIR or STTR, as applicable.
- Form Page 4 reflects the total direct costs, which include the total costs of any contractual costs, requested for the initial (first 12 months) Phase II budget period. (F&A/indirect costs are requested on the Checklist Page.) Form Page 4 also reflects the fee/profit requested.
- Form Page 5 reflects the total direct costs plus fee for the entire project period. This form is also used to prepare the *narrative budget justification*.
- Do not include any items that are treated by the applicant organization as indirect costs according to a Federal rate negotiation agreement, except for those indirect costs included in consortium/contractual costs.
- Submit a *separate* detailed budget (Form Page 4) for each participating consortium/contractual organization. For each, label that page accordingly. If consortium activity exceeds one year, also include a *separate* Form Page 5. See Consortium/Contractual Costs for specific instructions.
- Refer to the SBIR or STTR Reminder Sheet before submitting the grant application.

F&A/Indirect Costs are to be shown on the Checklist Page. The TOTAL costs (sum of direct, F&A and fee) are to be shown on the Face Page in Items 7b and 8b.

Phase II SBIR Budget

SBIR Initial Budget Period (Form Page 4)

The following items pertain individually to the completion of Form Page 4 (Detailed Budget for Initial Budget Period – Direct Costs Only), to be completed by the small business concern.

Personnel

Name. Starting with the principal investigator, list the names of all applicant small business personnel who are to be involved on the project during the initial budget period, regardless of whether a salary is requested.

Role on Project. Identify the role (for example, principal investigator or statistician) of each individual listed on the project. *Describe their specific functions under Justification on Form Page 5*. The concept of co-principal investigator is not recognized.

Type of Appointment/Months. List the number of months per year reflected in an individual's contractual appointment with the organization. PHS staff assume that appointments at the applicant organization are full time (i.e., 12 months/100 percent time) for each individual. If an appointment is less than full time, e.g., 50 percent time (i.e., 6 months), enter an asterisk (*) after the number of months and *provide a full explanation under Budget Justification on Form Page 5*. Individuals may have split appointments, for example for an academic period and a summer period. For each appointment, identify and enter the number of months on separate lines. In cases where no contractual appointment exists with the applicant organization and salary is requested, enter the number of months for that period.

Percent Effort on Project. List the percentage of each individual's employment at the organization to be spent on *this project*. If an individual engages in other corporate responsibilities, such as management, the total percentage devoted to all research activities by the individual must be less than 100%. While a minimum percent effort is not stipulated for the principal investigator on an SBIR project, note that the principal investigator is the individual who is responsible for the scientific or technical aspects of the grant and for day-to-day management of the project.

Institutional Base Salary. The institutional base salary is defined as the annual compensation that the organization pays for the individual's

employment, whether that individual's time is spent on research, administration, or other activities. Base salary excludes any income the individual may be permitted to earn outside of duties to the organization. Base salary may not be increased as a result of replacing corporate salary funds with grant funds.

An applicant organization may choose to leave this column blank. However, PHS staff will require this information prior to award. See Definition of Institutional Base Salary in Section III.

Dollar Amount Requested

Salary Requested. Enter the dollar amounts for each position for which funds are requested. Calculate the totals for each position and enter the subtotals in each column where indicated. The maximum salary that may be requested is calculated by multiplying the individual's institutional base salary, defined above, by the percent of effort on this project. Congress has imposed and may continue to impose salary caps. Effective January 1, 2003, the salary limitation (cap) is $171,900. (See *NIH Guide for Grants and Contracts* and search on "salary limitation" or "salary cap.") *Organizations should request appropriate salary support without regard to Congressional salary caps. Any amount requested for salary that may be in excess of a salary cap will be adjusted at the time an award is issued.*

Fringe Benefits. Leave this column blank as *commercial (for-profit) organizations usually treat "fringe benefits" as indirect costs*. In certain cases, fringe benefits may be requested as a direct cost to the extent that they are treated consistently by the organization as a direct cost to all sponsors.

Totals. Calculate the totals for each position and enter the subtotals in each column where indicated.

Consultant Costs

Whether or not costs are involved, provide the names and organizational affiliations of any consultants, *other than those involved in consortium/contractual arrangements*, who have agreed to serve in that capacity. Include consultant physicians in connection with patient care and persons who serve on external monitoring boards or advisory committees to the project.

Justify the request on Form Page 5. Briefly describe/justify the services to be performed, including the number of days of anticipated consultation, the expected rate of compensation, travel, per diem, and other related costs.

Letters of commitment from collaborators and consultants must be submitted with the application.

Equipment

Provide the total dollar amount requested. *List each item* of equipment separately. *Justify the request on Form Page 5*. Explain the need for any item that appears to be duplicated or equivalent to those listed in the "Resources" portion on these forms.

Supplies

Provide the total dollar amount requested. *Justify the request on Form Page 5*. Itemize supplies in separate categories, such as glassware, chemicals, radioisotopes, etc. (Categories in amounts less than $1,000 do not have to be itemized.) If animals are to be purchased, state the species, the number to be used, their unit purchase cost, and their unit care cost.

Travel

Provide the total dollar amount requested. *Justify the request on Form Page 5*. Describe the purpose of any travel, giving the number of trips involved, the destinations, and the number of individuals for whom funds are requested, bearing in mind that agency policy requires that less than first-class air travel be used. Travel of a reasonable amount ($1,500-$2,000) may be proposed to attend conferences and similar meetings in the scientific field(s) of endeavor, to learn of new or emerging scientific interests of the PHS awarding components (for example, bioengineering), and to improve post award management. Travel to a scientific meeting in a foreign country is allowable, but this request should be thoroughly justified regardless of the dollar amount requested.

Patient Care Costs

The applicant organization may be reimbursed for inpatient and outpatient charges incurred incidentally to the proposed research. *Justify the request on Form Page 5*. Patient care costs do not include travel, lodging, and subsistence; request these costs in the "Other Expenses" category. Request consultant physician fees in the "Consultant Costs" category.

If inpatient and/or outpatient costs are requested, provide the names of any hospitals and/or clinics

and the amounts requested for each on Form Page 5.

State whether each hospital or clinic has a currently effective DHHS-negotiated research patient care rate agreement and, if not, what basis is used for calculating costs. If an applicant does not have a DHHS-negotiated rate, the PHS awarding component can approve a provisional rate. Indicate, in detail, the basis for estimating costs in this category, including the number of patient days, estimated cost per day, and cost per test or treatment. If both inpatient and outpatient costs are requested, provide information for each separately. If multiple sites are to be used, provide detailed information by site.

Include information regarding projected patient accrual for the project/budget periods and relate this information to the budget request for patient care costs. If patient accrual is anticipated to be lower at the start or during the course of the project, plan budget(s) accordingly.

Provide specific information regarding anticipated sources of other support for patient care costs, e.g., third-party recovery or pharmaceutical companies. Include any potential or expected utilization of General Clinical Research Centers. *Justify the request on Form Page 5*.

Other Expenses

Provide the total dollar amount requested. Itemize any other expenses by category and unit cost. These might include animal maintenance (unit care costs and number of care days), patient travel, donor fees, publication costs, computer charges, rentals and leases, equipment maintenance, service contracts, and tuition remission in lieu of salary. *Justify costs on Form Page 5*.

Consortium/Contractual Costs

On the applicant organization's budget, list the *sum of all* consortium/contractual costs (separate lines provided for direct costs and F&A). *Justify the request on Form Page 5*.

Each participating consortium/contractual organization must submit a separate detailed budget for both the "Initial Budget Period (up to 12 months)" (Form Page 4) and, if the project period exceeds one year, for the "Entire Proposed Project Period" (Form Page 5). *Type the name of the consortium/ subcontractor at the top of these pages* to distinguish them from the small business concern, and number the pages sequentially. (Do not use 5a, 5b, 5c, etc.) Insert these additional page(s) after the applicant small business organization's budget pages.

Consortium arrangements may involve personnel costs, supplies, and other allowable costs, including Facilities and Administrative (F&A) costs. Contractual arrangements for scientific or technical support services (e.g., laboratory testing of biological materials, clinical services, or data processing) may involve costs such as personnel, supplies, and any other allowable expenses, including indirect costs. Such contracts may be of sufficient scope to warrant a similar categorical breakdown of costs.

When F&A/indirect costs are requested by a consortium organization, enter these costs in the F&A cost category for each supplementary budget. Provide the F&A cost base and rate. Leave the direct cost category (above the F&A line) blank.

Fee

Enter the request for profit/fee as a *separate line item* below the "Total Direct Costs for Initial Budget Period." *Justify the request on Form Page 5*. A reasonable fee, not to exceed *7% of total costs* (direct and indirect) for each Phase (I and II) of the project, is available to small business concerns receiving awards under the SBIR/STTR program. The fee is intended to be a reasonable profit factor available to for-profit organizations, consistent with normal profit margins provided to profit-making firms for research and development work.

The fee is not a direct or indirect "cost" item and may be used by the small business concern for any purpose, including additional effort under the SBIR/STTR award. The fee applies solely to the small business concern receiving the award and not to any other participant in the project. However, the grantee may pay a profit/fee to a contractor providing routine goods or services in accordance with normal commercial practice.

Total Direct Costs for Initial Budget Period

Enter total direct costs for the Initial Budget Period (up to 12 months). Also enter this number in *Item 7a* of the Face Page.

SBIR Entire Proposed Period of Support (Form Page 5)

On Form Page 5, enter in the first column the budget category totals of the "Initial Budget Period" costs from Form Page 4.

Enter the totals under each budget category for all additional years of support requested. Identify with an asterisk (*), and justify any significant increases or decreases from the initial year budget, if applicable. Also, justify budgets with more than a standard escalation from the initial to the future year(s) of support. *Provide necessary justifications for the amount requested for profit/fee and other items described on the form*. Use continuation pages as necessary.

Enter in *Item 8a* on the Face Page, the amount for "Total Direct Costs for Entire Proposed Project Period" as indicated on Form Page 5.

Enter in *Item 8b* on the Face Page, "Total Costs Requested for Proposed Period of Support" the *sum* of the following amounts: (1) Item 8a, plus (2) Total profit/fee for Entire Proposed Project Period, plus (3) Total F&A costs as indicated on the Checklist Form Page.

SBIR applicants may proceed directly to the next section, Biographical Sketch.

Phase II STTR Budget

STTR Research Institution Budget Form Page (MS Word | PDF)

Submit Form Page 4 and Form Page 5, which are to be completed by the applicant small business concern, *and* submit the STTR Research Institution Budget Form Page, which is to be *completed by the single partnering research institution (RI)*, in accordance with the instructions below.

The STTR Research Institution Budget Form Page identifies costs pertaining to the portion of the work to be performed by the research institution for the *initial (up to 12 months)* STTR Phase II project. The research institution must also use a *separate* Form Page 5 to identify its costs for future years.

Reminder. The single partnering research institution must certify *at the time of application* that at least 30% of the work of the STTR project will be performed by the research institution. This 30% requirement applies to the single collaborating organization identified as the "research institution." Space has been provided on the form for the requisite signature, printed name, title, and date of signature of the duly authorized representative of the research institution affirming certifications made by the research institution upon signing the budget page.

STTR Initial Budget Period

Research Institution Budget Page. On the Research Institution's Budget Page, provide information for Personnel, Consultant Costs, Equipment, Supplies, Travel, Patient Care Costs, Other Expenses, Total Direct Costs, Facilities and Administrative (F&A) Costs, and Total Costs associated with the research institution's portion of the budget in the same manner as described above under "Phase II SBIR Budget." Provide the F&A cost base and rate. Also indicate the total direct costs and F&A costs in the field labeled "Consortium/Contractual Costs" on the Small Business Concern's Budget Page (Form Page 4). When the research institution requests F&A costs, these *costs are included as a direct cost for the Small Business Concern*.

Other Consortia/Subcontracts. Costs pertaining to arrangements for a portion of the project to be conducted by *other than* the "research institution" should be identified completing a *separate* Form Page 4 (and Form Page 5 if the budget exceeds one year) and completing it in the same manner as described above. *Justify costs pertaining to the research institution* under "Justification" on the *Small Business Concern's Form Page 5*. Total costs of the portion of the project to be performed by the research institution are also to be shown in the Justification section of Form Page 5. If space is not available on the form, attach continuation page(s) for this purpose.

STTR Entire Proposed Project Period Form Page 5 (MS Word | PDF)

If the STTR project exceeds one year, use a *separate* Form Page 5 to identify costs pertaining to the portion of the project to be conducted by the research institution for the "Entire Proposed Project Period." *Identify the research institution's budget page by typing "Budget of Research Institution" at the top of Form Page 5*. Insert these additional pages *after* the budget pages of the small business concern (Form Page 4 and Form Page 5), numbering them sequentially. (Do not use 5a, 5b, 5c, etc.) Provide information for Personnel, Consultant Costs, Equipment, Supplies, Travel, Patient Care Costs, Other Expenses, Subtotal Direct Costs, Total Direct Costs, and Consortium/ Contractual Costs associated with the research institution's portion of the budget in the same manner as described above.

6. BIOGRAPHICAL SKETCH

Biographical Sketch Format Page (MS Word | PDF)

Follow the format of the "Biographical Sketch Format Page" to prepare this section for *ALL* (modular *and* non-modular) grant applications. This section must contain the biographical sketches of *all KEY* personnel, *including consultants,* following the order as listed on Form Page 2. *A sample biographical sketch is available at* http://grants.nih.gov/grants/funding/phs398/biosketchsample.pdf.

> Each Biographical Sketch may not exceed four pages. Items A and B (together) may not exceed two pages of the four-page limit.

Complete the educational block at the top of the format page, and complete sections A, B, and C.

A. ***Positions and Honors.*** List in chronological order previous positions, concluding with your present position. List any honors. Include present membership on any Federal Government public advisory committee.

B. ***Selected Peer-Reviewed Publications or Manuscripts in Press (in chronological order).*** Do not include manuscripts submitted or in preparation.

C. ***Research Support.*** List both selected ongoing and completed (during the last three years) research projects (federal or non-federal support). *Begin with the projects that are most relevant to the research proposed in this application*. Briefly indicate the overall goals of the projects and responsibilities of the key person identified on the Biographical Sketch. *Do not include percent of effort or direct costs*.

This information will be used by the reviewers in the assessment of each individual's qualifications for a specific role in the proposed project, as well as to evaluate the overall qualifications of the research team.

> Information on other support *beyond* that required in the biographical sketch should NOT be submitted with the application. Otherwise, the application processing may be delayed or the application may be returned to the applicant without review. For additional information and policy, see Section X, Other Support Policy.

Don't confuse "Research Support" with "Other Support." Though they sound similar, these parts of the application are very different. As part of the biosketch section of the application, "Research Support" highlights your accomplishments, and those of your colleagues, as scientists. It is used by reviewers for the "investigator" review criterion. In contrast, "Other Support" information is required for all applications that are selected to receive grant awards. NIH staff will request complete and up-to-date "other support" information from you *after* peer review. This information will be used to check that the proposed research has not already been Federally-funded.

7. RESOURCES

Resources Format Page (MS Word | PDF)

Follow the sample format and instructions on the "Resources Format Page" when completing information on resources available for the project. *One of the sites indicated must be that of the applicant small business concern*. If there are multiple performance sites, then resources available at each site should be described.

All performance sites identified on Form Page 2 of the application should be described under "Facilities." Use continuation pages, if necessary.

> The research to be performed by the applicant small business concern and its collaborators must be in U.S. facilities (unless otherwise approved) that are *available to and under the control of each party* for the conduct of each party's portion of the proposed project.

8. RESEARCH PLAN

No Specific Form Page
Use Continuation Page (MS Word | PDF)

The Research Plan should include sufficient information needed for evaluation of the project, independent of any other document (e.g., previous application). The format for preparing this section is provided below. Be specific and informative, and avoid redundancies.

Introduction
(revised or supplemental applications only)

All revised and supplemental applications must include an Introduction. Do not exceed *three pages*. The "Introduction" is excluded from the page limitations of the Phase II application.

Insert the Introduction at the very beginning of the Research Plan. In the "Introduction," summarize any substantial additions, deletions, and changes that have been made. Include responses to criticisms in the previous summary statement. Identify these changes within the text of the Research Plan by appropriate bracketing, indenting, or changing of typography. Do not shade changes. Incorporate any work done since the prior version was submitted. A revised application will be returned if substantial revisions are not clearly apparent. Acceptance of a revised application automatically withdraws the prior version.

The introduction to a supplemental application should provide an overall description of the nature of the supplement and how it will influence the specific aims, research design, and methods of the current grant. Any budgetary changes for the remainder of the project period of the current grant should be discussed under the budget justification. The body of the application should contain sufficient information from the original grant application to allow evaluation of the proposed supplement in relation to the goals of the original application. *Reminder: applications for competitive supplements must be discussed with NIH program staff prior to submission*.

Content of Research Plan

Items a-d of the Phase II Research Plan are limited to 25 pages, including all tables and figures. There is no further limitation on the total number of pages for the entire application.

Organize *Items a-d* to answer these questions: (1) What do you intend to do? (2) What are the anticipated commercial products, processes, services and societal benefits? Why is the work important? (3) What has already been done? (4) How are you going to do the work?

The suggested format for the Research Plan (see page limitations above) is as follows:

Item a. Specific Aims

State the specific objectives of the Phase II research and development effort. State concisely and realistically what the proposed research is intended to accomplish in terms of its potential for technological innovation and commercial application. Define the proposed product, process or service to ultimately be developed. Include milestones for each of the aims as these will be used in the evaluation process. *One page is recommended*.

Item b. Significance and Related R&D

Provide a clear statement of the specific technical problem or opportunity. Describe significant R/R&D that is directly related to the proposal including any conducted by the project manager/principal investigator or by the proposing small business concern. Describe how it relates to the proposed effort, and any planned coordination with outside sources. You must persuade reviewers of your awareness of key, recent R/R&D conducted by others in the specific topic area.

Briefly sketch the background to the present grant application, critically evaluate existing knowledge, and specifically identify the commercial opportunities and societal benefits that the project is intended to address. State the anticipated outcomes of the proposed Phase II approach if the project (Phase I and II) is successful. *Three to four pages for Item b are recommended*.

Item c. Preliminary Studies/Phase I Final Report

Among several criteria, a Phase II application will be reviewed based on the degree to which progress toward the Phase I objectives were met and feasibility demonstrated.

Phase I Final Report. A Phase I Final Report is required for all Phase II applications. There is no form page for the Phase I Final Report. It may be typed on plain white paper (or you may use the PHS 398 Continuation Page). *The recommended length for the narrative portion is 10 pages*. The report should be a presentation of the accomplishments of the Phase I effort. Abbreviations and language that may not be generally known to the broader scientific community should be avoided unless clearly defined.

The format for the Phase I Final Report is as follows:

1. State the beginning and ending dates for the period covered by the SBIR/STTR Phase I grant.
2. List all key personnel who have worked on the project during that period, their titles, dates of service, and number of hours devoted to the project.
3. Summarize the specific aims of the Phase I grant and provide a succinct account of published and unpublished results, indicating progress toward their achievement. Summarize the importance of the findings. Discuss any changes in the specific aims of Phase I since the project was initiated.

4. List the titles and complete references to publications, manuscripts *accepted* for publication, patents, invention reports, and other printed materials, if any, that have resulted from the Phase I effort. Submit five copies of such items, except patent and invention reports, as an *Appendix*.

Item d. Experimental/Research Design and Methods

Include a detailed description of the Phase II R/R&D plan. The plan should indicate what will be done, where it will be done, and how the R/R&D will be carried out. Phase II R/R&D should address the objectives and the questions cited in the Specific Aims section. The methods planned to achieve each objective or task should be discussed in detail.

Discuss in detail the experimental design, procedures and protocols to be used, and the means by which the data will be analyzed and interpreted. Describe any new methodology and its advantage over existing methodologies. Discuss the potential difficulties and limitations of the proposed procedures and alternative approaches to achieve the aims. *Discuss the criteria that will be used to determine that feasibility has been demonstrated*. Point out any procedures, situations, or materials that may be hazardous to personnel and the precautions to be exercised.

Item e. Human Subjects Research

If *Item 4 on the Face Page* of the application has been marked "*Yes*," it is very important that you follow the detailed instructions in this section.

Applicants conducting research using human subjects are encouraged to read the information at the following websites: http://www.hhs.gov/ohrp/humansubjects/assurance/OF310.rtf and http://www-cdp.ims.nci.nih.gov/brochure.html.

The following human subject information applies even if you are obtaining specimens from collaborators or if you are subcontracting the human research to a university or another entity.

Although no specific page limitation applies to the human subjects section of the application, be succinct.

For all research involving human subjects, a part of the peer review process will include careful consideration of protections from research risks, as well as the appropriate inclusion of women, minorities, and children. The Scientific Review Group (SRG) will assess the adequacy of safeguards of the rights and welfare of research participants, and the appropriate inclusion of women, minorities, and children, based on the information in the application.

This evaluation will be a part of the Approach criterion (see SBIR/STTR Review Criteria). The evaluation of the inclusion plans will be factored into the overall score that the SRGs award for scientific and technical merit of the application. In addition, awards will not be made if the research project does not comply with this policy.

To assist you in filling out this section of the application, a Decision Table is provided below that presents six possible scenarios, and links to instructions for providing information on human subjects protection from research risks, and the inclusion of women, minorities and children. All research will fall into one of these six scenarios.

Determining which scenario best matches your proposed research depends on your answers to the following five questions:

Question 1: Does your proposed research involve human subjects?

Question 2: Is your proposed research described by one of the exemptions in the Federal regulations?

Question 3: Does your proposed research meet the definition for clinical research?

Question 4: Does your proposed research include a Clinical Trial?

Question 5: Does your proposed research meet criteria for an NIH-Defined Phase III Clinical Trial?

Click on the questions and when you can answer the five questions proceed to the table below, and select the scenario that best matches your responses. Follow the instructions provided for the scenario you choose. If you need additional guidance then click on the questions, the column heading in the table below, or links within the scenario and you will be provided additional information and guidance.

When you have completed this section of the application proceed to Section f Vertebrate Animals.

DECISION TABLE FOR HUMAN SUBJECTS RESEARCH, PROTECTION AND THE INCLUSION OF WOMEN, MINORITIES, AND CHILDREN.

	Criteria and Answers to Questions 1 thru 5					
Scenarios with linked instructions	1. Human Subjects Research	2. Exempt from Federal Human Subjects Regulations	3. Clinical Research	4. Clinical Trial	5. NIH-Defined Phase III Clinical Trial	Requirements
A No Human Subjects	No	N/A	N/A	N/A	N/A	- Indicate "No Human Subjects Research"
B Human Subjects/E-4	Yes	Yes Exemption: 4	No	N/A	N/A	- Indicate Exemption 4 (E-4) and include justification that E-4 is appropriate. - Address "Inclusion of Children" if known
C Human Subjects/ Other Exemptions	Yes	Yes Exemptions: 1, 2, 3, 5, 6	Yes	N/A	N/A	- Indicate Exemption number(s) and include justification that the designated exemption(s) is appropriate. - Address "Inclusion of Women and Minorities" - Address "Inclusion of Children"
D Clinical Research	Yes	No	Yes	No	N/A	- Address Protection of Human Subjects - Address "Inclusion of Women and Minorities" -Address "Inclusion of Children" "Targeted/Planned Enrollment Table(s)" for each new study/protocol (New applications; Competing Continuation applications; Competing Supplements) - "Inclusion Enrollment Report Table(s)" (Competing

	Criteria and Answers to Questions 1 thru 5					
Scenarios with linked instructions	1. Human Subjects Research	2. Exempt from Federal Human Subjects Regulations	3. Clinical Research	4. Clinical Trial	5. NIH-Defined Phase III Clinical Trial	Requirements
						Continuations; Competing Supplements)
E Clinical Trials	Yes	No	Yes	Yes	No	- All requirements in Scenario D - Data and Safety Monitoring Plan - Note: Some trials may require a Data and Safety Monitoring Board, based on risk
F NIH-Defined Phase III Clinical Trial	Yes	No	Yes	Yes	Yes	- All requirements in Scenario E Increased requirements for Inclusion of Women and Minorities in Clinical Research

NIH no longer requires IRB approval and certification of the proposed research prior to NIH peer review of an application (see http://grants.nih.gov/grants/guide/notice-files/NOT-OD-00-031.html) and Human Subjects Research supplemental instructions. However, any modification of the Research Plan section of the application, required by the IRB or to address human subjects concerns raised during review, must be submitted for approval before award. See also the Just-in-Time Policy.

Relevant Human Subjects Research policies and information:

Protection of Human Subjects (45 CFR 46)

Required Education in the Protection of Human Research Participants

Inclusion of Women and Minorities in Clinical Research

NIH Policy on Inclusion of Children

NIH Policy on Reporting Race and Ethnicity Data: Subjects in Clinical Research

Special Populations

Research Using Human Embryonic Stem Cells

Completing the Population Tracking Tables

Item f. Vertebrate Animals

If you have marked Item 5 on the Face Page of the application "Yes," create a section heading entitled "Vertebrate Animals." Place it immediately following the "Experimental Design and Methods" section of the application (or after Item e, if applicable).

Failure to address the following elements will result in the application being designated as incomplete and it will be grounds for the PHS either to defer the application from the peer review round or to reflect the application's incompleteness in the priority score.

Under the Vertebrate Animals heading address the following five points. In addition, when research involving vertebrate animals will take place at collaborating site(s) or other performance site(s), provide this information before discussing the five points. Although no specific page limitation applies to this section of the application, be succinct.

Be sure to consult the information under Section XI, subsection B. Vertebrate Animals.

1. Provide a detailed description of the proposed use of the animals in the work previously outlined in the Experimental Design and Methods section. Identify the species, strains, ages, sex, and numbers of animals to be used in the proposed work.
2. Justify the use of animals, the choice of species, and the numbers used. If animals are in short supply, costly, or to be used in large numbers, provide an additional rationale for their selection and numbers.
3. Provide information on the veterinary care of the animals involved.
4. Describe the procedures for ensuring that discomfort, distress, pain and injury will be limited to that which is unavoidable in the conduct of scientifically sound research. Describe the use of analgesic, anesthetic, and tranquilizing drugs and/or comfortable restraining devices where appropriate to minimize discomfort, distress, pain and injury.
5. Describe any euthanasia method to be used and the reasons for its selection. State whether this method is consistent with the recommendations of the Panel on Euthanasia of the American Veterinary Medical Association. If not, present justification for not following the recommendations.

If the applicant small business concern does not have its own animal facilities and plans to utilize the facilities of a collaborating institution, such arrangements must be detailed in the application. *Both the applicant small business concern and the collaborating institution, as well as any other performer at a different performance site, must have OLAW-approved Animal Welfare Assurances on file before an award can be made*.

In accordance with the 2002 change in PHS Policy on Humane Care and Use of Laboratory Animals, the verification of IACUC approval may be submitted subsequent to peer review and at any time prior to award unless specifically required earlier by NIH or other PHS agencies. In no case may PHS agencies make an award (competing or non-competing) without verification of IACUC approval. Ordinarily, IACUC approval is for three years from the time of IACUC review.

Item g. Literature Cited

List literature citations. Each citation must include the title, names of all authors, the name of the book or journal, volume number, page numbers, and year of publication.

See example at:
http://www.niaid.nih.gov/ncn/grants/app/app.pdf.

The reference should be limited to relevant and current literature. While there is not a page limitation, it is important to be concise and to select only those literature references pertinent to the proposed research.

Item h. Consortium/Contractual Arrangements

Explain the programmatic, fiscal, and administrative arrangements made between the applicant small business concern and the contractor(s). The consortium investigator and the authorized official at the consortium institution(s) must provide a signed statement or confirming letters stating that "The appropriate programmatic and administrative personnel of each organization involved in this grant application are aware of the NIH consortium grant policy (http://grants1.nih.gov/grants/policy/nihgps_2003/NIHGPS_Part12.htm#_Toc54600251) and are prepared to establish inter-institutional agreements consistent with that policy." Include confirming letters with the application. *These letters are required before an award can be made*.

If consortium/contractual activities represent a significant portion of the overall project, explain why

the applicant organization, rather than the ultimate performer of the activities, should be the grantee.

The signature of the authorized organizational official on the Face Page signifies that the applicant and all proposed consortium participants understand and agree to the following statement: The appropriate programmatic and administrative personnel of each organization involved in this grant application are aware of the NIH consortium agreement policy and are prepared to establish the necessary inter-organizational agreement(s) consistent with that policy.

Item i. Consultants

Involvement of consultants in the planning and research stages of the project is permitted. If such involvement is intended, it should be described in detail. Include with the application appropriate letters from each individual confirming his or her role in the project. Also include biographical sketches for each consultant.

Item j. Commercialization Plan

All Phase II applications *and* Fast-Track applications must include a succinct Commercialization Plan. The Commercialization Plan is limited to *15 pages*. Be succinct. There is no requirement for applicants to use the maximum allowable pages allotted to the Commercialization Plan.

Create a section entitled, "Commercialization Plan," and provide a description in each of the following areas:

1. ***Value of the SBIR/STTR Project, Expected Outcomes, and Impact.*** Describe, in layperson's terms, the proposed project and its key technology objectives. State the product, process, or service to be developed in Phase III. Clarify the need addressed, specifying weaknesses in the current approaches to meet this need. In addition, describe the commercial applications of the research and the innovation inherent in this application. Be sure to also specify the potential societal, educational, and scientific benefits of this work. Explain the non-commercial impacts to the overall significance of the project. Explain how the SBIR/STTR project integrates with the overall business plan of the company.
2. ***Company.*** Give a brief description of your company including corporate objectives, core competencies, present size (annual sales level and number and types of employees), history of previous Federal and non-Federal funding, regulatory experience, and subsequent commercialization, and any current products/services that have significant sales. Include a short description of the origins of the company. Indicate your vision for the future, how you will grow/maintain a sustainable business entity, and how you will meet critical management functions as your company evolves from a small technology R&D business to a successful commercial entity.
3. ***Market, Customer, and Competition.*** Describe the market and/or market segments you are targeting and provide a brief profile of the potential customer. Tell what significant advantages your innovation will bring to the market, e.g., better performance, lower cost, faster, more efficient or effective, new capability. Explain the hurdles you will have to overcome in order to gain market/customer acceptance of your innovation.

   Describe any strategic alliances, partnerships, or licensing agreements you have in place to get FDA approval (if required) and to market and sell your product.

   Briefly describe your marketing and sales strategy. Give an overview of the current competitive landscape and any potential competitors over the next several years. *(It is very important that you understand and know the competition.)*
4. ***Intellectual Property (IP) Protection.*** Describe how you are going to protect the IP that results from your innovation. Also note other actions you may consider taking that will constitute at least a temporal barrier to others aiming to provide a solution similar to yours.
5. ***Finance Plan.*** Describe the necessary financing you will require, and when it will be required, as well as your plans to raise the requisite financing to launch your innovation into Phase III and begin the revenue stream. Plans for this financing stage may be demonstrated in one or more of the following ways:

   - Letter of commitment of funding.
   - Letter of intent or evidence of negotiations to provide funding, should the Phase II project be successful and the market need still exist.

- Letter of support for the project and/or some in-kind commitment, e.g., to test or evaluate the innovation.

- Specific steps you are going to take to secure Phase III funding.

6. ***Production and Marketing Plan.*** Describe how the production of your product/service will occur (e.g., in-house manufacturing, contract manufacturing). Describe the steps you will take to market and sell your product/service. For example, explain plans for licensing, internet sales, etc.

7. ***Revenue Stream.*** Explain how you plan to generate a revenue stream for your company should this project be a success. Examples of revenue stream generation include, but are not limited to, manufacture and direct sales, sales through value added resellers or other distributors, joint venture, licensing, service. Describe how your staffing will change to meet your revenue expectations.

Applicants are *encouraged to seek commitment(s) of funds and/or resources from an investor or partner organization for commercialization* of the product(s) or service(s) resulting from the SBIR/STTR grant. *Place relevant letters following letters from consultants and collaborators*.

Your Phase III funding may be from any of a number of different sources including, but not limited to: SBIR/STTR firm itself; private investors or "angels"; venture capital firms; investment companies; joint ventures; R&D limited partnerships; strategic alliances; research contracts; sales of prototypes (built as part of this project); public offering; State finance programs; non SBIR-funded R&D or production commitments from a Federal agency with the intention that the results will be used by the United States government; or other industrial firms.

Item k. Prior SBIR/STTR Phase II Awards

A small business concern that has received more than 15 Phase II SBIR/STTR awards during the preceding five (5) fiscal years must document the extent to which it was able to secure Phase III funding to develop concepts resulting from previous Phase II SBIR/STTR awards. If not applicable, this section of the Research Plan should indicate so.

If applicable, the following information must be submitted in the application regarding each such prior Phase II award: (1) name of awarding agency; (2) award number and date; (3) amount of award; (4) title of project; (5) source, date, and amount of Phase III funding agreement; and (6) commercialization status of each Phase II award.

Item l. Data-Sharing Plan

Investigators seeking $500,000 or more in direct costs in any year should include a brief 1-paragraph description of how final research data will be shared, or explain why data-sharing is not possible. Applicants are encouraged to discuss their data-sharing plan with the Institute/Center (IC) staff likely to accept assignment of their application. See Data-Sharing Policy or http://grants1.nih.gov/grants/policy/data_sharing/index.htm. *This description does not count toward the Research Plan page limits*.

Letters from Consultants and Collaborators

Letters from consultants and collaborators must be submitted with the application. Place them at the end of the application just before the Checklist Page.

Research Institution Certification

(*Applicable only to STTR*)

The single partnering research institution must certify *at the time of application* that at least 30% of the work of the STTR project will be performed by the research institution. This 30% requirement applies to the single collaborating organization identified as the "research institution." Space has been provided on the STTR Research Institution Budget Form Page or the modular STTR Research Institution Certification Format Page for the requisite signature, printed name, title, and date of signature of the duly authorized representative of the research institution affirming certifications made by the research institution upon signing the budget page.

Use the "*STTR Research Institution Budget Page*" (MS Word | PDF). See the instructions in Section IV, Phase II STTR Budget.

The signature of the duly authorized representative of the research institution on the "STTR Research Institution Budget Page" (non-modular applications) or the "STTR Research Institution Certification Page" (modular applications) certifies, among other things, that at least 30% of the work proposed on the Phase I or Phase II project will be performed by the partnering research institution.

Include the Research Institution Certification Format Page (or a letter containing the same information) at

the end of the application following any letters from consultants.

The certification, with the signature, printed name, title, and date of signature of the duly authorized representative of the research institution affirming certifications made by the research institution, must be included with the application or the application will be deemed incomplete and returned without peer review.

9. APPENDIX

Include *five collated sets*, single-sided, of all appendix material, in the same package with the application, following all copies of the application. Identify each item with the name of the principal investigator. *Do not intermingle appendix materials with the application*.

New, Revised, Competing Continuation, and Supplemental applications may include the following materials in the appendix:

- Up to 10 publications, manuscripts (*accepted* for publication), abstracts, patents, or other printed materials directly relevant to this project. These may be stapled as sets. *Manuscripts submitted for publication should not be included*.
- Surveys, questionnaires, data collection instruments, and clinical protocols. These may be stapled as sets.
- Original glossy photographs or color images of gels, micrographs, etc., provided that a photocopy (may be reduced in size) is also included within the 25-page limit of *Items a-d* of the Research Plan. No photographs or color images may be included in the appendix that are not also represented within the Research Plan.

Do not use the appendix to circumvent the page limitations of the Research Plan. Graphs, diagrams, tables, and charts that do not need to be in a glossy format to show detail must not be included in the appendix. An application that does not observe these limitations will be returned. These appendix limitations may not apply to specialized grant applications. Request and follow the additional instructions for those applications.

The appendix will not be duplicated with the application and will be sent only to certain members of the SRG who will serve as the primary reviewers of the application.

10. CHECKLIST

Checklist Form Page (MS Word | PDF)

This is the next-to-last form page of the application, but is the last page to be numbered.

Request F&A/Indirect Costs in Section 3 on the Checklist Form Page.

Type of Application

Check all that apply.

Inventions and Patents

Check "No" if no inventions were conceived or reduced to practice during the course of work under this project. The remaining parts of the item are then not applicable.

Check "Yes" if any inventions were conceived or reduced to practice during the previous period of support. Also indicate whether this information has been previously reported to the PHS or to the applicant organization official responsible for patent matters.

Note: NIH recipient organizations must promptly report inventions to the Extramural Inventions and Technology Resources Branch of the Office of Policy for Extramural Research Administration, OER, NIH, Bethesda, MD 20892-2750, (301) 435-1986. Invention reporting compliance according to regulations at 37 CFR 401.14 is described at http://www.iedison.gov. The grantee is encouraged to submit reports electronically using Interagency Edison (http://www.iedison.gov). See also "Inventions and Patents" in Section X.

Program Income

NIH policy requires applicants for research grants to include in their grant applications an estimate of the amount and source of program income (defined below) expected to be generated as a result of the project for which funding is being sought. The specific policies that govern the treatment of program income under research grants are set forth in the *NIH Grants Policy Statement* (http://grants1.nih.gov/grants/policy/nihgps_2003/index.htm).

Program Income is defined as: gross income earned by a grant recipient during the budget period of the grant as a result of activities supported by the grant award. The *NIH Grants Policy Statement* (http://grants1.nih.gov/grants/policy/nihgps_2003/index.htm) contains a detailed explanation of program income, ways in which it may be generated and accounted for, and the various options for its use and disposition.

Examples of program income include:

- Patent or copyright royalties.
- Fees earned from services performed under the grant, such as those resulting from laboratory drug testing.
- Rental or usage fees, such as those earned from fees charged for use of computer equipment purchased with grant funds.
- Third-party patient reimbursement for hospital or other medical services, such as insurance payments for patients when such reimbursement occurs because of the grant-supported activity.
- Funds generated by the sale of products developed under the grant, which include but are not limited to drugs, assays, devices, instrumentation, software, laboratory techniques/methodologies, and testing/training devices or systems.
- Funds generated by the sale of commodities, such as tissue cultures, cell lines, or research animals.

Generally, SBIR/STTR grantee organizations that earn program income may be authorized to have such income added to the grant account and used to further the objectives of the research project. Authorization must be requested from the Grants Management Officer of the appropriate PHS awarding component.

If *no program income* is anticipated during the period(s) for which grant support is requested, no other action is necessary.

If the *response to this item is "Yes,"* follow the prescribed format to reflect, by budget period, the amount and source(s) of anticipated program income. If the application is funded, the Notice of Grant Award will provide specific instructions regarding the use of such income. *All program income earned during the budget period must also be identified on the Financial Status Report*.

The distribution of any income derived from royalties or licensing of an invention or patent is subject to specific provisions under 37 CFR Part 401. If any such income is anticipated, the applicant small business concern is encouraged to contact:

National Institutes of Health
Extramural Inventions and Technology Resources Branch
(301) 435-1986; Fax: (301) 480-0272
Email: gs60a@nih.gov or edison@od.nih.gov

Applicants with questions concerning any aspect of this topic are encouraged to contact the Grants Management Officer of the appropriate PHS awarding component or:

NIH, Division of Grants Policy
(301) 435-0949; Fax: (301) 435-3059.

Assurances/Certifications

Each application to the PHS requires that the following assurances and certifications listed on the Checklist be verified by the signature of the official signing for the applicant organization on the Face Page of the application.

In addition, SBIR/STTR applicants certify by the signature of the Official Signing for the Applicant Organization on the Face Page of the application that it is a Small Business Concern, and if so indicated, is a Woman-owned/Socially and Economically Disadvantaged Small Business Concern, and meets the definition(s) as stated in the program announcement or that it will meet that definition at the time of award.

Facilities and Administrative Costs

To request Facilities and Administrative (F&A) costs, complete Section 3 on the Checklist.

Facilities and Administrative (F&A) costs are defined as costs that are incurred by a grantee for common or joint objectives and that, therefore, cannot be identified specifically with a particular project or program. These costs were previously referred to as "indirect costs," and, in most instances, will be referred to in this document as "F&A costs."

You are encouraged to visit the following Division of Financial Advisory Services (DFAS) websites or call the DFAS staff at 301-496-2444 for guidance:

Main DFAS website, http://ocm.od.nih.gov/dfas/dfas.htm

FAQS, http://ocm.od.nih.gov/dfas/faqindirectcosts.htm

Listing of unallowable and unallocable costs and the related FAR citation for each, http://ocm.od.nih.gov/dfas/unallowables.htm

If the applicant small business concern has a currently effective negotiated F&A cost rate with a Federal agency, it should be used when calculating proposed F&A costs. (However, these rates must be adjusted for independent [self-sponsored] research and development expenses, which are not allowable by the Department of Health and Human Services [HHS]. See "Negotiation of F&A Costs" later in this section.)

If applicable, indicate your organization's most recent F&A cost rate with DFAS or with another Federal agency. If your applicant organization is in the process of negotiating or renegotiating a rate, use that rate on the Checklist.

Commercial (for-profit) organizations usually treat "*fringe benefits*" as F&A costs. These fringe benefits are applied to direct salaries charged to projects either through a fringe benefit rate or as part of an overhead/F&A cost rate.

Generally, F&A cost rate structures for commercial organizations follow a single, two-rate (for example, fringe and overhead rates), or three-rate (for example, fringe, overhead, and General and Administrative expense rates) system. A Single Rate structure is illustrated at http://ocm.od.nih.gov/dfas/examples.htm.

If you do not have currently effective negotiated F&A cost rates with a Federal agency, then propose estimated actual F&A costs. If you are considered for an award, you will be asked to submit detailed documentation justifying the proposed rate if it exceeded 25% of the total direct costs.

1. Complete line 3a (Initial Budget Period) for first 12-month budget period, line 3b (-02 Year) for second budget period, and subsequent year(s) as appropriate.
2. Under "Explanation," insert "Rate to be negotiated with NIH" if you do not have a currently negotiated F&A cost rate with a Federal Agency. If you have a currently effective negotiated F&A cost rate with a Federal agency, it should be used when calculating proposed F&A costs.

If the requested F&A rate is 25 percent or less, F&A costs will be awarded at the requested rate.

However, applicant organizations are reminded that only actual F&A costs are to be charged to projects. If awarded at a rate of 25% or less of total direct costs, the rate used to charge actual F&A costs to projects cannot exceed the awarded rate. *If the requested F&A rate is greater than 25 percent, additional information will be required prior to award to justify the requested rate*.

Negotiation of F&A Costs

The Division of Financial Advisory Services (DFAS), Office of Acquisition Management and Policy, NIH, is the office authorized to negotiate F&A cost rates with small business concerns receiving NIH SBIR/STTR awards. *Upon request of the NIH, the applicant small business concern should provide DFAS with an F&A cost proposal and supporting financial data for the most recently completed fiscal year*. If financial data is not available for the most recently completed fiscal year, proposals showing estimated rates and support for same should be submitted.

The F&A cost proposal, based on company-wide cost data, should be accompanied by the following supporting information:

1. Profit and loss statement and balance sheet for the applicant organization's most recently completed fiscal year. Certified statements prepared by a CPA engaged to conduct an annual audit should be submitted, if available. The F&A cost proposal should include a reconciliation with the income statement; that is, there should be a cross-referencing from amounts on the income statement to amounts shown in the proposal, and a clear identification of individual elements (labor, materials, other expenses, etc.) of independent (self-sponsored) research and development (IR&D) expenses. IR&D costs are not allowable under NIH awards.
2. Listing of categories of costs normally classified and claimed as direct costs on Federal awards and non-Federally supported projects or activities.
3. Explanation of how the organization accounts for paid absences (vacation, holiday, and sick leave).
4. Certification of Final Indirect Costs as specified in FAR Part 52.242-4. This Certificate is to be completed by an official at a level no lower than a

vice president or chief financial officer of the business segment submitting the proposal.

Smoke-Free Workplace

Does your organization currently provide a smoke-free workplace and/or promote the nonuse of tobacco products or have plans to do so? Check the appropriate box marked "Yes" or "No." Response to the question has no impact on the review or funding of this application.

11. PERSONAL DATA

Use the "Personal Data Form Page" (MS Word | PDF). Follow the instructions on the form. Place the form at the end of the original application. Do not copy.

E. Market Research

The PHS will not support any market research under the SBIR/STTR programs. Neither will it support studies of the literature that will lead to a new or expanded statement of work. Literature searches where the commercial product is a database are acceptable.

For purposes of the SBIR/STTR programs, "market research" is the systematic gathering, editing, recording, computing, and analyzing of data about problems relating to the sale and distribution of the subject of the research project. It includes various types of research, such as the size of potential market and potential sales volume, the identification of consumers most apt to purchase the products, and the advertising media most likely to stimulate their purchases. However, "market research" does not include activities under a Research Plan or protocol that require a survey of the public as part of the objective of the project to determine the impact of the subject of the research on the behavior of individuals.

V. GRANT APPLICATION SUBMISSION REQUIREMENTS

The NIH's Center for Scientific Review (CSR) is the *single* receiving point for all NIH, CDC, and FDA SBIR/STTR grant applications. If your application is relevant to more than one awarding component, you need only submit the original application and five copies to CSR, and CSR will assign the application to all such components. Do not submit identical applications with requests for assignment to different funding components (e.g., NCI, NHLBI, NIBIB, NIA).

Cover Letters. Applicants are encouraged to include a cover letter with the application. The letter may contain any of the following information that applies to the application:

- Application title.
- PA or RFA title, if you are responding to an NIH initiative.
- Request of an assignment and referral to a particular awarding component(s) (e.g., NIA, NIAMS, NINDS) or Scientific Review Group (SRG). The PHS makes the final determination.
- Indicate a specific area of expertise that should be represented on the study section committee.
- List of people (e.g., competitors who have direct conflicts of interest) who should not review your application and why.

A. Submission, Review and Award Dates

A grant application submitted under this SBIR/STTR Phase II Grant Solicitation will be considered on time if it is received by or mailed on or before the published receipt date and a proof of mailing is provided.

Proof of timely mailing consists of one of the following: a legibly dated U.S. Postal Service postmark or a dated receipt from a commercial carrier or the U.S. Postal Service.

If the receipt date falls on a weekend, it will be extended to the following Monday. If the date falls on a holiday, it will be extended to the following workday. The application will be considered on time if it is received by or mailed on or before that day and a proof of mailing is provided.

The receipt date will be waived only in extenuating circumstances. To request a waiver, include an explanatory letter, addressed to the Division of Receipt and Referral, Center for Scientific Review, with the signed, completed application. No request

for a waiver will be considered prior to receipt of the application.

SBIR/STTR applications in response to Request for Applications (RFAs) or Program Announcements (PAs) with other than standard (Apr 1, Aug 1, Dec 1) receipt dates must be received by the specified dates. These RFAs/PAs are issued separately through the *NIH Guide for Grants and Contracts*. A list of relevant small business PAs and RFAs is maintained at http://grants1.nih.gov/grants/funding/sbir_announcements.htm.

SUBMISSION OF SBIR/STTR PHASE II APPLICATIONS (NON-FAST-TRACK AND COMPETING CONTINUATION PHASE II)

Phase II applications may be *submitted on any of the three published receipt dates*, either before or after expiration of the Phase I budget period. However, Phase II grant applications should be submitted *no later than the first six receipt dates following expiration of the Phase I budget period*.

Applicant small business concerns are reminded that Phase II funding is based on the results of Phase I, demonstration of feasibility, scientific and technical merit, and commercial potential of the Phase II application. *Applicants are cautioned that applications demonstrating insufficient results in Phase I may not receive a score in the peer review process (see* Section VI. Method of Evaluation and Selection Criteria*).*

SUBMISSION OF FAST-TRACK APPLICATIONS

Fast-Track applications may be submitted on any of the three published receipt dates. The Face Pages for both the Phase I and Phase II portions should be clearly marked "Fast-Track", and copies of both portions should be assembled and submitted together. Refer to the instructions in IV.E. of the Solicitation and the Fast-Track Reminder Sheet for additional information.

SUBMISSION OF AIDS OR AIDS-RELATED APPLICATIONS

AIDS-Related applications include: (1) projects relating to the etiology, epidemiology, natural history, diagnosis, treatment, or prevention of AIDS; (2) various sequelae specifically associated with the syndrome; and (3) preparation and screening of anti-AIDS agents as well as vaccine development, including both preclinical and clinical studies. Not all applications examining various influences on T-lymphocytes or retroviruses will be appropriate for the expedited AIDS review process. Applications only indirectly related to AIDS will be evaluated by established Scientific Review Groups (SRGs) appropriate to the scientific discipline during regular NIH review cycles and should not be submitted in response to the expedited AIDS receipt dates. Applicants are urged to take note of the yearly NIH Plan for HIV-Related Research and indicate how their application addresses the NIH priorities set forth in that Plan. The Plan can be found on the NIH Office of AIDS Research home-page.

SBIR AND STTR* SUBMISSION DATES PHASE I AND II	AIDS AND AIDS-RELATED APPLICATIONS	NATIONAL TECHNICAL MERIT REVIEW	ADVISORY COUNCIL BOARD REVIEW	ESTIMATED AWARD DATE
April 1, 2004	May 1, 2004	June/July	Sept/Oct	November
August 1, 2004	September 1, 2004	Oct/Nov	Jan/Feb	March
December 1, 2004	January 2, 2005	Feb/March	May/June	July

* *NIH, CDC and FDA now use the same three standard submission dates. CDC and FDA do not participate in the STTR program.*

B. Number of Copies

Original
Plus 5 Copies

Submit the *original and five* exact, clear, single-sided photocopies of each application. The *original* must be signed by the principal investigator and a corporate official authorized to act for the applicant organization.

C. Bindings and Packaging

Attach to the bottom of the Face Page (original) the appropriate SBIR or STTR label (MS Word | PDF)

Submit the following materials in one package:

- cover letter;
- original application;
- five copies of the application.

DO NOT include more than one application set (original plus 5 copies) in each mailing envelope.

The original application. The original application must be single-sided, with both required signatures on the Face Page. Do **not** staple or otherwise bind the original application. Use rubber bands or clips. Assemble the pages in the order specified in the table of contents. Place the Personal Data page at the end of the application; it is not to be duplicated. If appropriate, attach the RFA label provided in the application kit or a facsimile to the Face Page.

Five exact, single-sided copies of the original application. Make the copies **after** both individuals have signed the Face Page so that their signatures are present on the copies. Do not staple or otherwise bind the five copies of the original application. Rubber bands are acceptable.

D. Mailing and/or Delivery Addresses

Mail or deliver the complete, signed, and typewritten original and five signed, exact, clear, single-sided photocopies of the application in one package.

Applications sent via the **United States Postal Service (USPS) EXPRESS or REGULAR MAIL** should be sent to the following address:

Center for Scientific Review
National Institutes of Health
6701 Rockledge Drive
Room 1040-MSC 7710
Bethesda, MD 20892-7710
Phone: (301) 435-0715

NOTE: All applications sent via a **courier delivery service (non-USPS)** should use this address, but **CHANGE THE ZIP CODE TO 20817**.

C.O.D. applications will *not* be accepted.

E. Assignment of Grant Applications

The Center for Scientific Review (CSR) will assign appropriately completed applications to the Scientific Review Groups (commonly referred to as "SRGs" or "study sections") that will perform the scientific/ technical merit review. The CSR website lists the recurring small business review panels. You may refer to the following link, http://www.csr.nih.gov/review/sba.asp, and suggest a specific group (e.g., ZRG1 SSS D 10B).

In addition, CSR will assign each application to the agency awarding component that is the potential funding component. When the scientific areas and the research proposed in a grant application are sufficiently relevant to the program responsibilities of two or more awarding components, CSR may assign your application to all such components. The component that has the most relevant program responsibility is designated as the primary assignee. The other components that have an interest in your application are designated as secondary assignees. If your application is eligible for funding and the primary assignee does not intend to make an award, the secondary assignees will be given the opportunity to do so. Although these suggestions will be taken into consideration, the final determination will be made by the agencies participating in this solicitation.

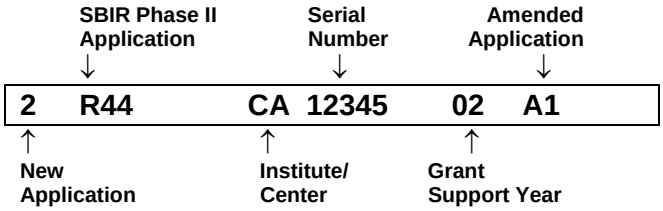
F. Notification of Receipt

Usually within six weeks after the receipt date, the CSR/NIH will send the principal investigator and the applicant organization a notification of receipt of the application. The notification will indicate a grant application assignment number and the name, address, and telephone number of the Scientific

Review Administrator (SRA) of the Scientific Review Group (SRG) to which the application has been assigned. If this information is *not received within that time, contact*:

Division of Receipt and Referral
Center for Scientific Review, NIH
(301) 435-0715; Fax: (301) 480-1987

Sample Grant Application Assignment Number



G. Incomplete Applications

Do not submit an incomplete application. An application will be considered incomplete and will be returned if it is illegible, if it does not conform to the instructions, or if the material presented is insufficient to permit an adequate review. *If the proposed research involves human subject research or vertebrate animals, carefully read and follow the* Human Subjects Research *instructions in Section IV, Item 9.e of the Research Plan*.

H. Supplementary or Corrective Information

Should you discover an inadvertent error or omission after submitting your application, call 301-435-0715.

Supplementary or corrective material pertinent to the review of an application may be submitted after the receipt date, but only if it is specifically solicited by or agreed to through prior discussion with the Scientific Review Administrator (SRA) of the SRG. In no instance can the original Phase II application plus supplementary materials exceed the Phase II Research Plan page limitations.

VI. METHOD OF EVALUATION AND SELECTION CRITERIA

All Phase II grant applications will be evaluated and judged on a competitive basis. Initially, applications will be screened for responsiveness and to confirm that the required instructions were completed. *Those applications found to be incomplete in any way or programmatically unrelated to the agency's mission will be returned without review* to the applicant small business concern. Applications passing this initial screening will be reviewed for technical and scientific merit by scientists, engineers and/or other persons who are experts in the scientific field in which you are proposing. Each application will be judged on its own merit, according to the review criteria described below. The participating agencies are under no obligation to fund any specific application or make any specific number of awards in a given research topic area. Also, they may elect to fund several or none of the proposed projects within a given topic area.

Evaluations of applications require, among other factors, *consideration of an application's commercial potential* as evidenced by the small business concern's record of commercializing SBIR/STTR or other research; the existence of second phase funding commitments from private sector or non-SBIR/STTR funding sources; the existence of third phase follow-on commitments for the subject of the research; and/or the presence of other indicators of the commercial potential of the idea.

A. Review Process

Grant applications are subjected to an external peer review process involving two sequential steps that are required by law. The first step is performed by the Scientific Review Groups (SRGs), composed primarily of non-Federal scientists, physicians, and engineers (from academia and industry) selected for their expertise and stature in particular scientific fields. The second step is performed by the National Advisory Council or Board of the potential awarding component (Institute, Center, or other unit) to which the grant application is assigned.

SCIENTIFIC REVIEW GROUPS

The first task of the SRGs is to evaluate each SBIR/STTR application for scientific and technical merit and potential for commercialization, and to make an SRG recommendation for each application on the basis of this evaluation. The SBIR/STTR review criteria are listed in Section B below.

While NIH uses a numerical range from 1.00 (most meritorious) to 5.00 (least meritorious), a

streamlined procedure is used to determine those applications that the SRG considers to be in the "upper" or "lower half." Applications in the "upper half" are discussed by the SRG and these *generally* receive a score between 1.0 and 3.0, and applications in the "lower half" are not discussed and receive an "unscored" designation (i.e., those that would generally have received a score between 3.0 and 5.0). However, any review group member may identify an application that he or she believes should be discussed at the meeting and receive a numerical score. Under the currently employed streamlining procedures, a rating of 3.00 would be considered the median score for the cohort of applications that a scientific review group might review.

Individual reviewers mark scores to two significant figures, e.g., 1.5, and the individual scores are averaged and then multiplied by 100 to yield a single overall score for each scored application, e.g., 153. Abstaining members and those not present during the discussion do not assign a numerical rating and are not counted in calculating the average of the individual ratings.

The second task of the SRGs is to make budget recommendations concerning time and dollar amounts that are appropriate for the work proposed.

Regardless of the study section recommendation, all applicants receive a summary statement that includes a single rating/designation and the essentially unedited, verbatim critiques of two or more assigned reviewers.

NATIONAL ADVISORY COUNCIL OR BOARD

The second level of review is performed by the National Advisory Council or Board of the potential awarding component (Institute, Center, or other unit) to which the grant application is assigned. These groups, composed of scientists, physicians, and members of the public, are chosen for their expertise, interest, or activity in matters related to the awarding component's mission. In order for an application to be funded, it must be recommended by the Council or Board.

B. SBIR/STTR Review Criteria

"Formulae" do not exist for calculating an individual reviewer's score on an application. Remember, among several criteria, Phase II applications will be judged based on the results of Phase I, demonstration of feasibility, scientific and technical merit, and commercial potential of the Phase II application. In considering the scientific and technical merit of each application, the following criteria will be used:

ALL SBIR/STTR APPLICATIONS

1. *Significance*
   a. Does the proposed project have commercial potential to lead to a marketable product or process? Does this study address an important problem?
   b. What may be the anticipated commercial and societal benefits that may be derived from the proposed research?
   c. If the aims of the application are achieved, how will scientific knowledge be advanced?
   d. Does the proposal lead to enabling technologies (e.g., instrumentation, software) for further discoveries?
   e. Will the technology have a competitive advantage over existing/alternate technologies that can meet the market needs?
2. *Approach*
   a. Are the conceptual framework, design, methods, and analyses adequately developed, well-integrated, and appropriate to the aims of the project?
   b. Is the proposed plan a sound approach for establishing technical and commercial feasibility?
   c. Does the applicant acknowledge potential problem areas and consider alternative strategies?
   d. Are the milestones and evaluation procedures appropriate?
3. *Innovation*
   a. Does the project challenge existing paradigms or employ novel technologies, approaches or methodologies?
   b. Are the aims original and innovative?
4. *Investigators*
   a. Is the principal investigator capable of coordinating and managing the proposed SBIR/STTR?

b. Is the work proposed appropriate to the experience level of the principal investigator and other researchers, including consultants and subcontractors (if any)?

c. Are the relationships of the key personnel to the small business and to other institutions appropriate for the work proposed?

5. *Environment*

a. Is there sufficient access to resources (e.g., equipment, facilities)?

b. Does the scientific and technological environment in which the work will be done contribute to the probability of success?

c. Do the proposed experiments take advantage of unique features of the scientific environment or employ useful collaborative arrangements?

Human Subjects. In conducting peer review for scientific and technical merit, SRGs will also evaluate the involvement of human subjects and proposed protections from research risk relating to their participation in the proposed non-exempt Research Plan according to the following four review criteria: (1) risk to subjects, (2) adequacy of protection against risks, (3) potential benefits of the proposed research to the subjects and others, and (4) importance of the knowledge to be gained.

When human subjects are involved in the proposed clinical research, the SRG will also evaluate the proposed plans for inclusion of minorities and members of both sexes/genders, as well as the inclusion of children in clinical research, as part of the scientific assessment of Approach criterion. The evaluation will be factored into the overall score for scientific and technical merit of the application.

When human subjects are involved in research that involves one of the six categories of research that are exempt under 45 CFR 46, the SRG will evaluate the justification for the exemption and (1) Human Subjects Involvement and Characteristics, and (2) Sources of Materials.

Vertebrate Animals. The proposed involvement of vertebrate animals will be evaluated by SRGs as part of the scientific assessment of Approach and Environment criteria and according to the following five points: (1) detailed description of the proposed use of the animals; (2) justification for the use of animals and for the appropriateness of the species and numbers proposed; (3) adequacy of proposed veterinary care; (4) procedures for limiting pain and distress to that which is unavoidable; and (5) methods of euthanasia. See section in Research Plan on Vertebrate Animals.

These evaluations will be factored into the overall score for scientific and technical merit of the application.

In accordance with NIH policy, the following criteria will be applied to ALL applications:

Human Subjects

1. *Protection of Human Subjects from Research Risks* – for all studies involving human subjects. See instructions and Decision Table for Human Subjects Research, Protection and the Inclusion of Women, Minorities, and Children.

a. If an exemption is claimed, is it appropriate for the work proposed? If no exemption is claimed, are the applicant's responses to the six required points appropriate?

b. Are human subjects placed at risk by the proposed study? If so, are the risks reasonable in relation to the anticipated benefits to the subjects and others? Are the risks reasonable in relation to the importance of the knowledge that reasonably may be expected to be gained?

c. Are the plans proposed for the protection of human subjects adequate?

2. *Inclusion of Women Plan* – *for clinical research only*.

a. Does the applicant propose a plan for the inclusion of both genders that will provide their appropriate representation? Does the applicant provide appropriate justification when representation is limited or absent?

b. Does the applicant propose appropriate and acceptable plans for recruitment/outreach and retention of study participants?

3. *Inclusion of Minorities Plan* – *for clinical research only*

a. Does the applicant propose a plan for the inclusion of minorities that will provide their appropriate representation? Does the applicant provide appropriate justification when representation is limited or absent?

b. Does the applicant propose appropriate and acceptable plans for recruitment/outreach and retention of study participants?

4. *Inclusion of Children Plan* – *for all studies involving human subjects*

   a. Does the applicant describe an acceptable plan in which the representation of children of all ages (under the age of 21) is scientifically appropriate and recruitment/retention is addressed realistically?

   b. If not, does the applicant provide an appropriate justification for their exclusion?

5. *Data and Safety Monitoring Plan* – *for clinical trials only*

   a. Does the applicant describe a Data and Safety Monitoring Plan that defines the general structure of the monitoring entity and mechanisms for reporting Adverse Events to the NIH and the IRB?

Animal Welfare

1. If vertebrate animals are involved, are adequate plans proposed for their care and use?
2. Are the applicant's responses to the five required points complete and appropriate?
3. Will the procedures be limited to those that are unavoidable in the conduct of scientifically sound research?

Budget

1. For all applications, is the percent effort listed for the principal investigator appropriate for the work proposed?
2. On applications requesting up to $100,000 total costs, is the overall budget realistic and justified in terms of the aims and methods proposed?
3. On applications requesting over $100,000 in total costs, is each budget category realistic and justified in terms of the aims and methods?

Biohazards

1. Is the use of materials or procedures that are potentially hazardous to research personnel and/or the environment proposed?
2. Is the proposed protection adequate?

PHASE II APPLICATION REVIEW CRITERIA

In addition to the above criteria:

1. How well did the applicant demonstrate progress toward meeting the Phase I objectives, demonstrating feasibility, and providing a solid foundation for the proposed Phase II activity?
2. Did the applicant submit a concise Commercialization Plan that adequately addresses the specific areas described in Item j of the Phase II Research Plan?
3. Does the project carry a high degree of commercial potential, as described in the Commercialization Plan?

Amended Applications

In addition to the above criteria, the following criteria will be applied to revised applications.

1. Are the responses to comments from the previous SRG review adequate?
2. Are the improvements in the revised application appropriate?

TYPE 2 PHASE II COMPETING CONTINUATION APPLICATION REVIEW CRITERIA

In addition to the review criteria stated above for “All SBIR/STTR applications," the following items will be applied to ALL Type 2 Competing Continuation Phase II applications in the determination of scientific merit and the priority score.

1. Does the activity as proposed address issues related to Federal regulatory approval processes?
2. Did the applicant submit a concise Commercialization Plan (formerly Product Development Plan [PDP]) that adequately addresses the specific areas described in Item j of the Phase II Research Plan?
3. Does the project carry a high degree of commercial potential, as described in the Commercialization Plan?

In cases where an IC has issued a type 2 competing continuation announcement in the NIH Guide, applicants should read the RFA or PA carefully for special instructions or additional review criteria. The Topics section (http://grants.nih.gov/grants/funding/sbirsttr1/2004-2_sbir-sttr-topics.pdf) includes the relevant Guide announcement links.

C. Release of Grant Application Information after Review

Following evaluation of your grant application by the SRG but prior to National Advisory Council or Board

action, a summary statement will be sent automatically to the principal investigator. The identity of the reviewers will never be disclosed.

Applicants normally receive their summary statement within four to six weeks following the study section meeting in which it was reviewed. A "summary statement" documents the evaluation of an application by the SRG and conveys the SRG's recommendations to the awarding component and its Council or Board. The identity of the reviewers is never disclosed. No one other than the principal investigator (and appropriate NIH staff) may receive the summary statement and evaluation rating.

After the review meeting occurs, applicants are encouraged to address inquiries about review to their Program Director, rather than to review staff. After receipt/review of the summary statement (4-6 weeks after the review meeting), applicants are encouraged to contact their Program Director for guidance and advice on next steps.

Also following NIH peer review, applicant organizations will be notified of the need for review and certification for the proposed research by an OHRP- Registered Institutional Review Board (IRB). See http://www.hhs.gov/ohrp to register an IRB. The certification of IRB approval from an official signing for the applicant organization must then be sent to and received by the Grants Management Office identified in the notice requesting IRB certification. This IRB certification must include: the PHS application number, title of the project, name of the principal investigator/program director, date of IRB approval, and appropriate signatures. You may also use optional Form 310, "Protection of Human Subjects" to provide IRB certification (see http://www.hhs.gov/ohrp/humansubjects/assurance/OF310.rtf).

Any modifications in the Research Plan section of the application, required by the IRB, must be submitted with the follow-up certification. It is the responsibility of the principal investigator/program director and the applicant organization to submit the follow-up certification.

When a year will have elapsed between the initial IRB review date and the anticipated award date, awarding unit staff shall require re-review by the IRB and certification prior to award.

D. Funding Decisions

When making funding decisions, the awarding components take into consideration the following: (1) ratings resulting from the scientific and technical evaluation process; (2) areas of high program relevance; (3) program balance (that is, balance among areas of research); (4) available funds; and (5) the commercialization status where the small business concern has received more than 15 Phase II awards in the prior five (5) fiscal years, if applicable (see this application requirement under "Prior SBIR/STTR Phase II Awards" found in Section IV.D.9. Item Research Plan, Item k). The awarding component will notify the principal investigator and the applicant small business concern of the final disposition of the application.

Phase II applications will be selected for funding based on the project's scientific and technical merit, the awarding component's assessment of the Phase I progress report and determination that the Phase I goals were achieved, an update and verification of the Commercialization Plan and any commitment(s) for funds and/or resources from an investor or partner organization, the project's potential for meeting the mission of the awarding component and potential for commercial success, and the availability of funds.

Fast-Track Phase II applications that are recommended for approval may be funded following submission of the Phase I progress report, demonstration that milestones were met, and other documents necessary for continuation (e.g. PHS 2590). Specific instructions will be provided at the time the Phase II is awarded.

E. Revision and Resubmission of Grant Applications

NIH allows the submission of up to two revised applications on any of the published receipt dates (e.g., Apr 1, Aug 1, Dec 1) but no longer restricts those submissions to a two-year timeframe. See NIH Policy on Submission of a Revised (amended) Application.

NIH has established new policies for application resubmissions of certain categories. See Resubmission of Unpaid RFA Applications and Resubmission of Applications with a Changed Grant Activity Mechanism.

Before a revised application can be submitted, the principal investigator must have received the Summary Statement from the previous review.

Acceptance of a revised application automatically withdraws the prior version, since two versions of the same application cannot be simultaneously pending.

Introduction to Revised Application. The revision must include an Introduction of not more than three pages (Phase II) that *summarizes* the substantial additions, deletions, and changes. The Introduction must also include responses to the criticisms and issues raised in the Summary Statement. **Insert the Introduction just before the very beginning of the Research Plan.**

Research Plan of Revised Application. A revised application must include substantial changes. Identify the changes in the Research Plan clearly by bracketing, indenting, or changing typography, unless the changes are so extensive as to include most of the text. This exception should be explained in the Introduction. **Do not underline or shade changes.** The Preliminary Studies/Progress Report section should incorporate any work done since the prior version was submitted.

Application processing may be delayed or the application may be returned if it does not comply with all of these requirements.

Investigators who have submitted three versions of an application and have not been successful often ask NIH staff how different the next application submitted needs to be to be considered a new application. It is recognized that investigators are trained in a particular field of science and are not likely to make drastic changes in their research interests. However, a new application following three reviews is expected to be substantially different in content and scope with more significant differences than are normally encountered in a revised application. Simply rewording the title and Specific Aims or incorporating minor changes in response to comments in the previous Summary Statement does not constitute a substantial change in scope or content. Changes to the Research Plan should produce a significant change in direction and approach for the research project. Thus, a new application would include substantial changes in all sections of the Research Plan, particularly the Specific Aims and the Research Design and Methods sections.

In the referral process, NIH staff look at all aspects of the application, not just the title and Description (abstract). Requesting review by a different review committee does not affect the implementation of this policy. When necessary, previous applications are analyzed for similarities to the present one. Thus, identical applications or those with only minor changes will not be accepted for review.

The limit of two revisions allows applicant small business concerns and principal investigators sufficient time to consider the comments of the reviewers and address them. If an applicant is not successful after three attempts at funding (the initial submission and two revisions), she/he is expected to make a significant change in the direction and approach for subsequent applications. **It is not appropriate to submit an essentially identical or only slightly changed application as a new application.**

Upon acceptance of a revised application by the CSR, the prior version will be withdrawn from further consideration by the awarding components. Acceptance of the revised application will generally mean that it will fall into a later review and award cycle. *Resubmission of an application that merely duplicates a previous application is not acceptable and the duplicate application will be returned without review*.

F. Submission of Similar Grant Applications to More Than One NIH Awarding Component

The NIH will not accept similar grant applications with essentially the same research focus from the same applicant organization. This includes derivative or multiple applications that propose to develop a single product, process or service that, with non-substantive modifications, can be applied to a variety of purposes. Likewise, identical or essentially identical grant applications submitted by different applicant organizations will not be accepted. Applicant organizations should ascertain and assure that the materials they are submitting on behalf of the principal investigator are the original work of the principal investigator and have not been used elsewhere in the preparation and submission of a similar grant application. Applications to the NIH are grouped by scientific discipline for review by individual Scientific Review Groups and not by disease or disease state. The reviewers can thus

easily identify multiple grant applications for essentially the same project. In these cases application processing may be delayed or the application(s) may be returned to the applicant without review.

It is unlawful to enter into contracts or grants requiring essentially equivalent work or effort. If there is any question concerning this, it must be disclosed to the soliciting agency or agencies before award. "Essentially equivalent work or effort" occurs when (1) substantially the same research is proposed for funding in more than one contract proposal or grant application submitted to the same Federal agency; (2) substantially the same research is submitted to two or more different Federal agencies for review and funding consideration; or (3) a specific research objective and the research design for accomplishing an objective are the same or closely related in two or more proposals or awards, regardless of the funding source.

G. Submission of Similar Grant Applications by the Applicant Organization to Other Federal Agencies

WARNING: While it is permissible with application notification to submit identical applications or applications containing a significant amount of essentially equivalent work to more than one Federal agency for consideration under numerous Federal program solicitations, it is unlawful to enter into funding agreements requiring essentially equivalent effort. If there is any question concerning this, it must be disclosed to the soliciting agency or agencies before award.

Other support (not to be confused with Research Support requested on your Biographical Sketch) should only be submitted when requested by NIH. If you elect to submit identical applications or applications containing a significant amount of essentially equivalent work under other Federal program solicitations, you must include the following information as part of your "Other Support" information when requested by NIH:

- Name and address of the agencies to which applications were submitted or from which awards were received.
- Date of application submission or date of award.
- Title, number, and date of solicitations under which application(s) was submitted or awards received.
- Specific applicable research topics for each application submitted or award received.
- Titles of research projects.
- Name and title of principal investigator or project manager for each application submitted or award received.

If an award is made pursuant to a grant application submitted in response to this Omnibus Solicitation, the grantee may be required to certify that it has not previously been, nor is currently being, paid for essentially equivalent work by any NIH awarding component or other agency of the Federal Government. See Section III for the definition of "essentially equivalent work." If an award is made under this Omnibus Solicitation for a project, some of whose elements are being or will be supported by another Federal agency, the awarding component and the applicant organization will negotiate a budget that reflects the elimination of any overlapping support.

VII. AWARD GUIDELINES, REPORTING REQUIREMENTS, AND OTHER CONSIDERATIONS

A. Awards

The primary award mechanism will be the grant instrument. The average dollar amount of Phase II awards (composed of direct costs, F&A/indirect costs, and profit/fee) is estimated to be approximately $750,000 for SBIR awards and STTR awards.

PHS awarding components may not always be able to honor the requested start date. No commitments or obligations should be made until confirmation of the actual start date by the awarding component.

B. Terms and Conditions of Award

Preaward Costs. A potential grantee may, *at its own risk* and without NIH prior approval, incur

obligations and expenditures to cover costs up to 90 days prior to the effective date of a new or competing continuation award if such costs:

- Are necessary to conduct the project, and
- Would be allowable under the grant, if awarded, without NIH prior approval.

Upon acceptance of a grant award, the grantee must comply with the terms and conditions contained or referenced in the Notice of Grant Award document. These terms and conditions, constituting legal requirements imposed on an awardee by statute, regulations, administrative policy, or the award document itself, are either "standard" or "special" as follows:

Standard Terms and Conditions. Those that are required by policy to be incorporated by reference in Notices of Grant Award through citations of specific documents that contain requirements applicable to the grant.

Special Terms and Conditions. Those that are judged necessary to attain the objectives for which the grant is being awarded, facilitate post-award administration, conserve grant funds, or otherwise protect the interests of the Federal Government. They are stated in full on the Notice of Grant Award.

Expanded Authorities. Under expanded authorities of NIH Grants Policy, the grantee organization may elect to extend the project period for up to 12 months without additional funds. At least 10 days prior to the original project end date, the grantee must NOTIFY the awarding agency GMO in writing (email or letter) of the extension. The notification must be signed by the authorizing business official and must include the new project end date. Extensions beyond the initial notification must be REQUESTED by the grantee organization and APPROVED by the awarding GMO.

Grant awards must be administered in accordance with the *NIH Grants Policy Statement* (http://grants1.nih.gov/grants/policy/nihgps_2003/index.htm) and with the following regulations and policy:

9 CFR 1,2,3	Animal Welfare
37 CFR 401	Rights to Inventions Made by Non-profit Organizations and Small Business Firms under Government Grants, Contracts, and Cooperative Agreements
42 CFR 52	Grants for Research Projects
45 CFR 46	Protection of Human Subjects
45 CFR 74	Administration of Grants
45 CFR 80	Nondiscrimination Under Programs Receiving Federal Assistance Through DHHS Effectuation of Title VI of the Civil Rights Act of 1964.
45 CFR 84	Nondiscrimination on the Basis of Handicap in Programs and Activities Receiving or Benefiting from Federal Financial Assistance
45 CFR 91	Nondiscrimination on the Basis of Age in Programs and Activities Receiving or Benefiting from Federal Financial Assistance
P.L. 99-158	Public Health Service Policy on Humane Care and Use of Laboratory Animals Section 495 "Animals in Research"
P.L. 100-690	Drug-Free Workplace Act of 1988 Title V, Subtitle D

C. Payment Schedule

Once an SBIR/STTR grant is awarded, the grantee will receive information and forms from the Payment Management System of the DHHS regarding requests for cash, manners of payment, and associated reporting requirements. Payment may be made on a cost-reimbursement or advance basis.

D. Reports and Related Information

NIH requires that SBIR/STTR grantees **submit the following reports within 90 days of the end of the grant support period** unless the grantee is under an extension.

- Financial Status Report (OMB 269, http://www.whitehouse.gov/omb/grants/index.html)
- Final Progress Report (no form)

- Final Invention Statement and Certification (HHS 568) Microsoft Word, Corel WordPerfect, and Adobe Acrobat format.
- Annual Invention Utilization Reports
- Final Cash Transaction Report (PSC 272, http://www.dpm.psc.gov/reports/forms/272.cfm)
- Phase II Data Collection Requirement for Government Tech-Net Database (http://technet.sba.gov) - due upon completion of Final Reports above.

Failure to submit timely final reports may affect future funding to the organization or awards with the same principal investigator.

Awardees are strongly encouraged to review the section later in this chapter regarding the PHS 2590 Non-Competing Progress Report. The PHS 2590 is the progress report application to determine continued funding (type 5) for multi-year projects.

FINANCIAL STATUS REPORT (FSR) (OMB 269)

As stated in the *NIH Grants Policy Statement*, a Financial Status Report (OMB 269) must be submitted within 90 days of the expiration date. Reports of expenditures are required as documentation of the financial status of grants according to the official accounting records of the grantee 0rganization.

The FSR 269 form is available electronically at http://www.whitehouse.gov/omb/grants/index.html. FSRs may be transmitted electronically to the NIH's Office of Financial Management (OFM), which, for this purpose, is equivalent to submission to the GMO. Information about the electronic transmittal of FSRs may be obtained from OFM at (301) 496-5287. Otherwise, the Financial Status Report may be mailed to:

Government Accounting Branch
Office of Financial Management
National Institutes of Health
31 Center Drive, Room B1B05A, MSC 2050
Bethesda, MD 20892-2050

Prior to submitting FSRs to NIH, grantees must ensure that the information submitted is accurate, complete, and consistent with the grantee's accounting system. The signature of the authorized institutional official on the FSR certifies that the information in the FSR is correct and complete and that all outlays and obligations are for the purposes set forth in grant documents, and represents a claim to the Federal Government. *Filing a false claim may result in the imposition of civil or criminal penalties*.

FINAL PROGRESS REPORT

A Phase I Final Progress Report is required for all Phase II applications. A Phase II Final Progress Report is required to close out your Phase II grant.

You must submit a Phase II Final Progress Report within 90 days of the Phase II project period end date. Submit the original and one copy of the report to the Grants Management Office of the awarding component (IC) within 90 days of the termination of the Phase II grant.

There is no form page for the Final Progress Report. It may be typed on plain white paper and should include, at a minimum:

- Beginning and end dates for the period covered by the SBIR/STTR Phase II grant.
- Key personnel who worked on the project during that period (include titles, dates of service, and number of hours devoted to the project).
- Summary of the specific aims of the Phase II grant.
- Succinct account of published and unpublished results, indicating progress toward achievement of the originally stated aims.
- List of titles and complete references to publications, manuscripts accepted for publication, patents, invention reports and other printed materials, if any, that resulted from the Phase II.

The recommended length for the *narrative portion is 10 pages*.

Note: The Phase II Final Progress Report to close out your grant is different than the PHS 2590 non-competing Grant Progress Report, which is required to determine continued funding for multi-year and Fast-Track projects. See Non-Competing Grant Progress Report.

FINAL INVENTION STATEMENT AND CERTIFICATION (HHS 568)

The grantee must *submit to the awarding component a Final Invention Statement and Certification (HHS-568)*, whether or not an invention(s) results from work under the grant. The final invention statement/certification must be signed by the principal investigator and an authorized institutional official and must list all inventions that were conceived or first actually reduced to practice during the course of work under the project, from the original effective date of support through the date of expiration or termination, whether or not previously reported. If there were no inventions, the statement should indicate "None."

IMPORTANT: All inventions made in the course of, or under, any NIH research grant, including SBIR/STTR awards, must be promptly and fully disclosed to NIH within 2 months after the inventor provides written disclosure to the grantee's authorized official.

The *disclosure must be in writing*. Identify the applicable grant and the name of the inventor(s), and provide a complete technical description and other information as required by 37 CFR 401.14(c)(1) (see "Administrative Requirements Availability of Research Results: Publications and Intellectual Property Rights, Including Unique Research Resources" for the full text of the clause).

In addition to immediate invention disclosure, each application for competing or non-competing continuation support of an NIH grant-supported research project must include either a listing of all inventions conceived or reduced to practice during the preceding budget period or a certification that no inventions were made during the applicable period.

ANNUAL UTILIZATION REPORT

The grantee must also submit an annual utilization report when the grantee has elected title to an invention or when royalties or licensing fees are generated for inventions that are not patented. NIH has developed an optional online Extramural Invention Information Management System, known as "IEdison," to facilitate grantee compliance with the disclosure and reporting requirements of 37 CFR 401.14(h) (http://www.iedison.gov). *Information from these reports is not made publicly available*. For additional information on IEdison, see Inventions below.

A summary of grantee/contractor invention responsibilities, which provides information on time limits placed by law and identifies specific invention reporting actions that must be taken, is provided at http://www.iedison.gov/timeline.html.

PHASE II DATA COLLECTION REQUIREMENT FOR GOVERNMENT TECH-NET DATABASE

The SBA maintains a ''Technology Resources Access Network'' (Tech-Net) Database System to track and report on statistics regarding the SBIR and the STTR Programs.

Each Phase II applicant will be required to provide information to the SBA Tech-Net Database System (http://technet.sba.gov) for any of its prior Phase II awards.

In meeting this requirement, the small business concern may apportion sales or additional investment information relating to more than one Phase II award among those awards, if it notes the apportionment for each award. Each Phase II awardee is required to update the appropriate information in the Tech-Net database on that award upon completion of the last deliverable (e.g., Final Report, Financial Status Report, Invention Report) under the funding agreement. In addition, the awardee is requested to voluntarily update the appropriate information on that award in the Tech-Net database annually thereafter for a minimum period of 5 years.

Questions about this requirement may be submitted to SBA directly through the Tech-Net URL. To register on and use the Tech-Net database system, visit the Web site http://technet.sba.gov. Online help is available. SBA will minimize the data reporting requirements of small business concerns, make updating available electronically, and provide standardized procedures.

Project commercialization and sales data can only be viewed by Congress, GAO, agencies participating in the SBIR and the STTR Programs, Office of Management and Budget (OMB), Office of Science and Technology Policy (OSTP), Office of Federal Procurement Policy (OFPP), and other authorized persons (for example, authorized contractors) who are subject to a use and nondisclosure agreement with the Federal Government covering the use of the database. Pursuant to 15 U.S.C. 638(k)(4), information

provided to the Government Tech-Net Database is privileged and confidential and not subject to disclosure pursuant to 5 U.S.C. 552 (Government Organization and Employees); nor must it be considered to be publication for purposes of 35 U.S.C. 102 (a) or (b).

Examples of the data to be entered by applicants into Tech-Net include revenue from the sale of new products or services resulting from the research conducted under each Phase II award or additional investment from any source, other than Phase I or Phase II awards, to further the research and development conducted under each Phase II award.

NON-COMPETING GRANT PROGRESS REPORTS

http://grants.nih.gov/grants/funding/2590/2590.htm

SUBMITTING YOUR PROGRESS REPORT

Progress reports to continue support of a PHS grant must be submitted to the awarding component's grants management office on PHS 2590 two months before the beginning date of the next budget period. Previously, NIH reminded grantees about the submission of a progress report by mailing a pre-printed face page. In 2002 NIH modified this business process and discontinued this mailing. Instead grantees now access a website to determine which progress reports are due. The Office of Policy for Extramural Research Administration, OER, National Institutes of Health (NIH) hosts the website located at: http://era.nih.gov/userreports/pr_due.cfm. Grantees are responsible for periodically checking the list, which is updated on/around the 30th of each month. Additional information on this website can be found in the NIH Guide Notice OD-02-066: http://grants.nih.gov/grants/guide/notice-files/NOT-OD-02-066.html. In addition to this website, e-mail reminders are sent to the PI.

For grantee institutions and PIs registered in the NIH eRA Commons, the progress report due information is available in the Commons Status system. Commons-registered institutions and PIs also have access to pre-populated face pages via Status. For more information on the NIH Commons, see: https://commons.era.nih.gov/commons/index.jsp.

Submit the completed, signed original progress report and two copies (with required signatures) directly to the awarding component that is funding the grant. For mailing address information for each awarding component, see: http://grants.nih.gov/grants/type5_mailing_addresses.htm.

You may substitute computer-generated facsimiles for any of the forms. Substitute forms should be printed in black ink, and maintain the exact wording and format of the government-printed forms, including all captions and spacing. Any questions on completing this continuation progress report should be directed to the awarding component.

The forms, in Adobe Acrobat, can be downloaded from the NIH Web site at http://grants.nih.gov/grants/forms.htm. Future developments in electronic transfer of progress reports will be published periodically in the NIH Guide for Grants and Contracts. Blank form pages are also available separately from the applicant's office of sponsored research. Investigators are encouraged to retain these instructions for future submissions.

Use English only and avoid jargon and unusual abbreviations. Prepare the progress report single-sided and single-spaced, staying within the margin limitations indicated on the form.

The progress reports must be clear, readily legible, and conform to the following three requirements:

(1) The height of the letters must not be smaller than 10 point; (2) Type density must be no more than 15 cpi (characters per inch). For proportional spacing, the average for any representative section of text must not exceed 15 cpi; and (3) No more than 6 lines of type must be within a vertical inch. Type requirements should be checked on the printed document using a standard device for measuring type size, rather than relying on the font selected for a particular word processing/printer combination. Figures, charts, tables, figure legends, and footnotes may be smaller in size but must be readily legible. The type size used throughout the progress report must conform to all three requirements.

Do not bind or staple the original. An incomplete or incorrectly prepared continuation progress report may result in a delay in award of funds.

E. Innovations, Inventions and Patents

LIMITED RIGHTS INFORMATION AND DATA

Proprietary Information

Applicants are discouraged from submitting information considered proprietary unless it is deemed essential for proper evaluation of the application. However, when the application contains information that constitutes trade secrets; or information that is commercial or financial; or information that is confidential or privileged, **identify the pages in the application that contain this information by marking those paragraphs or lines with an asterisk (*) in the left-hand margin and providing the page numbers** before "a. Specific Aims" in the Research Plan.

Also include the following legend in this section of the application or on PHS 398 Form Page 3 to identify the appropriate page numbers:

"These data shall not be disclosed outside the Government and shall not be duplicated, used, or disclosed in whole or in part for any purpose other than evaluation of this application. If a funding agreement is awarded to this applicant as a result of or in connection with the submission of these data, the Government shall have the right to duplicate, use, or disclose the data to the extent provided in the funding agreement and pursuant to applicable law. This restriction does not limit the Government's right to use information contained in the data if it is obtained from another source without restriction. The data subject to this restriction are contained in pages _____ of this application."

Any other legend may be unacceptable to the Government and may constitute grounds for removing the application from further consideration, without assuming any liability for inadvertent disclosure. The Government will limit dissemination of such information to/within official channels.

When information in the application constitutes trade secrets or information that is commercial or financial, and confidential or privileged, it is furnished to the Government in confidence with the understanding that the information shall be used or disclosed only for evaluation of this application. If a grant is awarded as a result of or in connection with the submission of this application, the Government shall have the right to use or disclose the information to the extent authorized by law. This restriction does not limit the Government's right to use the information if it is obtained without restriction from another source.

Information contained in unfunded grant applications will remain the property of the applicant. The Government may, however, retain copies of all applications submitted. Public release of information in any application submitted will be subject to existing statutory and regulatory requirements.

Title to Equipment and Supplies

Title to equipment and supplies acquired by a for-profit organization as a grantee or subcontractor under a grant awarded by the agencies participating in this solicitation, shall vest, upon acquisition, in the grantee or subcontractor, respectively. Final disposition of equipment acquired with Federal funds by for-profit grantees is covered under 45 CFR 72.13(g).

Rights in Data Developed Under SBIR/STTR Funding Agreement

To preserve the SBIR data rights of the awardee, the legend (or statements) used in the SBIR Data Rights clause included in the SBIR award must be affixed to any submissions of technical data developed under that SBIR award. If no Data Rights clause is included in the SBIR award, the following legend, at a minimum, should be affixed to any data submissions under that award:

"These SBIR data are furnished with SBIR rights under Funding Agreement No. _____ (and subcontract No. _____ if appropriate), Awardee Name _____, Address, Expiration Period of SBIR Data Rights _____. The Government may not use, modify, reproduce, release, perform, display, or disclose technical data or computer software marked with this legend for (choose four (4) or five (5) years). After expiration of the (4- or 5-year period), the Government has a royalty-free license to use, and to authorize others to use on its behalf, these data for Government purposes, and is relieved of all disclosure prohibitions and assumes no liability for unauthorized use of these data by third parties, except that any such data that is also protected and referenced under a subsequent SBIR award shall remain protected through the protection period of that subsequent SBIR award. Reproductions of these data or software must include this legend."

Rights to data, including software developed under the terms of any funding agreement resulting from a grant application submitted in response to this solicitation, shall remain with the grantee, except that the Government shall have the limited right to use such data for internal Government purposes and shall not release such data outside the Government without permission of the grantee for a period of four years from completion of the project from which the data were generated.

Copyrights

The grantee may normally copyright and publish (consistent with appropriate national security considerations, if any) material developed with PHS support. The awarding component receives a royalty-free license for the Federal Government and requires that each publication contain an acknowledgment of agency support and disclaimer statement, as appropriate. An acknowledgment shall be to the effect that *"This publication was made possible by grant number _____ from (NIH/CDC/FDA awarding component)*" OR *"The project described was supported by grant number _____ from (NIH/CDC/FDA awarding component). Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the (NIH/CDC/FDA awarding component)."*

Inventions

Refer to http://www.iedison.gov *for more detailed information.*

Any invention first conceived or reduced to practice with award funds must be reported to the NIH. *The inventor must report the discovery to the grantee organization promptly*. Within two months of the inventor's initial report to the grantee organization, the organization must report the invention to the NIH's Extramural Invention Reporting and Technology Resources Branch of the Office of Policy for Extramural Research (see address in "Patents" section below). This should be done prior to any publication or presentation of the invention at an open meeting, since failure to report at the appropriate time is a violation of 35 USC 202, and may result in loss of the rights of the small business concern, inventor, and Federal Government in the invention. All foreign patent rights are immediately lost upon publication or other public disclosure unless a United States patent application is already on file. In addition, statutes preclude obtaining valid United States patent protection after one year from the date of a publication that discloses the invention.

The reporting of inventions by the grantee organization to the NIH can be accomplished by submitting paper documentation, including fax, or electronically through the NIH Interagency Edison (IEdison) Invention Reporting System. Use of the IEdison system satisfies all mandated invention reporting requirements and access to the system is through a secure interactive Website (http://www.iedison.gov) designed to ensure that all information submitted is confidential.

In addition to fulfilling reporting requirements, IEdison notifies the user of future time-sensitive deadlines with enough lead-time to avoid the possibility of loss of patent rights due to administrative oversight. IEdison can accommodate the invention reporting needs of all organizations. For additional information about this invention reporting and tracking system, *visit the IEdison home page cited above or contact Edison via email at* edison@od.nih.gov.

Patents

Small business concerns normally retain the principal worldwide patent rights to any invention developed with Government support. Under existing regulations, 37 CFR 401, the Government receives a royalty-free license for Federal Government use, reserves the right to require the patent-holder to license others in certain circumstances, and requires that anyone exclusively licensed to sell the invention in the United States must normally manufacture it substantially in the United States. The applicant small business concern is *strongly encouraged to obtain information about additional requirements imposed by 37 CFR 401 from local counsel or from*:

Extramural Inventions and Technology Resources Branch
Office of Policy for Extramural Research
National Institutes of Health
6705 Rockledge Drive, MSC 7980
Bethesda, MD 20892-7750
Phone: (301) 435-1986; Fax: (301) 480-0272
Email: george.stone@nih.gov or edison@od.nih.gov.

To the extent authorized by 35 U.S.C. 205, the Government will not make public any information disclosing a Government-supported invention for a four-year period from the date of disclosure (that may be extended by subsequent SBIR/STTR funding agreements) to allow the grantee a

reasonable time to file a patent application, nor will the Government release any information that is part of that patent application.

RESEARCH TOOLS/UNIQUE RESEARCH RESOURCES

It is the policy of the NIH to make available to the public the results and accomplishments of the activities it funds. Restricted availability of unique research resources, upon which further studies are dependent, can impede the advancement of research and delivery of medical care. Notices in the *NIH Guide for Grants and Contracts (Vol. 23, No. 26*, July 15, 1994, http://grants.nih.gov/grants/guide/notice-files/not94-216.html) and the *NIH Grants Policy Statement* (http://grants.nih.gov/grants/policy/nihgps_2003/NIHGPS_Part7.htm) fully explain the policy regarding the distribution of research resources developed with NIH funds.

The NIH encourages the commercialization of research products and allows grantee organizations to make materials available to others for commercial purposes with appropriate restrictions and licensing terms. Where the product of research developed with Federal funding is a patentable but unpatented research product, the terms of a license must be no more restrictive than they would have been if the product had been patented.

F. Joint Ventures and Limited Partnerships

Joint ventures and limited partnerships are eligible provided the entity created qualifies as a small business concern in accordance with the definition in Section III. Size determination of a joint venture entity requires that the combined total number of employees from all affiliates not exceed 500. Other criteria under the definition of a small business concern must also be met.

G. American-Made Equipment and Products

When purchasing equipment or a product under the SBIR/STTR award, the small business concern should purchase only American-made items whenever possible.

H. Profit or Fee

A reasonable profit/fee is available to small business concerns receiving awards under the SBIR/STTR program; *however, this profit/fee must be included in your budget request at the time of application*. The fee is not a "cost" item and may be used by the small business concern for any purpose, including additional effort under the SBIR/STTR award. The fee is intended to be a reasonable profit factor available to for-profit organizations, consistent with normal profit margins provided to profit-making firms for research and development work. However, the amount of the fee approved by the agencies participating in this solicitation normally will not exceed 7% of total costs (direct and indirect) for each phase (I and II) of the project. *The profit/fee applies solely to the small business concern (grantee organization) receiving the SBIR/STTR award and not to any other participant in the project*. However, the grantee may pay a profit/fee to a contractor providing routine goods or services in accordance with normal commercial practice.

I. Additional Information

This Omnibus Solicitation is intended for informational purposes and reflects current planning. If there is *any inconsistency between the information contained herein and the terms of any resulting SBIR/STTR funding agreement, the terms of the funding agreement are controlling*.

Prior to award of an SBIR/STTR funding agreement, the Government may request the applicant small business concern to submit certain organizational, management, personnel, and financial information to ensure responsibility of the applicant organization.

This Omnibus Solicitation is not an offer by the Government and does not obligate the Government to make any specific number of awards. Awards under the SBIR/STTR program are contingent upon the scientific and technical merit and potential for commercialization of an application and the availability of funds for research and development. The Government is not responsible for any monies expended by the applicant organization before award of any funding agreement.

Phase II awards are contingent upon the results demonstrated in Phase I and the scientific and technical merit and commercial potential of the Phase II application and the availability of funds for

research and development. The incurrence of costs by the small business concern prior to the award of a grant imposes no obligation on the Government to either make the award or increase the amount of the award.

If an award is made pursuant to a grant application submitted in response to this Omnibus Solicitation, the grantee may be required to certify that it has not previously been, nor is currently being, paid for essentially equivalent work by any agency of the Federal Government. See Section III for the definition of "essentially equivalent work."

If an award is made under this Omnibus Solicitation for a project, some of whose elements are being or will be supported by another Federal agency, the awarding component and the applicant organization will negotiate a budget that reflects the elimination of any overlapping support.

J. Cost Sharing

Cost sharing is permitted for SBIR/STTR applicants, however it is not required, and it will not be a review criterion. If you are cost sharing the project, be sure that the costs reflected on the budget page(s) are only those Federal funds that you are requesting from the SBIR Program. You may state in the budget justification or elsewhere in the application your plans to cost share.

K. Audit Requirements of For-Profit Organizations

The Department of Health and Human Services (HHS) has specified requirements for non-Federal audits of for-profit (commercial) organizations in HHS' Title 45, Code of Federal Regulations (CFR), Part 74.26, "Non-Federal Audits." Per the regulations, a for-profit (commercial) organization is subject to audit requirements for a non-Federal audit if, during its fiscal year, it expended $300,000 or more under HHS awards and at least one award is an HHS grant.

Title 45 CFR Part 74.26 essentially incorporates the thresholds and deadlines of Office of Management and Budget (OMB) Circular No. A-133, "Audits of States, Local Governments and Non-Profit Organizations," but provides for-profit organizations with two options regarding the type of audit that will satisfy the audit requirements either: (1) a financial related audit (as defined in the Government Auditing Standards, GPO Stock #020-000-00-265-4, http://www.gao.gov/govaud/ybk01.htm) of all the HHS awards in accordance with Government Auditing Standards, or (2) an audit that meets the requirements contained in OMB Circular No. A-133, http://www.whitehouse.gov/omb/circulars/a133/a133.html.

Audits shall be completed and submitted to the office shown below within a period that is either (1) the earlier of 30 days after receipt of the auditor's report(s), or (2) nine months after the end of the audit period (i.e., the organization's fiscal year).

National External Audit Resources
HHS Office of Audit Services
Lucas Place
323 West 8th Street, Room 514
Kansas City, MO 64105

The HHS will be identifying organizations not meeting audit requirements. Failure to comply may jeopardize eligibility for receiving future HHS awards.

L. Time and Effort Reporting for Commercial Organizations

POLICY

Commercial (for-profit) organizations must document salaries and wages charged to contracts and grants by maintaining a labor distribution system for all employees regardless of function. The labor distribution system must account for total hours and charge direct and indirect labor to the appropriate cost objectives to accurately identify labor costs:

- Charged to direct projects.
- Charged to indirect activities.
- Included in the base to which indirect costs are allocated.

Internal Controls

Timekeeping procedures and controls on labor charges are of utmost concern. Unlike other costs, labor is not supported by external documentation or physical evidence, which provides independent checks and balances. It is critical that managers indoctrinate individual employees on their independent responsibility for accurately recording

their time. Internal controls over labor charging should meet the following criteria:

- Responsibility for timekeeping and payroll accounting should be separated.
- Procedures must be clear and reasonable so there is no confusion regarding the rationale for the controls or misunderstanding as to what is and is not permissible.
- Maintenance of controls must be verified continually, and violations must be acted upon promptly and effectively to serve as a deterrent to prospective violations.
- Individual employees must be constantly made aware of controls that act as an effective deterrent against violations. This awareness can be accomplished by emphasizing the importance of accurate time and effort reporting in orientation sessions, periodic meetings, and the posting of messages as reminders.
- Changes on timesheets to the number of hours recorded or the cost center identified should be made by the employee and must be initialed by the employee.
- Company policy must state that the nature of the work performed determines the proper distribution of time, not the availability of funding, type of contract/grant, or other factors.
- Company policy should emphasize that complete and accurate time and effort reporting is an important part of an employee's job. Careless or improper reporting may lead to disciplinary actions under company policies as well as applicable Federal statutes.

Time and Effort Documentation Requirements and Responsibilities

Detailed instructions for time documentation should be established in written company procedures. A manual system would require handwritten pen and ink entries on a paper timesheet reflecting all the days in the pay period. An automated timekeeping system typically would use remote data entry for recording labor charging data and sending it directly to a central computer for processing. Supporting documentation for an automated system would normally consist of computer printouts showing data that appear on source documents, i.e., timesheets in a manual system.

Employee Responsibilities

Whether a manual or automated time and effort reporting system is in place, the employee is personally responsible for:

- After the fact recording of hours (or fractions thereof) on a daily basis.
- Recording all hours worked and all hours absent. All hours should be recorded whether or not they are paid.
- Recording of hours on the timesheet in ink (manual system only).
- Recording the correct distribution of hours by project or indirect category. The nature of the work performed determines the proper distribution of time, not the availability of funding, type of contract/grant, or other factors.
- To ensure accuracy, a listing of project numbers/indirect categories and their descriptions should be provided in writing to each employee.
- Any changes/corrections to timesheets should be made by the employee and must show what was initially recorded, i.e., no erasures or “white out” of entries.
- The employee also must initial any change(s).
- At the end of each pay period, the employee must sign the timesheet or electronically certify the labor distribution in an automated system.

Supervisor Responsibilities

- An authorized company official (e.g., supervisor) must cosign timesheets or electronically certify individual time and effort reporting at the end of each pay period.
- The supervisor is prohibited from completing an employee's timesheet or entering hours in an automated system unless the employee is absent for an extended period of time on some form of authorized leave.

VIII. SCIENTIFIC AND TECHNICAL INFORMATION SOURCES

Health science research literature is available at academic and health science libraries throughout the United States. Information retrieval services are available at these libraries and Regional Medical Libraries through a network supported by the National Library of Medicine. To find a Regional Medical Library in your area, visit http://nnlm.gov/ or contact the Office of Communication and Public Liaison at publicinfo@nlm.nih.gov, (301) 496-6308.

Other sources that provide technology search and/or document services include the organizations listed below. They should be contacted directly for service and cost information.

National Technical Information Service
1-800-553-6847
http://www.ntis.gov

National Technology Transfer Center
Wheeling Jesuit College
1-800-678-6882
http://www.nttc.edu/

Regional Technology Transfer Centers
1-800-472-6785
http://www.ctc.org/NewFiles/RTTCs.html

IX. MODEL AGREEMENT FOR ALLOCATION OF RIGHTS

The STTR legislation (Public Law 107-50, as amended) and the STTR Policy Directive of the Small Business Administration (SBA), require that agencies participating in the STTR program provide guidance for allocating between small business concerns and research institutions intellectual property rights and rights, if any, to carry out follow-on research, development or commercialization. Included in this solicitation, is the guidance as approved by the SBA and the Office of the General Counsel, HHS. The document, entitled "Model Agreement, Small Business Technology Transfer (STTR) Program, Allocation of Rights in Intellectual Property and Rights to Carry Out Follow-on Research, Development, or Commercialization," may be photocopied freely. The parties to the Agreement are advised that this "model" may be revised through negotiation between the small business concern and the single, "partnering" research institution.

The *Agreement is a requirement to receive support under the STTR program. Therefore, by signing the Face Page of the grant application, the Official Signing for Applicant Organization (small business concern) certifies that the Agreement with the research institution will be effective at the time of award*. A copy of the Agreement must be furnished upon request of the NIH awarding component.

X. POLICY ISSUES

A. Resubmission of Unpaid RFA Applications and Resubmission of Applications with a Changed Grant Activity Mechanism

See http://grants1.nih.gov/grants/guide/notice-files/NOT-OD-03-019.html.

The majority of grant applications submitted to NIH each year are investigator-initiated. However, the Institutes and Centers of NIH also solicit grant applications on specific topics through the use of Requests for Applications (RFAs). Resubmissions of grant applications fall into the following categories:

1. Applications that were originally submitted in response to an RFA and then resubmitted as an investigator-initiated application.

2. Applications that were originally submitted as investigator-initiated applications and subsequently resubmitted in response to an RFA.

3. Applications that were originally submitted using one grant mechanism and subsequently resubmitted using a different grant mechanism (for example, an application that was originally an R01 and then is resubmitted as an R21).

Since an RFA often has special considerations of eligibility, scientific scope, and review criteria, it is felt that most unfunded applications should be resubmitted as **new** applications. Similarly, a change of grant mechanism (from an R01 to an R21 or from an R03 to an R01, for example) usually involves a change of eligibility criteria, application characteristics, dollar limits, time limits, or review criteria. This also suggests that consideration as a

new application is the most appropriate course. Because the application will be new, it will be easier to conform to the new application requirements, which should be an advantage to the applicant in the review process. Additionally, submission of a new application will allow the applicant to benefit fully from the NIH policy that allows an applicant to submit two revisions (see http://grants.nih.gov/grants/policy/amendedapps.htm).

NEW APPLICATIONS: The new application must be submitted on the scheduled due dates for new applications (see http://grants.nih.gov/grants/funding/submissionschedule.htm). It must not include an Introduction describing the changes and improvements made; and the text must not be marked to indicate the changes. Although the investigator may still benefit from the previous review, the applicant should not explicitly address reviewers' comments. The reviewers will not be provided with the previous Summary Statement. The investigator will be allowed to submit the new application and up to two revised versions of this application, should that be necessary.

POLICY: This general policy on application resubmission, stated below, applies to all grant mechanisms that might be solicited via an RFA and to instances where there is a change in mechanism. There may, however, be exceptions to this policy, which will be clearly identified in the original RFA or in a follow-up RFA.

1. When an application that was submitted in response to an RFA is not funded and the investigator wishes to resubmit an application on this topic as an investigator-initiated application, it is to be submitted as a **new** application, unless provisions for submission of a revised application are clearly delineated in the RFA. In addition, if a subsequent RFA specifically solicits revisions of unfunded applications from a previous RFA, the instructions in the second RFA should be followed. In all other cases, applications submitted in response to an RFA and then resubmitted as an investigator-initiated application must be submitted as a **new** application.

2. When a previously unfunded application, originally submitted as an investigator-initiated application is to be submitted in response to an RFA, it is to be prepared as a **new** application.

3. When an unfunded application that was reviewed for a particular research grant mechanism (for example, R01) is to be submitted for a different grant mechanism (for example, R03), it is to be prepared as a **new** application.

B. Revised NIH Policy on Submission of a Revised (Amended) Application

The NIH will not consider a third revision (A3) or higher amendment to an application for extramural support. As of May 7, 2003, there is no longer a time limit for the submission of the first and second revisions (A1 and A2). This policy applies to all NIH extramural funding mechanisms.

In submitting a revised application, it is worth noting that a lengthy hiatus after the initial submission may be marked by significant advances in the scientific field and the comments of the reviewers may no longer be relevant. Principal investigators and their institutions need to exercise their best judgment in determining the advisability of submitting a revised application after several years have elapsed.

The policy limiting the number of revisions was established following analysis of data indicating that investigators who receive initial funding for an amended application have a lower success rate in obtaining support for a follow-on competing application. The likelihood of subsequent success decreased with an increasing number of amendments. After three reviews, it was felt that it was time for investigators to take a fresh approach to their research proposals.

Investigators who have submitted three versions of an application and have not been successful often ask NIH staff how different the next application submitted has to be to be considered a new application. It is recognized that investigators are trained in a particular field of science and are not likely to make drastic changes in their research interests; however, a new application following three reviews is expected to be substantially different in content and scope with more significant differences than are normally encountered in a revised application. Simply re-wording the title and/or Specific Aims or incorporating minor changes in response to comments in the previous Summary Statement does not constitute a substantial change in scope or content. Changes to the Research Plan should produce a significant change in direction and approach for the research project. Thus, a new application would include substantial changes in all sections of the Research Plan, particularly the

Specific Aims and the Research Design and Methods sections.

In the referral process, NIH staff look at all aspects of the application, not just the title and Description (abstract). Requesting review by a different review committee does not affect the implementation of this policy. When necessary, previous applications are analyzed for similarities to the present one. Thus, identical applications or those with only minor changes will not be accepted for review.

C. Data-Sharing Policy

All investigator-initiated applications with direct costs greater than $500,000 in any single year will be expected to address data-sharing in their application. Applicants are encouraged to discuss their data-sharing plan with their program contact at the time they negotiate an agreement with the Institute/Center (IC) staff to accept assignment of their application as described at http://grants.nih.gov/grants/guide/notice-files/NOT-OD-02-004.html.

Reviewers will not factor the proposed data-sharing plan into the determination of scientific merit or priority score. Program staff will be responsible for overseeing the data-sharing policy and for assessing the appropriateness and adequacy of the proposed data-sharing plan.

NIH recognizes that data-sharing may be complicated or limited, in some cases, by institutional policies, local IRB rules, as well as local, state and Federal laws and regulations, including the Privacy Rule. As NIH stated in the March 1, 2002 draft data-sharing statement (http://grants.nih.gov/grants/guide/notice-files/NOT-OD-02-035.html), the rights and privacy of people who participate in NIH-sponsored research must be protected at all times. Thus, data intended for broader use should be free of identifiers that would permit linkages to individual research participants and variables that could lead to deductive disclosure of the identity of individual subjects. When data-sharing is limited, applicants should explain such limitations in their data-sharing plans.

The final NIH statement on data-sharing is largely the same as stated in the March 1, 2002 draft with the following exceptions:

- The effective start date has been changed from January 1, 2003 to October 1, 2003 receipt date.
- This policy applies to applicants seeking $500,000 or more in direct costs in any year of the project period. Such applicants are expected to contact IC program staff prior to submission and are also expected to include a data-sharing plan in their application stating how they will share the data or, if they cannot share the data, why not. Applicants responding to an RFA or RFP will find instructions related to data-sharing in the specific announcement.
- NIH recognizes that the investigators who collect the data have a legitimate interest in benefiting from their investment of time and effort. Therefore, the “timely release and sharing" is defined to be release and sharing no later than the acceptance for publication of the main findings from the final data set. NIH continues to expect that the initial investigators may benefit from first and continuing use but not from prolonged exclusive use.

For more information on data-sharing, please see our website at http://grants.nih.gov/grants/policy/data_sharing/.

D. Inventions and Patents

According to NIH Grants Policy and Federal law, NIH recipient organizations must promptly report all inventions that are either conceived or first actually reduced to practice using NIH grant funds. Invention reporting compliance is described at http://www.iedison.gov. The grantee is encouraged to submit reports electronically using Interagency Edison (http://www.iedison.gov). Inquiries or correspondence should be directed to **Extramural Inventions and Technology Resources Branch of the Office of Policy for Extramural Research Administration, OER, NIH, 6705 Rockledge Dr., MSC 7980, Bethesda, MD 20892-7980, (301) 435-1986.** Information from these reports is retained by the NIH as confidential and does not constitute any public disclosure. Failure to report as described at 37CFR Section 401.14 is a violation of 35 USC 202 and may result in loss of the rights of the applicant institution.

E. Just-In-Time Policy

Several elements of an application are no longer required at the time the application is submitted. Instead, this information will be requested later in the review cycle (i.e., "just-in-time") to ensure that it is current. The information eligible for just-in-time submission includes:

- Current Other Support: See Other Support section for policy information. Use the sample format provided on the Other Support Format Page (MS WORD or PDF). For all Key Personnel, provide details on how you would adjust any budgetary, scientific, or effort overlap if this application is funded.
- Certifications:
  - If human subjects are involved, provide the assurance type and number (if not previously provided) and the Certification of IRB Review and Approval. Pending or out-of-date approvals are not acceptable.
  - If vertebrate animals are involved and this information was not previously provided on the Face Page of the application, provide assurance number, verification of IACUC approval with date, and any IACUC-imposed changes. Pending or out-of-date approvals are not acceptable.
- Human Subjects Education: For grants involving Human Subjects, provide certification that each person identified under Key Personnel involved in the design or conduct of research involving human subjects has completed an educational program in the protection of human subjects. For further information refer to the separate section on Required Education in the Protection of Human Research Participants.

Applicants are advised to submit this information only when requested by the awarding component. Guidance for submitting this information will be provided at the time of the request.

F. Other Support

Do not submit information on Other Support with the application beyond that required in the biographical sketch. If this information is included at the time of application, processing may be delayed or the application may be returned to the applicant without review.

Information on Other Support is required for all applications that are to receive grant awards; NIH will request complete and up to date information from applicants at an appropriate time **after peer review**. The Institute/Center scientific program and grants management staff will review this information prior to award.

Don't confuse "Research Support" with "Other Support." Though they sound similar, these parts of the application are very different. As part of the biosketch section of the application, "Research Support" highlights your accomplishments, and those of your colleagues, as scientists. It is used by reviewers for the "investigator" review criterion. In contrast, "Other Support" information is required for all applications that are selected to receive grant awards. NIH staff will request complete and up-to-date "other support" information from you *after* peer review. This information will be used to check that the proposed research has not already been Federally-funded.

OTHER SUPPORT POLICY

Other Support includes all financial resources, whether Federal, non-Federal, commercial or institutional, available in direct support of an individual's research endeavors, including but not limited to research grants, cooperative agreements, contracts, and/or institutional awards. Training awards, prizes, or gifts are not included.

Information on Other Support assists awarding agency staff in the identification and resolution of potential overlap of support. Overlap, whether scientific, budgetary, or commitment of an individual's effort greater than 100 percent, is not permitted. The goals in identifying and eliminating overlap are to ensure that sufficient and appropriate levels of effort are committed to the project; that there is no duplication of funding for scientific aims, specific budgetary items, or an individual's level of effort; and that only funds necessary to the conduct of the approved project are included in the award.

Budgetary overlap occurs when duplicate or equivalent budgetary items (e.g., equipment, salary) are requested in an application but are already provided for by another source.

Commitment overlap occurs when a person's time commitment exceeds 100 percent, whether or not salary support is requested in the application. While information on other support is only requested for Key Personnel (excluding consultants), no individuals on the project may have commitments in excess of 100 percent.

Scientific overlap occurs when: (1) substantially the same research is proposed in more than one application or is submitted to two or more different funding sources for review and funding consideration, or (2) a specific research objective and the research design for accomplishing that objective are the same or closely related in two or more applications or awards, regardless of the funding source. Potential scientific overlap is to be addressed by the SRG *only* by its identification in an Administrative Note in the Summary Statement.

Resolution of Overlap. Resolution of overlap occurs at the time of award in conjunction with applicant institution officials, the principal investigator, and awarding agency staff.

OTHER SUPPORT INFORMATION

OTHER SUPPORT FORMAT PAGE (MS WORD OR PDF)

Information on Other Support should be submitted ONLY when requested by the NIH Institute/Center (IC).

There is no form page for Other Support. Follow the sample format on the Other Support Format Page. The sample is intended to provide guidance regarding the type and extent of information requested.

The following instructions should be followed in completing the information:

- Information on active and pending Other Support is required for Key Personnel, excluding consultants. For individuals with no active or pending support, indicate "None." Neither the application under consideration nor the current PHS award for this project should be listed as Other Support.
- If the support is provided under a consortium/subcontract arrangement or is part of a multiproject award, indicate the project number, principal investigator, and source for the overall project, and provide all other information for the subproject only.

INSTRUCTIONS FOR SELECTED ITEMS

Project Number: If applicable, include a code or identifier for the project.

Source: Identify the agency, institute, foundation, or other organization that is providing the support.

Major Goals: Provide a brief statement of the overall objectives of the project, subproject, or subcontract.

Dates of Approved/Proposed Project: Indicate the inclusive dates of the project as approved/proposed. For example, in the case of NIH support, provide the dates of the approved/proposed competitive segment.

Annual Direct Costs: In the case of an active project, provide the current year's direct cost budget. For a pending project, provide the proposed direct cost budget for the initial budget period.

Percent Effort: For an active project, provide the level of effort (even if unsalaried) as approved for the current budget period. For a pending project, indicate the level of effort as proposed for the initial budget period. In cases where an individual's appointment is divided into academic and summer segments, indicate the proportion of each devoted to the project.

Overlap: After listing all support, summarize for each individual any potential overlap with the active or pending projects and this application in terms of the science, budget, or an individual's committed effort.

G. DUNS Number

Applicants **must have** a DUN and Bradstreet (D&B) Data Universal Numbering System (DUNS) number as the Universal Identifier when applying for Federal grants or cooperative agreements. Form Page 1 includes a field for the applicant to enter the organization's DUNS number. The DUNS number is a nine-digit number assigned by Dun and Bradstreet Information Services. If the organization does not have a DUNS number, complete the US D&B D-U-N-S Number Request Form or contact Dun and

Bradstreet by telephone directly at 1-866-705-5711 (toll-free) to obtain one. A DUNS number will be provided immediately by telephone at no charge.

H. Government Use of Information Under Privacy Act

The Privacy Act of 1974 (5 U.S.C. 552a) is a records management statute and regulates the collection, maintenance, use, and dissemination of personal information by Federal agencies. In accordance with the Act, the PHS is required to provide the following notification to each individual whom it asks to supply information.

The PHS maintains applications and grant records pursuant to its statutory authority for awarding grants. The purpose of the information collection is to aid in the review, award, and administration of PHS programs. Provision of information is voluntary; however, a lack of sufficient information may hinder the ability of the PHS to review applications, monitor grantee performance, or perform overall management of grant programs.

The Privacy Act authorizes discretionary disclosure of this information within the Department of Health and Human Services and outside the agency to the public, as required by the Freedom of Information Act and the associated DHHS regulations (45 CFR 5), including the Congress acting within its legislative authority, the National Archives, the General Accounting Office, the Bureau of Census, law enforcement agencies, and pursuant to a court order. Information also may be disclosed outside the Department, if necessary, for the following purposes:

1. To a Congressional office at the request of the record subject;
2. To the Department of Justice as required for litigation;
3. To the cognizant audit agency for auditing;
4. To qualified experts not within the definition of Department employees as prescribed in Department Regulations (45 CFR 5b.2) for opinions as part of the application review/award process;
5. For an authorized research purpose under specified conditions;
6. To contractors for the purpose of processing, maintaining, and refining records in the system. Contractors will be required to maintain Privacy Act safeguards with respect to such records;
7. To a Federal agency, in response to its request, in connection with the letting of a contract, or the issuance of a license, grant, or other benefit by the requesting agency, to the extent that the records are relevant and necessary to the requesting agency's decision on the matter; and
8. To the applicant organization in connection with the review of an application or performance or administration under the terms and conditions of the award, or in connection with problems that might arise in performance or administration if an award is made.

I. Information Available to the Principal Investigator

Under the provisions of the Privacy Act, principal investigators may request copies of records pertaining to their grant applications from the PHS component responsible for funding decisions. Principal investigators are given the opportunity under established procedures to request that the records be amended if they believe they are inaccurate, untimely, incomplete, or irrelevant. If the PHS concurs, the records will be amended.

J. Information Available to the General Public

The PHS makes information about awarded grants available to the public, including the title of the project, the grantee institution, the principal investigator, and the amount of the award. The description, on Form Page 2 of a funded research grant application is sent to the National Technical Information Service (NTIS), U.S. Department of Commerce, where the information is used for the dissemination of scientific information and for scientific classification and program analysis purposes. These descriptions are available to the public from the NTIS.

NIH also routinely places information about awarded grants, including project title, name of the principal investigator, and project description (abstract) in the CRISP system.

The Freedom of Information Act and implementing DHHS regulations (45 CFR Part 5) require the

release of certain information about grants, upon request, irrespective of the intended use of the information. Trade secrets and commercial, financial, or otherwise intrinsically valuable information that is obtained from a person or organization and that is privileged or confidential information may be withheld from disclosure. Information, which, if disclosed, would be a clearly unwarranted invasion of personal privacy, also may be withheld from disclosure. Although the grantee institution and the principal investigator will be consulted about any such release, the PHS will make the final determination. Generally available for release, upon request, except as noted above, are all funded grant applications including their derivative-funded noncompeting supplemental grant applications; pending and funded noncompeting continuation applications; progress reports of grantees; and final reports of any review or evaluation of grantee performance conducted or caused to be conducted by the DHHS. Generally, not available for release to the public are: competing grant applications (initial, competing continuation, and supplemental) for which awards have not been made; evaluative portions of site visit reports; and Summary Statements of findings and recommendations of review groups.

ACCESS TO RESEARCH DATA

By regulation (45 CFR 74.36), grantees that are institutions of higher education, hospitals, or non-profit organizations are required to release research data first produced in a project supported in whole or in part with Federal funds that are cited publicly and officially by a Federal agency in support of an action that has the force and effect of law (e.g., regulations and administrative orders). The term “research data” is defined as the recorded factual material commonly accepted in the scientific community as necessary to validate research findings. It does not include preliminary analyses; drafts of scientific papers; plans for future research; peer reviews; communications with colleagues; physical objects (e.g., laboratory samples, audio or video tapes); trade secrets; commercial information; materials necessary to be held confidential to a researcher until publication in a peer-reviewed journal; information that is protected under the law (e.g., intellectual property); personnel and medical files and similar files, the disclosure of which would constitute an unwarranted invasion of personal privacy or information that could be used to identify a particular person in a research study.

These requirements do not apply to commercial organizations or to research data produced by state or local governments. However, if a state or local governmental grantee contracts with an educational institution, hospital or non-profit organization, and the contract results in covered research data, those data are subject to these disclosure requirements.

XI. ASSURANCES AND CERTIFICATIONS

Each application to the PHS requires that the following assurances and certifications be verified by the signature of the Official Signing for Applicant Organization on the Face Page of the application.

The assurances listed and explained below may or may not be applicable to your project, program, or type of applicant organization. There are a number of additional public policy requirements with which applicants and grantees must comply. Contact your institution's research grant administrative office or consult the *NIH Grants Policy Statement* for additional information. A copy of the NIH Grants Policy Statement may be obtained from the NIH website (http://grants.nih.gov/grants/policy/policy.htm). In signing the application Face Page, the duly authorized representative of the applicant organization certifies that the applicant organization will comply with the following policies, assurances and/or certifications:

A. Human Subjects

(Also see **Section XII: Supplemental Instructions for Preparing the Human Subjects Section of the Research Plan**.)

The DHHS regulations for the protection of human subjects provide a systematic means, based on established, internationally recognized ethical principles, to safeguard the rights and welfare of individuals who participate as subjects in research activities supported or conducted by the DHHS. The regulations stipulate that an applicant organization, whether domestic or foreign, bears responsibility for safeguarding the rights and welfare of human subjects in DHHS-supported research activities. The regulations require that applicant organizations proposing to involve human subjects in non-exempt research file a written Assurance of Compliance with

the Office for Human Research Protections (OHRP), establishing appropriate policies and procedures for the protection of human subjects. These regulations, 45 CFR 46, Protection of Human Subjects, are available from the OHRP, National Institutes of Health, Rockville, MD 20892, (301) 496-7041.

No non-exempt research involving human subjects can be conducted under a DHHS-sponsored award unless that organization is operating in accordance with an approved Assurance of Compliance and provides verification that an appropriate Institutional Review Board (IRB) has reviewed and approved the proposed activity in accordance with the DHHS regulations. An award will not be made to an applicant unless that applicant is affiliated with an assured organization that accepts responsibility for compliance with the DHHS regulations. Foreign applicant organizations must also comply with the provisions of the regulations.

The Center of Biologics Evaluation and Research (CBER) at FDA regulates the use of biological products in humans, at the investigational and marketing phases, including somatic cell therapies and gene therapies. If your work involves these areas or preclinical research that will support later work in these areas, please see the Office of Recombinant DNA Activities Web site at http://www4.od.nih.gov/oba/.

Note: Under DHHS regulations to protect human subjects from research risks, certain research areas are exempt. (See Exemption Categories). Nonetheless, studies that are exempt from the human subjects regulations must still address the inclusion of women and minorities and children in clinical research in the study design. Therefore, applications will be evaluated for compliance with this policy. Research involving the collection or study of existing data, documents, records, pathological specimens, diagnostic specimens, or tissues that are individually identifiable are also to be included within the term “research involving human subjects.”

Inappropriate designations of the noninvolvement of human subjects or of exempt categories of research may result in delays in the review of an application or the return of the application without review. The PHS will make a final determination as to whether the proposed activities are covered by the regulations or are in an exempt category, based on the information provided in the Research Plan. In doubtful cases, consult with the OHRP DHHS by accessing their website http://www.hhs.gov/ohrp/ for guidance and further information.

Federal requirements to protect human subjects apply to most research on human specimens (such as cells, blood, and urine), residual diagnostic specimens and medical information. The NIH has developed a user-friendly brochure to help investigators understand how the human subjects regulations 45CFR46 apply to their research. You may download this brochure, entitled "Research on Human Specimens: Are You Conducting Research Using Human Subjects?" (http://www.cancerdiagnosis.nci.nih.gov/specimens/brochure.html).

RESEARCH ON TRANSPLANTATION OF HUMAN FETAL TISSUE

In signing the application Face Page, the duly authorized representative of the applicant organization certifies that if research on the transplantation of human fetal tissue is conducted, the applicant organization will make available, for audit by the Secretary, DHHS, the physician statements and informed consents required by section 498A (b)(2) and (c) of the Public Health Service Act, 42 U.S.C. 289g (b)(2) and (c), or ensure DHHS access to those records, if maintained by an entity other than the applicant organization.

SPECIAL POPULATIONS

Investigators who conduct research involving fetuses, pregnant women, human *in vitro* fertilization, prisoners, or children must follow the provisions of the regulations in Subparts B, C, and D of 45 CFR 46, respectively, which describe the additional protections required for these populations. Relevant information may be obtained at the OHRP website (http://www.hhs.gov/ohrp/assurances/assurances_index.html). Exemptions 1-6 (See Human Subjects Research Supplement) do not apply to research involving prisoners, fetuses, pregnant women, or human in-vitro fertilization (see Subparts B and C). Also, Exemption 2 below does not apply to research with children (see Subpart D), for research involving survey or interview procedures or observation of public behavior, except for research involving observations of public behavior when the investigator(s) do not participate in the activities being observed.

REQUIRED EDUCATION IN THE PROTECTION OF HUMAN RESEARCH PARTICIPANTS

NIH requires education on the protection of human research participants for all individuals identified as Key Personnel before funds are awarded for applications or contract proposals involving human subjects. For information relating to this requirement, see the following notices: (http://grants.nih.gov/grants/guide/notice-files/NOT-OD-00-039.html and http://grants.nih.gov/grants/guide/notice-files/NOT-OD-01-061.html), and Frequently Asked Questions (http://grants.nih.gov/grants/policy/hs_educ_faq.htm). Prior to award, applicants will be required to provide a description of education completed in the protection of human subjects for all Key Personnel. While NIH does not endorse programs, there are curricula available that can provide guidance or that can be modified to provide training in this area. See http://ohsr.od.nih.gov/ for computer-based training developed for NIH that can be downloaded at no charge. For information on facilitating education and developing curricula, see http://www.nih.gov/sigs/bioethics.

RESEARCH USING HUMAN EMBRYONIC STEM CELLS

http://stemcells.nih.gov/index.asp

In signing the application Face Page, the duly authorized representative of the applicant organization certifies that if research using human embryonic stem cells is proposed, the applicant organization will be in compliance with the "Notice of Extended Receipt Date and Supplemental Information Guidance for Applications Requesting Funding that Proposes Research with Human Embryonic Stem Cells" (http://grants.nih.gov/grants/guide/notice-files/NOT-OD-02-006.html).

NIH POLICY ON REPORTING RACE AND ETHNICITY DATA: SUBJECTS IN CLINICAL RESEARCH

Also see "**Guidance on Reporting Ethnicity/Race and Sex/Gender in Clinical Research"** in Human Subjects Research Supplemental Instructions.

The NIH has adopted the 1997 Office of Management and Budget (OMB) revised minimum standards for maintaining, collecting, and presenting data on race and ethnicity for all grant, contract, and intramural proposals and for all active research grants, cooperative agreements, contracts, and intramural projects. The minimum standards are described in the 1997 OMB Directive 15, http://www.whitehouse.gov/omb/fedreg/ombdir15.html.

The 1997 OMB revised minimum standards include two ethnic categories (Hispanic or Latino, and Not Hispanic or Latino) and five racial categories (American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, and White). The categories in this classification are social-political constructs and should not be interpreted as being anthropological in nature. Using self-reporting or self-identification to collect an individual's data on ethnicity and race, investigators should use two separate questions with ethnicity information collected first followed by the option to select more than one racial designation.

Collection of this information and use of these categories is required for research that meets the NIH definition of clinical research.

Revised Minimum Standards for Maintaining, Collecting, and Presenting Federal Data on Race and Ethnicity

The following are the ethnic and racial definitions for the minimum standard categories (1997 OMB Directive 15):

Ethnic Categories:

Hispanic or Latino: A person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race. The term "Spanish origin" can also be used in addition to "Hispanic or Latino."

Not Hispanic or Latino

Racial Categories:

American Indian or Alaska Native: A person having origins in any of the original peoples of North, Central, or South America, and who maintains tribal affiliations or community attachment.

Asian: A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam. (Note: Individuals from the Philippine

Islands have been recorded as Pacific Islanders in previous data collection strategies.)

Black or African American: A person having origins in any of the black racial groups of Africa. Terms such as "Haitian" or "Negro" can be used in addition to "Black or African American."

Native Hawaiian or Other Pacific Islander: A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.

White: A person having origins in any of the original peoples of Europe, the Middle East, or North Africa.

Using respondent self-report or self-identification to collect an individual's data on ethnicity and race, investigators should use two separate questions with ethnicity information collected first followed by the option to select more than one racial designation.

When reporting these data in the aggregate, investigators should report: (a) the number of respondents in each ethnic category; (b) the number of respondents who selected only one category for each of the five racial categories; (c) the total number of respondents who selected multiple racial categories reported as the "number selecting more than one race"; and (d) the number of respondents in each racial category who are Hispanic or Latino. Investigators may provide the detailed distributions, including all possible combinations, of multiple responses to the racial designations as additional information. However, more detailed items should be designed in a way that they can be aggregated into the required categories for reporting purposes. NIH is required to use these definitions to allow comparisons to other Federal databases, especially the census and national health databases. Federal agencies will not present data on detailed categories if doing so would compromise data quality or confidentiality standards.

B. Vertebrate Animals

NIH no longer requires Institutional Animal Care and Use Committee (IACUC) approval of the proposed research **before NIH peer review** of an application (http://grants1.nih.gov/ grants/guide/notice-files/NOT-OD-02-064.html).

In August, 2002 NIH announced an IACUC "just-in-time" process for applications submitted for the October 1, 2002 deadline or other deadlines where the applications had a May/June 2003 Council review. The PHS policy requirement that no award may be made without an approved Assurance and without verification of IACUC approval remains in effect. The new policy gave institutions flexibility in the timing of IACUC review relative to the submission of an application and the verification of IACUC review. The policy does not require that IACUC approval be deferred. Institutional officials retain the discretion to require IACUC approval prior to NIH peer review in circumstances of their choosing if deemed necessary. As part of the NIH peer review process, the scientific review group will continue to address the adequacy of animal usage and protections in the review of an application and will continue to raise any concerns about animal welfare issues. Verification of IACUC approval will be required in a "just-in-time" fashion prior to award.

The PHS *Policy on Humane Care and Use of Laboratory Animals* requires that applicant organizations proposing to use vertebrate animals file a written Animal Welfare Assurance with the Office of Laboratory Animal Welfare (OLAW), establishing appropriate policies and procedures to ensure the humane care and use of live vertebrate animals involved in research activities supported by the PHS. The PHS policy stipulates that an applicant organization, whether domestic or foreign, bears responsibility for the humane care and use of animals in PHS-supported research activities. This policy implements and supplements the *U.S. Government Principles for the Utilization and Care of Vertebrate Animals Used in Testing, Research, and Training* and requires that institutions use the *Guide for the Care and Use of Laboratory Animals* as a basis for developing and implementing an institutional animal care and use program. This policy does not affect applicable state or local laws or regulations that impose more stringent standards for the care and use of laboratory animals. All institutions are required to comply, as applicable, with the Animal Welfare Act as amended (7 USC 2131 et sec.) and other Federal statutes and regulations relating to animals. These documents are available from the Office of Laboratory Animal Welfare, National Institutes of Health, Bethesda, MD 20892, (301) 496-7163.

The PHS policy defines "animal" as "any live, vertebrate animal used or intended for use in research, research training, experimentation or biological testing or for related purposes."

No PHS award for research involving vertebrate animals will be made to an applicant organization unless that organization is operating in accordance

with an approved Animal Welfare Assurance and provides verification that the IACUC has reviewed and approved the proposed activity in accordance with the PHS policy. Applications may be referred by the PHS back to the IACUC for further review in the case of apparent or potential violations of the PHS policy. No award to an individual will be made unless that individual is affiliated with an assured organization that accepts responsibility for compliance with the PHS policy. Foreign applicant organizations applying for PHS awards for activities involving vertebrate animals are required to comply with PHS policy or provide evidence that acceptable standards for the humane care and use of animals will be met.

C. Debarment and Suspension

Executive Order 12549, "Debarment and Suspension," mandated development of a Government-wide debarment and suspension system for nonprocurement transactions with Federal agencies. Executive Order 12689 and Section 2455 of the Federal Acquisition Streamlining Act of 1994 further required Federal agencies to establish regulations for reciprocal Government-wide effect across procurement and nonprocurement debarment and suspension actions. This reciprocity rule is effective for any debarment, suspension or other Government-wide exclusion initiated on or after August 25, 1995. DHHS regulations implementing Executive Orders 12549 and 12689 and Section 2455 of the Federal Acquisition Regulation are provided in 45 CFR 76, "Government-wide Debarment and Suspension (Nonprocurement) and Government-wide Requirements for Drug-Free Workplace (Grants)." Accordingly, before a grant award can be made, the applicant organization must make the following certification (Appendix A of the DHHS regulations):

"1. The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals (including research personnel):

"a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded by any Federal department or agency;

"b. Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

"c. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and

"d. Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State, or local) terminated for cause or default.

"2. Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal."

Grantees are required to obtain a similar certification from most subawardees, called "lower tier participants." (See 45 CFR 76, Appendices A and B.)

D. Drug-Free Workplace

The Drug-Free Workplace Act of 1988 (Public Law 100-690, Title V, Subtitle D) requires that all grantees receiving grants from any Federal agency certify to that agency that they will maintain a drug-free workplace. DHHS regulations implementing the Act are provided in 45 CFR 76, "Government-wide Debarment and Suspension (Nonprocurement) and Government-wide Requirements for Drug-Free Workplace (Grants)." Accordingly, before a grant award can be made, the applicant organization must make the certification set forth below (Appendix C of the DHHS regulations). The certification is a material representation of fact upon which reliance will be placed by the PHS awarding component. False certification or violation of the certification shall be grounds for suspension of payments, suspension or termination of grants, or Government-wide suspension or debarment.

The applicant organization certifies, "that it will continue to provide a drug-free workplace by:

"(a) Publishing a statement notifying employees that the unlawful manufacture, distribution,

dispensing, possession or use of a controlled substance is prohibited in the grantee's workplace and specifying the actions that will be taken against employees for violation of such prohibition;

"(b) Establishing an ongoing drug-free awareness program to inform employees about:

The dangers of drug abuse in the workplace;

The grantee's policy of maintaining a drug-free workplace;

Any available drug counseling, rehabilitation, and employee assistance programs, and

The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;

"(c) Making it a requirement that each employee to be engaged in the performance of the grant be given a copy of the statement required by paragraph (a);

"(d) Notifying the employee in the statement required by paragraph (a) that, as a condition of employment under the grant, the employee will:

Abide by the terms of the statement; and notify the employer in writing of his or her conviction for a violation of a criminal drug statute occurring in the workplace no later than 5 calendar days after such conviction;

"(e) Notifying the agency in writing within 10 calendar days after receiving notice under subparagraph (d)(2) from an employee or otherwise receiving actual notice of such conviction. Employers of convicted employees must provide notice, including position title, to every grant officer or other designee on whose grant activity the convicted employee was working, unless the Federal agency has designated a central point for the receipt of such notices. Notice shall include the identification number(s) of each affected grant;

"(f) Taking one of the following actions, within 30 calendar days of receiving notice under subparagraph (d)(2), with respect to any employee who is so convicted:

Taking appropriate personnel action against such an employee, up to and including termination, consistent with the requirements of the Rehabilitation Act of 1973, as amended; or

Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency;

"(g) Making a good faith effort to continue to maintain a drug-free workplace through implementation of paragraphs (a), (b), (c), (d), (e), and (f)"

For purposes of paragraph (e), regarding agency notification of criminal drug convictions, the DHHS has designated the following central point for receipt of such notices:

Division of Grants Management and Oversight
Office of Management and Acquisition
Department of Health and Human Services
Room 517-D
200 Independence Avenue, S.W.
Washington, DC 20201

E. Lobbying

Title 31, United States Code, Section 1352, entitled "Limitation on Use of Appropriated Funds to Influence Certain Federal Contracting and Financial Transactions," generally prohibits recipients of Federal grants and cooperative agreements from using Federal (appropriated) funds for lobbying the Executive or Legislative Branches of the Federal Government in connection with a specific grant or cooperative agreement. Section 1352 also requires that each person who requests or receives a Federal grant or cooperative agreement must disclose lobbying undertaken with non-Federal (nonappropriated) funds. These requirements apply to grants and cooperative agreements exceeding $100,000 in total costs. DHHS regulations implementing Section 1352 are provided in 45 CFR Part 93, "New Restrictions on Lobbying."

The complete Certification Regarding Lobbying is provided below.

"The undersigned (authorized official signing for the applicant organization) certifies, to the best of his or her knowledge and belief that:

"(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection

with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

"(2) If any funds other than Federally appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form LLL, "Disclosure of Lobbying Activities," in accordance with its instructions.

"(3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

"This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure."

Standard Form LLL, "Disclosure of Lobbying Activities," its instructions, and continuation sheet are available from GrantsInfo, National Institutes of Health, e-mail: GrantsInfo@nih.gov, (301) 435-0714.

F. Nondelinquency on Federal Debt

The Federal Debt Collection Procedure Act, 28 U.S.C. 3201 (e), provides that an organization or individual that is indebted to the United States, and has a judgment lien filed against it, is ineligible to receive a Federal grant. NIH cannot award a grant unless the authorized organizational official of the applicant organization (or individual as in the case of an individual Ruth L. Kirschstein National Research Service Award) certifies, by means of his/her signature on the application, that the organization is not delinquent in repaying any Federal debt. If the applicant discloses delinquency on a debt owed to the Federal Government, NIH may not award the grant until the debt is satisfied or satisfactory arrangements are made with the agency to which the debt is owed.

G. Research Misconduct

Each institution that receives or applies for a research, research training, or research-related grant or cooperative agreement under the Public Health Service Act must certify that the institution has established administrative policies as required by (1) 42 CFR Part 50, Subpart A, "Responsibilities for PHS Awardee and Applicant Institutions for Dealing with and Reporting Possible Misconduct in Science" and (2) 42 CFR 94, "Public Health Service Standards for the Protection of Research Misconduct Whistleblowers" (effective on the date set forth in the final rule).

The signature of the official signing for the applicant organization on the Face Page of the application serves as certification that:

1. The institution will comply with the requirements of the PHS regulations for dealing with reporting possible scientific misconduct under 42 CFR Part 50, Subpart A, and for protecting research misconduct whistleblowers under 42 CFR Part 94;
2. The institution has established policies and procedures incorporating the provisions set forth in 42 CFR Part 50, Subpart A, and 42 CFR Part 94;
3. The institution will provide its policies and procedures to the Office of Research Integrity upon request; and
4. The institution will submit an Annual Report on Possible Research Misconduct (Form 6349). A copy of Form 6349, covering the previous year, will be automatically sent to all PHS awardees by the Office of Research Integrity each January.

"Misconduct in Science" and "Research Misconduct" are defined by the Public Health Service as "fabrication, falsification, plagiarism or other practices that seriously deviate from those that are commonly accepted within the scientific community for proposing, conducting or reporting research. It does not include honest error or honest differences in interpretation or judgments of data."

For further information, please contact:

Office of Research Integrity
Division of Education and Integrity
Rockwall II, Suite 700
5515 Security Lane
Rockville, MD 20852,
Phone: (301) 443-5300
Fax: (301) 594-0042 or (301) 445-5351.

H. Assurance of Compliance (Civil Rights, Handicapped Individuals, Sex Discrimination, Age Discrimination)

Before a grant award can be made, a domestic applicant organization must certify that it has filed with the DHHS Office for Civil Rights: an Assurance of Compliance (Form HHS 690) with Title VI of the Civil Rights Act of 1964 (P.L. 88352, as amended), which prohibits discrimination on the basis of race, color, or national origin; Section 504 of the Rehabilitation Act of 1973 (P.L. 93-112, as amended), which prohibits discrimination on the basis of handicaps; Title IX of the Education Amendments of 1972 (P.L. 92-318, as amended), which prohibits discrimination on the basis of sex; and the Age Discrimination Act of 1975 (P.L. 94-135), which prohibits discrimination on the basis of age.

The Assurance of Compliance Form HHS 690 is available from http://forms.psc.gov/forms/HHS/hhs.html.

Assurance of Compliance Form HHS 690 is now used in lieu of individual assurances: Form HHS 441, Civil Rights; Form HHS 641, Handicapped Individuals; Form HHS 639-A, Sex Discrimination; and Form HHS 680, Age Discrimination.

I. Recombinant DNA and Human Gene Transfer Research

The *National Institutes of Health Guidelines for Research Involving Recombinant DNA Molecules (NIH Guidelines)* apply to NIH-funded and non-NIH-funded gene transfer projects that are conducted at or sponsored by an institution that receives NIH support for recombinant DNA research. As defined by the *NIH Guidelines*, recombinant DNA molecules are either: (1) molecules that are constructed outside living cells by joining natural or synthetic DNA segments to DNA molecules that can replicate in a living cell; or (2) DNA molecules that result from the replication of those described in (1). The *NIH Guidelines* set forth principles and standards for safe and ethical conduct of recombinant DNA research and apply to both basic and clinical research studies. Specific guidance for the conduct of human gene transfer studies appears in the appendix of the document (Appendix M). The *NIH Guidelines* should be reviewed carefully to ensure compliance with all other requirements for the conduct of projects involving recombinant DNA research and human gene transfer. Failure to comply with the *NIH Guidelines* may result in suspension, limitation, or termination of NIH funds for recombinant DNA research at the organization or a requirement for NIH prior approval of any or all recombinant DNA projects at the organization. A copy of *the NIH Guidelines* is posted at the following URL: http://www4.od.nih.gov/oba/rac/guidelines/guidelines.html and may be obtained from the NIH Office of Biotechnology Activities, 6705 Rockledge Drive, Suite 750, Bethesda, MD 20892, 301-496-9838.

J. Financial Conflict of Interest

NIH requires grantees and investigators (except Phase I SBIR/STTR applicants) to comply with the requirements of 42 CFR Part 50, Subpart F, "Responsibility of Applicants for Promoting Objectivity in Research for which PHS Funding is Sought." These requirements promote objectivity in research by establishing standards to ensure there is no reasonable expectation that the design, conduct, or reporting of research funded under PHS grants or cooperative agreements will be biased by any conflicting financial interest of an investigator.

The signature of the authorized organizational official on the Face Page of the application serves as certification of compliance with the requirements of 42 CFR Part 50, Subpart F, including that:

1. There is in effect at the organization a written and enforced administrative process to identify and manage, reduce, or eliminate conflicting financial interests with respect to research projects for which NIH funding is sought.
2. Prior to the expenditure of any NIH funds awarded under a new award, the organization will inform NIH of the existence of any conflicting financial interests of the type covered by 42 CFR 50.605 and assure that the interest has been managed, reduced, or eliminated in accordance with the regulations;

3. The Institution will continue to make similar reports on subsequently identified conflicts; and it will make information available to NIH, upon request, as to how identified conflicting interests have been handled.

K. Smoke-Free Workplace

The PHS strongly encourages all grant recipients to provide a smoke-free workplace and to promote the non-use of all tobacco products. In addition, Public Law 103-227, the Pro-Children Act of 1994, prohibits smoking in certain facilities (or in some cases, any portion of a facility) in which regular or routine education, library, day care, health care, or early childhood development services are provided to children. This is consistent with the PHS mission to protect and advance the physical and mental health of the American people.

L. PHS Metric Program

Consistent with Government-wide implementing regulations, 15 CFR Part 19, Subpart B and/or any other Government-wide requirements, PHS policy is to support Federal transition to the metric system and to use the metric system of measurement in all grants, cooperative agreements, and all other financial assistance awards. Likewise, measurement values in reports, publications, and other communications regarding grants will be in metric.

M. Prohibition on Awards to 501(c)4 Organizations That Lobby

Organizations described in section 501(c)4 of the Internal Revenue Code of 1968 that engage in lobbying are not eligible to receive grant/cooperative agreement awards. This is not to be confused with 45 CFR Part 93, Section 1352, “New Restrictions on Lobbying” Section XI.E, “Lobbying.”

N. Prohibited Research

BAN ON FUNDING OF HUMAN EMBRYO RESEARCH (SECTION 510)

This section continues the current ban that prohibits NIH from using appropriated funds to support human embryo research. Grant, cooperative agreement and contract funds may not be used for: "(a) (1) the creation of a human embryo or embryos for research purposes; or (2) research in which a human embryo or embryos are destroyed, discarded, or knowingly subjected to risk of injury or death greater than that allowed for research on fetuses in utero under 45 CFR 46.208(a)(2) and section 498(b) of the Public Health Service Act (42 U.S.C. 289g(b)). (b) For purposes of this section, the term `human embryo or embryos' includes any organism not protected as a human subject under 45 CFR 46 as of the date of the enactment of this Act, that is derived by fertilization, parthenogenesis, cloning, or any other means from one or more human gametes or human diploid cells."

The NIH has published final guidelines on the allowability of Federal funds to be used for research on existing human embryonic stem cell lines. The URL is http://stemcells.nih.gov/index.asp.

LIMITATION ON USE OF FUNDS FOR PROMOTION OF LEGALIZATION OF CONTROLLED SUBSTANCES (SECTION 511)

"(a) None of the funds made available in this Act may be used for any activity that promotes the legalization of any drug or other substance included in schedule I of the schedules of controlled substances established by section 202 of the Controlled Substances Act (21 U.S.C.812). (b)The limitation in subsection (a) shall not apply when there is significant medical evidence of a therapeutic advantage to the use of such drug or other substance or that federally sponsored clinical trials are being conducted to determine therapeutic advantage."

RESTRICTION ON DISTRIBUTION OF STERILE NEEDLES (SECTION 505)

"Notwithstanding any other provision of this Act, no funds appropriated under this Act shall be used to carry out any program of distributing sterile needles

or syringes for the hypodermic injection of any illegal drug."

RESTRICTION ON ABORTIONS (SECTION 508)

"(a) None of the funds appropriated under this Act, and none of the funds in any trust fund to which funds are appropriated under this Act, shall be expended for any abortion."

O. Small Business Concern SBIR Verification Statement

Under the SBIR Program, the statute requires that the applicant must be eligible at the time of the award. As the responsible Federal Official for administering funds, Grants Management Officials must verify eligibility prior to issuing a notice of grant award. For eligibility clarification see the July 25, 2003 Notice in the NIH Guide for Grants and Contracts (NOT-OD-03-053) SMALL BUSINESS ELIGIBILITY REQUIREMENTS FOR APPLICANTS TO THE SMALL BUSINESS INNOVATION RESEARCH (SBIR) AND SMALL BUSINESS TECHNOLOGY TRANSFER (STTR) PROGRAMS. If the firm is affiliated with any other organization (domestic or foreign), see http://www.sba.gov/regulations/121.

If the pending application referenced above is selected for funding, no award will be issued until the NIH IC receives and accepts the following information, which may be provided in a format of your choosing or by completing a checklist as in the example below:

☐ 1 The above named organization is a for-profit U.S. small business concern that is at least 51% owned and controlled by one or more **individuals** who are citizens of, or permanent resident aliens in, the United States (as the regulation currently requires) and the above named organization **IS NOT** a subsidiary of another company.

☐ 2 The above named organization is independently owned and operated, and has, including its affiliates, 500 or fewer employees.

☐ 3 The research space occupied by the above named organization is generally not shared with another organization and is under the control of the above named organization.

☐ 4 All research on the above referenced grant will be performed in its entirety in the United States.

☐ 5 The above named principal investigator's primary employment is with the above named organization and more than one-half of the above named principal investigator's time will be in the employ of the above named organization at the time of award and for the duration of the project.

☐ 6 It is understood that PHS will not support any market research under its SBIR program, as defined in the Omnibus SBIR/STTR Solicitation, or literature searches that will lead to a new or expanded statement of work and that if an award is made, any such costs, if requested in the application, will be removed prior to award.

☐ 7 It is understood that if this project is funded, drawing down funds from the payment system serves as the certification that the above-named organization has in place written policies and procedures for financial and business management systems that comply with 45 CFR 74 and the NIH Grants Policy Statement (12/03) and will follow those policies and procedures.

P. Small Business Concern STTR Verification Statement

Under the STTR Program, the statute requires that the applicant must be eligible at the time of the award. As the responsible Federal Official for administering funds, Grants Management Officials must verify eligibility prior to issuing a notice of grant award. For eligibility clarification see the July 25, 2003 Notice in the NIH Guide for Grants and Contracts (NOT-OD-03-053) SMALL BUSINESS ELIGIBILITY REQUIREMENTS FOR APPLICANTS TO THE SMALL BUSINESS INNOVATION RESEARCH (SBIR) AND SMALL BUSINESS TECHNOLOGY TRANSFER (STTR) PROGRAMS. If the firm is affiliated with any other organization (domestic or foreign), see http://www.sba.gov/regulations/121.

If the pending application referenced above is selected for funding, no award will be issued until

the NIH IC receives and accepts the following information, which may be provided in a format of your choosing or by completing a checklist as in the example below:

☐ 1 The above named organization is a for-profit U.S. small business concern that is at least 51% owned and controlled by one or more **individuals** who are citizens of, or permanent resident aliens in, the United States (as the regulation currently requires) and the above named organization **IS NOT** a subsidiary of another company.

☐ 2 The above named organization is independently owned and operated, and has, including its affiliates, 500 or fewer employees.

☐ 3 The research space occupied by the above named organization is generally not shared with another organization and is under the control of the above named organization.

☐ 4 All research on the above referenced grant will be performed in its entirety in the United States.

☐ 5 The above named principal investigator has a formal appointment or commitment to the above named organization, which is characterized by an official relationship between the organization and the principal investigator, whose percent of effort on this project will be not less than 10% effort.

☐ 6 It is understood that PHS will not support any market research under its STTR program, as defined in the Omnibus Solicitation, or literature searches that will lead to a new or expanded statement of work and that if an award is made, any such costs, if requested in the application, will be removed prior to award.

☐ 7 In conducting the joint research and development proposed in this project, the above named applicant will conduct not less than 40% of the work and the research institution named in the application will perform not less than 30% of the work.

☐ 8. It is understood that if this project is funded, drawing down funds from the payment system serves as the certification that the above-named organization has in place written policies and procedures for financial and business management systems that comply with 45 CFR 74 and the NIH Grants Policy Statement (12/03) and will follow those policies and procedures.

XII. SUPPLEMENTAL INSTRUCTIONS FOR PREPARING THE HUMAN SUBJECTS SECTION OF THE RESEARCH PLAN

PREPARING THE HUMAN SUBJECTS RESEARCH SECTION OF THE RESEARCH PLAN

To assist you in completing Item e. of the Research Plan (Human Subjects Research), we have provided six possible scenarios. All research will fall into one of these six scenarios. Determining which scenario best matches your proposed research depends on your answers to the following five questions:

Question 1: Does your proposed research involve human subjects?

Question 2: Is your proposed research described by one of the exemptions in the Federal regulations (45 CFR 46)?

Question 3: Does your proposed research meet the definition for clinical research?

Question 4: Does your proposed research include a clinical trial?

Question 5: Does your proposed research meet criteria for an NIH-Defined Phase III Clinical Trial?

Click on the questions and when you can answer the five questions, select the scenario that best matches your responses, and then follow the instructions provided for the scenario you choose.

In the Human Subjects Research section of the Research Plan, you must provide sufficient information for reviewers to determine that the proposed research meets (1) the requirements of Federal regulations (45 CFR 46) and that human subjects are protected from research risks, and (2) the requirements of NIH policies on inclusion of women, minorities, and children. If the research is exempt from the requirements in the Federal regulations, you must provide a justification for the exemption with sufficient information about the involvement of the human subjects to allow a determination by peer reviewers and NIH staff that claimed exemption(s) is/are appropriate.

Applications must comply with this requirement; if not, application processing may be delayed or the application may be returned to the applicant without review.

For all research involving human subjects, a part of the peer review process will include careful consideration of protections from research risks, as well as the appropriate inclusion of women, minorities, and children. The Scientific Review Group (SRG) will assess the adequacy of safeguards of the rights and welfare of research participants, and the appropriate inclusion of women, minorities, and children, based on the information in the application.

HUMAN SUBJECTS RESEARCH

Question 1: Does your proposed research involve human subjects?

The first thing you must determine is whether or not your research involves human subjects, either at the applicant organization or at any other performance site or collaborating institution (e.g., subcontractors, consultants).

Federal regulations (45 CFR 46) define a **human subject** as a living individual about whom an investigator conducting research obtains:

- data through intervention or interaction with the individual or
- identifiable private information

The definition of human subjects extends to the use of human organs, tissues, and body fluids from individually identifiable human subjects as well as to graphic, written, or recorded information derived from individually identifiable human subjects.

Intervention includes both physical procedures by which data are gathered (for example, venipuncture) and manipulations of the subject or the subject's environment that are performed for research purposes.

Interaction includes communication or interpersonal contact between investigator and subject.

Private information includes information about behavior that occurs in a context in which an individual can reasonably expect that no observation or recording is taking place and information which has been provided for specific purposes by an individual and which the individual can reasonably expect will not be made public (for example, a medical record). Private information must be individually identifiable (i.e., the identity of the subject is or may readily be ascertained by the investigator or associated with the information) in order to obtain the information to constitute research involving human subjects.

Guidance and Additional Instructions

If you answered “No” to Question 1, then proceed to Scenario A.

If activities involving human subjects are planned at any time during the proposed project period, either at the applicant organization or at any other performance site or collaborating institution, then your answer is “Yes” even if the research is exempt from regulations for the protection of human subjects.

If you answered “Yes” to Question 1, then you may need to determine whether your research meets the criteria for an exemption from the Human Subjects Protection requirements. Proceed to Question 2.

If you need to consider an alternative scenario, return to the Decision Table for Section e.

EXEMPT RESEARCH

Question 2: Is your proposed research described by one of the exemptions in the Federal regulations (45 CFR 46)?

Some human subjects research is exempt from the Federal regulations (45 CFR 46). Read the description of the following six exemptions to determine if your research meets the criteria for one of the exemptions.

Research involving individuals who are or who become prisoners cannot be exempt under any exemption categories (see Subpart C of 45 CRF 46).

Exemption 1: Research conducted in established or commonly accepted educational settings, involving normal educational practices, such as (i) research on regular and special education instructional strategies, or (ii) research on the effectiveness of or the comparison among instructional techniques, curricula, or classroom management methods.

Exemption 2: Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior, unless:

(i) information obtained is recorded in such a manner that human subjects can be identified directly or through identifiers linked to the subjects and (ii) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.

Exemption 2 for research involving survey or interview procedures or observation of public behavior, does not apply to research involving children (see Subpart D), except for research involving observations of public behavior when the investigator(s) do not participate in the activities being observed.

Exemption 3: Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior that is not exempt under paragraph (b)(2) of this section if: (i) the human subjects are elected or appointed public officials or candidates for public office; or (ii) Federal statute(s) require(s) without exception that the confidentiality of the personally identifiable information will be maintained throughout the research and thereafter.

Exemption 4: Research involving the collection or study of existing data, documents, records, pathological specimens, or diagnostic specimens, if these sources are publicly available or if the information is recorded by the investigator in such a manner that subjects cannot be identified, directly or through identifiers linked to the subjects.

Research on prospectively collected tissue samples that would otherwise have been discarded does not meet the criteria for Exemption 4.

Research that meets the criteria for Exemption 4 is not considered "clinical research."

The use of autopsy materials is governed by applicable state and local law and is not directly regulated by 45 CFR 46.

Evaluating what does and does not fall under Exemption 4 can be complex. The NIH brochure, Research on Human Specimens, contains information that is helpful in making this determination. See http://www.cancerdiagnosis.nci.nih.gov/specimens/brochure.html and also the information contained at: Exemption 4 Guidance and Information.

Exemption 5: Research and demonstration projects that are conducted by or subject to the approval of Department or Agency heads and that are designed to study, evaluate, or otherwise examine: (i) public benefit or service programs (ii) procedures for obtaining benefits or services under those programs (iii) possible changes in

or alternatives to those programs or procedures or (iv) possible changes in methods or levels of payment for benefits or services under those programs.

Exemption 6: Taste and food quality evaluation and consumer acceptance studies (i) if wholesome foods without additives are consumed or (ii) if a food is consumed that contains a food ingredient at or below the level and for a use found to be safe, or agricultural, chemical, or environmental contaminant at or below the level found to be safe, by the Food and Drug Administration or approved by the Environmental Protection Agency or the Food Safety and Inspection Service of the U.S. Department of Agriculture.

Guidance and Additional Instructions

If you answered "Yes" to Question 2, then your research meets the criteria for an exemption.

- If your research meets the criteria for Exemption 4, then follow the instructions for Scenario B and read the information contained in Exemption 4 Guidance and Information.
- If your research meets the criteria for any of the other five exemptions, follow the instructions for Scenario C.

Remember that you need to identify which exemption you believe is applicable to your research, and provide a justification for exemption with sufficient information about the involvement of the human subjects to allow a determination by peer reviewers and NIH staff that a claimed exemption is appropriate.

If you answered "No" to Question 2, then your research does not qualify for one of the exemptions, and your research is not exempt from IRB. Proceed to Question 3.

If you need to consider an alternative scenario, return to the Decision Table for Section e.

CLINICAL RESEARCH

Question 3: Does your proposed research meet the definition for clinical research?

The NIH defines Clinical Research as:

(1) Patient-oriented research. Research conducted with human subjects (or on material of human origin such as tissues, specimens and cognitive phenomena) for which an investigator (or colleague) directly interacts with human subjects. Excluded from this definition are in vitro studies that utilize human tissues that cannot be linked to a living individual. Patient-oriented research includes: (a) mechanisms of human disease, (b) therapeutic interventions, (c) clinical trials, or (d) development of new technologies.

(2) Epidemiologic and behavioral studies.

(3) Outcomes research and health services research.

Clinical Research that does not meet the criteria for a clinical trial or an NIH-defined Phase III clinical trial must follow the instructions in Scenario D.

Research that meets the criteria for Exemption 4 is not considered "clinical research." Investigators with research that meets the criteria for Exemption 4 must follow the instructions provided in Scenario B.

Guidance and Additional Instructions

If you answered "Yes" to Question 3, then proceed to Question 4 and Question 5 to determine whether your research meets the criteria for a clinical trial or an NIH-defined Phase III clinical trial.

If you answered "No," then you need to consider an alternative scenario. Return to the Decision Table for Section e.

CLINICAL TRIAL

Question 4: Does your proposed research include a clinical trial?

The NIH defines a clinical trial as a prospective biomedical or behavioral research study of human subjects that is designed to answer specific questions about biomedical or behavioral interventions (drugs, treatments, devices, or new ways of using known drugs, treatments, or devices).

Clinical trials are used to determine whether new biomedical or behavioral interventions are safe, efficacious, and effective.

Behavioral human subjects research involving an intervention to modify behavior (diet, physical activity, cognitive therapy, etc.) fits these criteria of a clinical trial.

Human subjects research to develop or evaluate clinical laboratory tests (e.g. imaging or molecular diagnostic tests) might be considered to be a clinical trial if the test will be used for medical decision-making for the subject or the test itself imposes more than minimal risk for subjects.

Biomedical clinical trials of experimental drug, treatment, device or behavioral intervention may proceed through four phases:

Phase I clinical trials test a new biomedical intervention in a small group of people (e.g., 20-80) for the first time to evaluate safety (e.g., to determine a safe dosage range, and to identify side effects).

Phase II clinical trials study the biomedical or behavioral intervention in a larger group of people (several hundred) to determine efficacy and to further evaluate its safety.

Phase III studies investigate the efficacy of the biomedical or behavioral intervention in large groups of human subjects (from several hundred to several thousand) by comparing the intervention to other standard or experimental interventions as well as to monitor adverse effects, and to collect information that will allow the intervention to be used safely.

Phase IV studies are conducted after the intervention has been marketed. These studies are designed to monitor effectiveness of the approved intervention in the general population and to collect information about any adverse effects associated with widespread use.

Guidance and Additional Instructions

If you answered “Yes” to Question 4, then you will need to provide a general description of a Data and Safety Monitoring Plan. See Scenario E.

Also continue to Question 5 to determine whether your research meets the criteria for an NIH-defined Phase III clinical trial.

If you answered “Yes” to Question 3 (Clinical Research) and “No” to Question 4 (Clinical Trial), then follow the instructions for Scenario D.

If you answered “No” to Question 4, you will need to consider an alternative scenario. Return to the Decision Table for Section e.

NIH-DEFINED PHASE III CLINICAL TRIAL

Question 5: Does your proposed research meet criteria for an NIH-Defined Phase III Clinical Trial?

An *NIH-Defined Phase III Clinical Trial* is a broadly based prospective Phase III clinical investigation, usually involving several hundred or more human subjects, for the purpose of either evaluating an experimental intervention in comparison with a standard or control intervention or of comparing two or more existing treatments. Often the aim of such investigation is to provide evidence leading to a scientific basis for consideration of a change in health policy or standard of care. The definition includes pharmacologic, non-pharmacologic, and behavioral interventions given for disease prevention, prophylaxis, diagnosis, or therapy. Community trials and other population-based intervention trials are also included.

If your research meets the above criteria, then in addition to providing a Data and Safety Monitoring Plan, you will be expected to address whether you expect to find clinically important sex/gender and/or race/ethnicity differences in the intervention effect. The discussion may include supporting evidence and/or data derived from prior animal studies, clinical observations, metabolic studies, genetic studies, pharmacology studies, and observational, natural history, epidemiology, and other relevant studies.

You will be expected to provide a research plan that must include one of the following plans:

- Plans to conduct valid analyses to detect significant differences in intervention effect among sex/gender and/or racial/ethnic subgroups when prior studies strongly support these significant differences among subgroups, OR
- Plans to include and analyze sex/gender and/or racial/ethnic subgroups when prior studies strongly support no significant differences in intervention effect between subgroups. (Representation of sex/gender and racial/ethnic groups in not required as subject selection criteria, but inclusion is encouraged.), OR
- Plans to conduct valid analyses of the intervention effect in sex/gender and/or racial/ethnic subgroups (without requiring high statistical power for each subgroup) when the prior studies neither support nor negate significant differences in intervention effect between subgroups.

Guidance and Additional Instructions

If you answered “Yes” to Question 5, then follow the instructions for Scenario F.

If you answered “No,” then you need to consider an alternative scenario. Return to the Decision Table for Section e.

EXEMPTION 4 GUIDANCE AND INFORMATION

Research that meets the criteria for Exemption 4 is Human Subjects Research but it is not considered clinical research. Evaluating what does and does not fall under Exemption 4 can be complex. The NIH Brochure, Research on Human Specimens, (http://www.cancerdiagnosis.nci.nih.gov/specimens/brochure.html) is helpful in making this determination.

Exemption 4 includes research involving the collection or study of existing data, documents, records, pathological specimens, or diagnostic specimens, if these sources are publicly available or if the information is recorded by the investigator in such a manner that subjects cannot be identified, directly or through identifiers linked to the subjects.

A **human subject** is a living individual about whom an investigator obtains either (1) data through intervention or interaction with the individual, or (2) identifiable private information.

Regulatory requirements (Federal and state) to protect human subjects apply to a much broader range of research than many investigators realize, and researchers using human tissue specimens are often unsure about how regulations apply to their research. Regulatory obligations to protect human subjects apply, for example, to research that uses –

- Bodily materials, such as cells, blood or urine, tissues, organs, hair or nail clippings, even if you did not collect these materials
- Residual diagnostic specimens, including specimens obtained for routine patient care that would have been discarded if not used for research
- Private information, such as medical information, that can be readily identified with individuals, even if the information was not specifically collected for the study in question. Research on cell lines or DNA samples that can be associated with individuals falls into this category.

NOTE: Some researchers mistakenly believe that any studies on existing pathology specimens are exempt. Exemption 4 does not apply to specimens that are linked to patient identity, even if the subject identifiers are locked up or kept by someone other than the researcher. It does not matter if the tissue would otherwise have been discarded. OHRP advises that investigators should not have the authority to make an independent determination that research involving human subjects is exempt. Investigators should check with the IRB or other designated authorities to determine institutional policies and procedures for the designation of any exemptions claimed for the proposed research (see http://www.hhs.gov/ohrp/humansubjects/guidance/hsdc95-02.htm).

Exemption 4 applies to retrospective studies of specimens that have already been collected. The materials must be “on the shelf” (or in the freezer) at the time the protocol is submitted to the IRB or other designated officials at your institution to determine whether the research is indeed exempt. Prospective collection of additional specimens does not meet the criteria for Exemption 4.

What about specimens obtained from a tissue bank?

OHRP offers guidance about the requirements for establishing tissue banks and repositories to collect, store, and distribute human tissue materials for research purposes (see current guidance at http://www.hhs.gov/ohrp/humansubjects/guidance/reposit.htm). There are many kinds of tissue banks that operate in different ways. Use of tissue specimens obtained from an established tissue repository may be exempt under certain circumstances.

You should check with your IRB or other designated authorities at your institution to determine how the exemption applies to your research.

What is meant by "publicly available sources"?

This language in the regulation was intended to apply to public sources of data, such as census data. Its meaning with respect to human tissue specimens is widely debated. Although there are organizations that make human cells and tissues broadly accessible at reasonable cost to the research community, these materials are not usually available to the public at large.

What is meant by "identifiers linked to the subjects"?

Identifiers such as names, social security numbers, medical record numbers, or pathology accession numbers permit specimens to be linked to individual people and perhaps also to associated medical information.

Exemption 4 may apply to specimens provided by a tissue bank or other repository, so long as the specimens are provided without identifiers and the repository has firm policies and procedures, approved by its own IRB, to prevent the release of personal information.

Exemption 4 does not apply in situations where a researcher receives "coded" specimens from a collaborator if the collaborator retains the key to the code, even though the researcher may have no access to patient identities.

How can I determine whether my research meets the criteria for Exemption 4?

The humans subjects regulations decision charts (http://www.hhs.gov/ohrp/humansubjects/guidance/decisioncharts.htm) from the Office of Human Research Protection (OHRP) will help you to see whether your research falls under the human subjects regulations and if so, whether it meets the criteria for Exemption 4. OHRP advises that investigators should not have the authority to make an independent determination that research involving human subjects is exempt. Investigators should check with the IRB or other designated authorities to determine institutional policies and procedures for the designation of any exemptions claimed for the proposed research (see http://www.hhs.gov/ohrp/humansubjects/guidance/hsdc95-02.htm).

Guidance and Additional Instructions

If your research meets the criteria for Exemption 4, refer to Scenario B.

If you need to consider an alternative scenario, return to the Decision Table for Section e.

INSTRUCTIONS PERTAINING TO NON-EXEMPT HUMAN SUBJECTS RESEARCH

In your application narrative, create a section entitled “e. Human Subjects Research” immediately following the last entry in the Research Design and Methods section. Although no specific page limitation applies to this section of the application, be succinct. Scientific Review Groups will assess each application as being “acceptable” or “unacceptable” with regard to the protection of human subjects.

As the first entry, create a heading entitled “Human Subjects Research and Protection from Risk.” Use subheadings to address the issues listed under items 1-4 below.

If your research includes a clinical trial, create another section heading entitled "Data and Safety Monitoring Plan." Instructions follow items 1-4.

1. RISKS TO THE SUBJECTS

a. Human Subjects Involvement and Characteristics

- Describe the proposed involvement of human subjects in the work outlined in the Research Design and Methods section.
- Describe the characteristics of the subject population, including their anticipated number, age range, and health status.
- Identify the criteria for inclusion or exclusion of any subpopulation.
- Explain the rationale for the involvement of special classes of subjects, such as fetuses, neonates, pregnant women, children, prisoners, institutionalized individuals, or others who may be considered vulnerable populations.
- List any collaborating sites where human subjects research will be performed, and describe the role of those sites in performing the proposed research.

b. Sources of Materials

- Describe the research material obtained from living human subjects in the form of specimens, records, or data.
- Describe any data that will be recorded on the human subjects involved in the project.
- Describe the linkages to subjects, and indicate who will have access to subject identities.
- Provide information about how the specimens, records, or data are collected and whether material or data will be collected specifically for your proposed research project.

c. Potential Risks

- Describe the potential risks to subjects (physical, psychological, social, legal, or other), and assess their likelihood and seriousness to the subjects.
- Where appropriate, describe alternative treatments and procedures, including the risks and benefits of the alternative treatments and procedures to participants in the proposed research.

2. ADEQUACY OF PROTECTION AGAINST RISKS

a. Recruitment and Informed Consent

- Describe plans for the recruitment of subjects (where appropriate) and the process for obtaining informed consent. If the proposed studies will include children, describe the process for meeting requirements for parental permission and child assent.

- Include a description of the circumstances under which consent will be sought and obtained, who will seek it, the nature of the information to be provided to prospective subjects, and the method of documenting consent. Informed consent document(s) need not be submitted to the PHS agencies unless requested.

b. Protection Against Risk

- Describe planned procedures for protecting against or minimizing potential risks, including risks to confidentiality, and assess their likely effectiveness.

- Where appropriate, discuss plans for ensuring necessary medical or professional intervention in the event of adverse effects to the subjects. Studies that involve clinical trials (biomedical and behavioral intervention studies) must include a description of the plan for data and safety monitoring of the research and adverse event reporting to ensure the safety of subjects.

3. POTENTIAL BENEFITS OF THE PROPOSED RESEARCH TO THE SUBJECTS AND OTHERS

- Discuss the potential benefits of the research to the subjects and others.

- Discuss why the risks to subjects are reasonable in relation to the anticipated benefits to subjects and others.

4. IMPORTANCE OF THE KNOWLEDGE TO BE GAINED

- Discuss the importance of the knowledge gained or to be gained as a result of the proposed research.

- Discuss why the risks to subjects are reasonable in relation to the importance of the knowledge that reasonably may be expected to result.

NOTE: Test articles (investigational new drugs, devices, or biologicals) including test articles that will be used for purposes or administered by routes that have not been approved for general use by the Food and Drug Administration (FDA) must be named. State whether the 30-day interval between submission of applicant certification to the FDA and its response has elapsed or has been waived and/or whether use of the test article has been withheld or restricted by the Food and Drug Administration, and/or the status of requests for an IND or IDE covering the proposed use of the test article in the research plan.

DATA AND SAFETY MONITORING PLAN

- If your research includes a clinical trial, create a section heading entitled "Data and Safety Monitoring Plan."

- Provide a general description of a monitoring plan that you plan to establish as the overall framework for data and safety monitoring. Describe the entity that will be responsible for monitoring and the process by which Adverse Events (AEs) will be reported to the Institutional Review Board (IRB), the funding I/C, the NIH Office of Biotechnology Activities (OBA), and the Food and Drug Administration (FDA) in accordance with Investigational New Drug (IND) or Investigational Device Exemption (IDE) regulations. Be succinct. Contact the FDA (http://www.fda.gov) and also see the following websites for more information related to IND and IDE requirements:
  http://www.access.gpo.gov/nara/cfr/waisidx_01/21cfr312_01.html (IND)
  http://www.access.gpo.gov/nara/cfr/waisidx_01/21cfr812_01.html (IDE)

- The frequency of monitoring will depend on potential risks, complexity, and the nature of the trial; therefore, a number of options for monitoring trials are available. These can include, but are not limited to, monitoring by a:

  Principal investigator (required)

  Independent individual/Safety Officer

  Designated medical monitor

  Internal Committee or Board with explicit guidelines

  Data and Safety Monitoring Board (DSMB – specifically required for multi-site trials involving interventions that entail potential risk to the participants)

  Institutional Review Board (IRB - required)

- A detailed Data and Safety Monitoring Plan must be submitted to the applicant's IRB and subsequently to the funding IC for approval prior to the accrual of human subjects (http://grants.nih.gov/grants/guide/notice-files/NOT-OD-00-038.html). For additional guidance on creating this Plan, see the above reference.

DATA AND SAFETY MONITORING BOARD

NIH specifically requires the establishment of **Data and Safety Monitoring Boards** (DSMBs) for **multisite** clinical trials involving interventions that entail potential **risk** to the participants, and generally for Phase III clinical trials. Although Phase I and Phase II clinical trials may also use DSMBs, smaller clinical trials may not require this oversight format, and alternative monitoring plans may be appropriate.

Guidance and Additional Instructions

Proceed to Inclusion of Women and Minorities.

INCLUSION OF WOMEN AND MINORITIES IN CLINICAL RESEARCH

Create a section heading entitled "Inclusion of Women and Minorities" and place it immediately following the "Human Subjects Research" section. Although no specific page limitation applies to this section of the application, be succinct.

Scientific Review Groups will assess each application as being "acceptable" or "unacceptable" with regard to the protection of human subjects.

In this section of the Research Plan, address, at a minimum, the following four points:

1. The targeted/planned distribution of subjects by sex/gender and racial/ethnic groups for each proposed study or protocol using the format in the Targeted/Planned Enrollment Table. (Instructions for completing this table are provided below.) If you are using existing specimens and/or data that does not meet the criteria for Exemption 4 and you do not have access to information on the distribution of women and minorities, so state and explain the impact on the goals of the research as part of the rationale that inclusion is inappropriate (item 3 below). Alternatively, you may describe the women and minority composition of the population base from whom the specimens and/or data will be obtained.

2. A description of the subject selection criteria and rationale for selection of sex/gender and racial/ethnic group members in terms of the scientific objectives and proposed study design. The description may include, but is not limited to, information on the population characteristics of the disease or condition under study.

3. A compelling rationale for proposed exclusion of any sex/gender or racial/ethnic group (see examples below).

4. A description of proposed outreach programs for recruiting sex/gender and racial/ethnic group members as subjects.

Examples of acceptable justifications for exclusion of :

A. One gender:

1. One gender is excluded from the study because:
    - inclusion of these individuals would be inappropriate with respect to their health;
    - the research question addressed is relevant to only one gender;
    - evidence from prior research strongly demonstrates no difference between genders;
    - sufficient data already exist with regard to the outcome of comparable studies in the excluded gender, and duplication is not needed in this study.
2. One gender is excluded or severely limited because the purpose of the research constrains the applicant's selection of study subjects by gender (e.g., uniquely valuable stored specimens or existing datasets are single gender; very small numbers of subjects are involved; or overriding factors dictate selection of subjects, such as matching of transplant recipients, or availability of rare surgical specimens).
3. Gender representation of specimens or existing datasets cannot be accurately determined (e.g., pooled blood samples, stored specimens, or data-sets with incomplete gender documentation are used), and this does not compromise the scientific objectives of the research.

B. Minority groups or subgroups:

1. Some or all minority groups or subgroups are excluded from the study because:
    - Inclusion of these individuals would be inappropriate with respect to their health;

- The research question addressed is relevant to only one racial or ethnic group;
- Evidence from prior research strongly demonstrates no differences between racial or ethnic groups on the outcome variables;
- A single minority group study is proposed to fill a research gap;
- Sufficient data already exists with regard to the outcome of comparable studies in the excluded racial or ethnic groups and duplication is not needed in this study.

2. Some minority groups or subgroups are excluded or poorly represented because the geographical location of the study has only limited numbers of these minority groups who would be eligible for the study, and the investigator has satisfactorily addressed this issue in terms of:
   - The size of the study;
   - The relevant characteristics of the disease, disorder or condition;
   - The feasibility of making a collaboration or consortium or other arrangements to include representation.
3. Some minority groups or subgroups are excluded or poorly represented because the purpose of the research constrains the applicant's selection of study subjects by race or ethnicity (e.g., uniquely valuable cohorts, stored specimens or existing datasets are of limited minority representation, very small numbers of subjects are involved, or overriding factors dictate selection of subjects, such as matching of transplant recipients or availability of rare surgical specimens).
4. Racial or ethnic origin of specimens or existing datasets cannot be accurately determined (e.g., pooled blood samples, stored specimens or data sets with incomplete racial or ethnic documentation are used) and this does not compromise the scientific objectives of the

Additional Instructions and Requirements When NIH-Defined Phase III Clinical Trials Are Proposed

If your proposed research includes an NIH-Defined Phase III Clinical Trial, the section on Inclusion of Women and Minorities also must address whether you expect to find clinically important sex/gender and/or race/ethnicity differences in the intervention effect. The discussion may include supporting evidence and/or data derived from prior animal studies, clinical observations, metabolic studies, genetic studies, pharmacology studies, and observational, natural history, epidemiology and other relevant studies. Your discussion of expected sex/gender and/or race/ethnicity differences in intervention effect must include selection and discussion of one of the following analysis plans:

- Plans to conduct valid analyses to detect significant differences in intervention effect among sex/gender and/or racial/ethnic subgroups when prior studies strongly support these significant differences among subgroups, **or**
- Plans to include and analyze sex/gender and/or racial/ethnic subgroups when prior studies strongly support no significant differences in intervention effect between subgroups. (Representation of sex/gender and racial/ethnic groups is not required as subject selection criteria, but inclusion is encouraged.), **or**
- Plans to conduct valid analyses of the intervention effect in sex/gender and/or racial/ethnic subgroups (without requiring high statistical power for each subgroup) when the prior studies neither support nor negate significant differences in intervention effect between subgroups.

Instructions for Completing the Targeted/Planned Enrollment Tables for Reporting Race and Ethnicity Data for Subjects in Clinical Research

A. New Applications and Clinical Research Studies begun after January 10, 2002:

All new clinical research studies should collect and report information on participants with respect to two categories of ethnicity and five categories of race. The new Inclusion Enrollment Report Table (MS Word or PDF) for reporting summary data on participants to NIH includes two categories of ethnicity and five categories of race and is based on recent changes by the Office of Management and Budget (OMB) regarding standards for data on race and ethnicity. Investigators should review the instructions and Frequently Asked Questions about using the new Enrollment Table format at http://grants.nih.gov/grants/guide/notice-files/NOT-OD-01-053.html.

For new applications and clinical research studies begun after January 10, 2002, use the Targeted/Planned Enrollment Table format (MS Word or PDF).

Provide the study title.

The ‘”Total Planned Enrollment” means the number of subjects that are expected to be enrolled during the entire period of the study and are needed to evaluate the research question The “Total Planned Enrollment” will be reported in two ways in the table: by “Ethnic Category” and by “Racial Categories.”

“Ethnic Category”: Provide the numeric distribution of the Total Planned Enrollment according to ethnicity and sex/gender in the top part of the table.

“Racial Categories”: Provide the numeric distribution of the Total Planned Enrollment, this time by racial categories and sex/gender, in the bottom part of the table. Note that Hispanic is not a racial category.

If there is more than one study/protocol, provide a separate table for each.

List any proposed racial/ethnic subpopulations below the table.

How should I report race and ethnicity data when my research involves a foreign population?

Investigators are encouraged to design their data collection instruments in ways that allow respondent self-identification of their racial and ethnic affiliation. However, these items should be designed in a way that they can be aggregated into the required categories. Also, the investigator can report on any racial/ethnic subpopulations by listing this information in an attachment to the required table. This may be particularly useful when distinctive subpopulations are relevant to the scientific hypotheses being studied.

When completing the tables, investigators should asterisk and footnote the table indicating that data includes foreign participants. If the aggregated data only includes foreign participants, the investigator should provide information in one table with an asterisk and footnote. However, if the study includes both domestic and foreign participants, we suggest the investigator complete two separate tables – one for domestic data and one for foreign data, with an asterisk and footnote accompanying the table with foreign data.

B. Clinical Research Studies begun before January 10, 2002:

If the proposed research uses existing data, then use the formats below for competing continuations and competing supplements.

Competing Continuations and Competing Supplements:

For competing continuations involving the collection of new/additional clinical data, use the Targeted/Planned Enrollment Table (MS Word or PDF) and the instructions above. **Note:** If you choose to report information with the new Targeted/Planned Enrollment Table, you must continue to use this format for the remaining years of the project.

For competing continuations involving studies begun before January 10, 2002 that do not involve the collection of new/additional clinical data, the data on ethnicity/race and sex/gender may be presented in EITHER the Targeted/Planned Enrollment Table (MS Word or PDF) OR the 4/98 Version of the Inclusion Table (MS Word or PDF). If data were originally collected from study subjects using two questions (one about ethnicity and one about race) and subjects were given the option of selecting more than one race, then use the Targeted/Planned Enrollment Table. Otherwise, use the 4/98 Version of the Inclusion Table, which uses a combined race/ethnicity format with five categories.

For competing supplemental applications involving studies begun before January 10, 2002, investigators may report ethnicity/race and sex/gender composition using EITHER the Inclusion Enrollment Report (MS Word or PDF) OR the 4/98 Version of the Inclusion Table (MS Word or PDF). If data are being collected using two questions (one about ethnicity and one about race) and subjects were given the option of selecting more than one race, then use the Targeted/Planned Enrollment Table. **Note:** If you choose to report information with the new Targeted/Planned Enrollment Table, you must continue to use this format for the remaining years of the project.

If data are being collected using one question that combines ethnicity and race, use the 4/98 Version of the Inclusion Table. For previously funded studies that used the 4/98 Version of the Inclusion Table the earlier reporting format is NOT directly transferable to the new format.

Investigators should review the instructions and Frequently Asked Questions about using the new Enrollment Table format at http://grants.nih.gov/grants/guide/notice-files/NOT-OD-01-053.html.

C. What Inclusion/Enrollment Table Should Principal Investigators Use for Reporting Accrual Data to NIH? (New versus Old Table)

The following instructions apply to progress reports, whether submitted as part of a non-competing or competing application.

Guidelines for choosing the new Inclusion Enrollment Report Table versus the old Inclusion Table are as follows:

New Inclusion Enrollment Report (MS Word or PDF)

- Studies begun after January 10, 2002, must be designed to ask participants two questions, one about their ethnicity and one about their race, and investigators must use the new Inclusion Enrollment Report table format for reporting summary data to NIH.
- Principal investigators who started a study prior to January 10, 2002 using the old Inclusion Table format for reporting summary data to NIH may switch to the new Inclusion Enrollment Report format if they choose to do so, but they must also change their data collection methods to ask two questions (one about ethnicity and another about race) rather than one question (that combined race and ethnicity) for all participants enrolled in the study from that point on.
- For studies that began prior to January 10, 2002: When the study is submitted for competing continuation (Type 2) and plans to collect new/additional data, the principal investigator is required to change to the new standards for collecting data and use the new Inclusion Enrollment Report format for reporting data to NIH. In some cases, this will mean that principal investigators will need to re-ask study participants about their race and ethnicity using the new two-question format. Note: principal investigators should not ask again about race and ethnicity if the subjects are no longer participating in the study.

Old Inclusion Table (4/98 Version) MS Word or PDF

- Studies begun prior to January 10, 2002 (and now in their non-competing Type 5 period) that were structured with one question about race and ethnicity may continue to report enrollment/accrual data to NIH based on the old form, i.e., using five categories of race/ethnicity. However, when they come in for competitive renewal (Type 2), they will need to change to the new standards/new form for any additional data collection.

- Principal investigators should not switch to the new form if only one question about race and ethnicity is used in data collection.
- Sample of old "Inclusion Table" format: http://grants.nih.gov/grants/funding/women_min/InclusionOld_Form.pdf

Investigators who have questions about these choices should contact NIH program staff for advice.

Guidance and Additional Instructions

After you have completed the Inclusion of Women and Minorities section, proceed to Inclusion of Children.

INCLUSION OF CHILDREN

- Create a section entitled “Inclusion of Children” and place it immediately following the last entry in the Inclusion of Women and Minorities section.
- For the purpose of implementing these guidelines, a **child** is defined as an individual under the age of 21 years (for additional information see http://grants.nih.gov/grants/funding/children/children.htm and http://grants.nih.gov/grants/guide/notice-files/not98-024.html).
- Provide either a description of the plans to include children or, if children will be excluded from the proposed research, application, or proposal, then you must present an acceptable justification (see below) for the exclusion.
- If children are included, the description of the plan should include a rationale for selecting a specific age range of children. The plan also must include a description of the expertise of the investigative team for dealing with children at the ages included, of the appropriateness of the available facilities to accommodate the children, and the inclusion of a sufficient number of children to contribute to a meaningful analysis relative to the purpose of the study.
- Scientific Review Groups will assess each application as being "acceptable" or "unacceptable" with regard to the age-appropriate inclusion or exclusion of children in the research project.
- When children are involved in research, the Additional Protections for Children Involved as Subjects in Research (45 CFR 46 Subpart D) apply and must be addressed in the “Human Subjects Research and Protection from Risks” subheading.

Justifications for Exclusion of Children

For the purposes of this policy, all individuals under 21 are considered children; however, exclusion of any specific age group, such as individuals under 18, should be justified in this section.

It is expected that children will be included in all research involving human subjects unless one or more of the following exclusionary circumstances can be fully justified:

1. The research topic to be studied is not relevant to children.
2. There are laws or regulations barring the inclusion of children in the research.
3. The knowledge being sought in the research is already available for children or will be obtained from another ongoing study, and an additional study will be needlessly redundant. Documentation of other studies justifying the exclusions should be provided. NIH program staff can be contacted for guidance on this issue if the information is not readily available.
4. A separate, age-specific study in children is warranted and preferable. Examples include:
   a. The condition is relatively rare in children, as compared to adults (in that extraordinary effort would be needed to include children, although in rare diseases or disorders where the applicant has made a particular effort to assemble an adult population, the same effort would be expected to assemble a similar child population with the rare condition); or
   b. The number of children is limited because the majority are already accessed by a nationwide pediatric disease research network; or
   c. Issues of study design preclude direct applicability of hypotheses and/or interventions to both adults and children (including different cognitive, developmental, or disease stages or different age-related metabolic processes). While this situation may represent a justification for excluding children in some instances, consideration should be given to taking these differences into account in the study design and expanding

the hypotheses tested, or the interventions planned, to allow inclusion of children rather than excluding them.

5. Insufficient data are available in adults to judge potential risk in children (in which case one of the research objectives could be to obtain sufficient adult data to make this judgment). Although children usually should not be the initial group to be involved in research studies, in some instances, the nature and seriousness of the illness may warrant their participation earlier based on careful risk and benefit analysis.
6. Study designs are aimed at collecting additional data on pre-enrolled adult study subjects (e.g., longitudinal follow-up studies that did not include data on children).
7. Other special cases can be justified by the investigator and found acceptable to the review group and the Institute Director.

Guidance and Additional Instructions

After you have completed this section of the application, proceed to Section IV.D.9, Item f, Vertebrate Animals.

See Policy on Inclusion of Children.

SCENARIO A: NO HUMAN SUBJECT RESEARCH PROPOSED

Criterion:

If you are uncertain as to whether your research involves Human Subjects please read: Question 1: Does your proposed research involve human subjects?

Instructions:

Check the box marked "No" on the Face Page (item 4).

In your application narrative, create a heading labeled "e. Human Subjects Research" and place it immediately after the last entry in the Research Design and Methods section. Include the following statement below the heading: "No Human Subjects Research is proposed in this application."

If your research involves human specimens, cell lines and/or data from subjects, please provide a justification for your claim that no human subjects are involved.

After you have completed this section of the application, proceed to Section IV.D.9, Item f, Vertebrate Animals.

Guidance and Additional Instructions

The material that you provide will be used by reviewers as part of their evaluations on the research design and methods of your proposed research.

Do not follow the instructions for Scenario A if research activities involving human subjects are planned at any time during the proposed project period, either at the applicant organization or at any other performance site or collaborating institution. You will need to consider an alternative scenario.

If you need to consider an alternative scenario return to the Decision Table for Section e.

or

After you have completed this section of the application, proceed to Section IV.D.9, Item f, Vertebrate Animals.

SCENARIO B: HUMAN SUBJECTS RESEARCH CLAIMING EXEMPTION 4

Criteria:

Human Subjects Research	Yes
Exemption	4
Clinical Research	No
Clinical Trial	N/A
NIH-Defined Phase III Clinical Trial	N/A

Instructions and Required Information:

Although no specific page limitation applies to this section of the application, be succinct in your responses.

Check the box marked "Yes" on the Face Page (item 4). Check "'Yes" if activities involving human subjects are planned at any time during the proposed project period, either at the applicant organization or at any other performance site or collaborating institution. "Yes" should be checked even if the research is exempt from requirements in the Federal regulations for the protection of human subjects (45 CFR 46).

Indicate that you are claiming Exemption 4 on the Face Page (item 4a) and enter "NA" for item 4b, since no assurance is needed.

In your application narrative, create a heading entitled "e. Human Subjects Research" and place it immediately after the last entry in the Research Design and Methods section. Include the following statement below the heading: "This Human Subjects Research falls under Exemption 4."

Address the following three items in this new section:

1. Human Subjects Involvement and Characteristics:

a. Describe the proposed involvement of human subjects in the work outlined in the Research Design and Methods section.

b. Describe the characteristics of the subject population, including their anticipated number, age range, and health status. If the characteristics of the population are not available, then the applicant should indicate that the information is unknown.

c. Identify the criteria for inclusion or exclusion of any subpopulation.

d. Explain the rationale for the involvement of vulnerable populations, such as fetuses, neonates, pregnant women, children, prisoners, institutionalized individuals, or others who may be considered vulnerable populations. Please note that research involving prisoners is not exempt under any category (for further information see 45 CFR 46 Subpart C). Note also that Exemption 2 for research involving survey or interview procedures or observation of public behavior does not apply to research involving children (see 45 CFR 46 Subpart D), except for research involving observations of public behavior when the investigator(s) do not participate in the activities being observed.

e. List any collaborating sites where human subjects research will be performed and describe the role of those sites in performing the proposed research.

2. Sources of Materials:

a. Describe the research material obtained from living human subjects in the form of specimens, records, or data.

b. Describe any data that will be recorded on the human subjects involved in the project.

c. Describe the linkages to subjects, and indicate who will have access to subject identities.

d. Provide information about when the specimens, records, or data were collected and whether new material or data will need to be collected specifically for your proposed research project.

3. Justification:

a. Indicate that you are claiming Exemption 4.

b. Provide a justification for why your research meets the criteria for Exemption 4. Note: Even if your research is appropriate for Exemption 4, you are required to address the inclusion of children, if known.

Guidance and Additional Instructions

The material that you provide will be used by reviewers as part of their evaluations on the research design and methods of your proposed research.

What types of research meet the criteria for Exemption 4? Research involving the collection or study of existing data, documents, records, pathological specimens, or diagnostic specimens, if these sources are publicly available or if the information is recorded by the investigator in such a manner that subjects cannot be identified, directly or through identifiers linked to the subjects. Determining the appropriateness of Exemption 4 for research using specimens and data can be complex.

Prospective collection of additional specimens does not meet the criteria for Exemption 4.

If you are uncertain as to whether your research meets the criteria for Exemption 4, refer to Exemption 4 Guidance and Information.

If you need to consider an alternative scenario, return to the Decision Table for Section e.

After you have completed this section of the application, proceed to Section IV.D.9, Item f, Vertebrate Animals.

SCENARIO C: HUMAN SUBJECTS RESEARCH CLAIMING EXEMPTION 1,2,3,5, OR 6

Criteria:

Human Subjects Research	Yes
Exemption Claimed	1, 2, 3, 5, 6
Clinical Research	Yes
Clinical Trial	N/A
NIH-Defined Phase III Clinical Trial	N/A

Instructions and Required Information:

Although no specific page limitation applies to this section of the application, be succinct.

Check the box marked "Yes" for item 4 on the Face Page, check the box marked "Yes" for item 4a on the Face Page, enter the exemption number that you are claiming. Enter "NA" for item 4b, since no OHRP assurance number is needed for exempt research.

Although your research may be exempt from the IRB oversight provisions, it is still human subjects research, and you need to follow the instructions that are identified for each of the following topics and provide the information that is requested.

In your application narrative, create a heading entitled "e. Human Subjects Research" and place it immediately after the last entry in the Research Design and Methods section. Include the following statement below the heading: "This Human Subjects Research falls under Exemption(s) … ." Address the following items in this new section.

1. Human Subjects Involvement and Characteristics:

a. Describe the proposed involvement of human subjects in the work outlined in the Research Design and Methods section.

b. Describe the characteristics of the subject population, including their anticipated number, age range, and health status.

c. Identify the criteria for inclusion or exclusion of any subpopulation (e.g., men, women, children).

d. Explain the rationale for the involvement of vulnerable populations, such as fetuses, neonates, pregnant women, children, prisoners, institutionalized individuals. Please note that research involving prisoners is not exempt under any category (for further information see 45 CFR 46 Subpart C).

e. List any collaborating sites where human subjects research will be performed and describe the role of those sites in performing the proposed research.

2. Sources of Materials:

a. Describe the sources of the research material obtained from living human subjects in the form of specimens, records, or data.

b. Describe any data that will be recorded on the human subjects involved in the project.

c. Describe the linkages to subjects and indicate who will have access to subject identities.

d. Provide information about when the specimens, records, or data were collected and whether new material or data will need to be collected specifically for your proposed research project.

3. Justification

In this section, identify which exemption (1, 2, 3, 5, or 6) you are claiming. (If you are claiming Exemption 4 please refer to Scenario B and the appropriate instructions.) Justify why your research is appropriate for the exemption that you have claimed.

4. Inclusion of Women and Minorities (click and follow instructions)

The inclusion of women and members of minority groups and their subpopulations must be addressed in developing a research design appropriate to the scientific objectives of the study.

Create a section entitled “Inclusion of Women and Minorities” and place it immediately following the last entry in the “Human Subjects Research” section.

Describe the composition of the proposed study population in terms of sex/gender and racial/ethnic group, and provide a rationale for selection of such subjects. Such a plan should contain a description of the proposed outreach programs for recruiting women and minorities as participants. See http://grants.nih.gov/grants/funding/women_min/women_min.htm.

5. Inclusion of Children (click and follow instructions)

For the purpose of implementing these guidelines, a child is defined as an individual under the age of 21 years. (For additional information see http://grants.nih.gov/grants/funding/children/children.htm and http://grants.nih.gov/grants/guide/notice-files/not98-024.html.)

Guidance and Additional Instructions

The material that you provide will be used by reviewers as part of their evaluations on the research design and methods of your proposed research.

If you are uncertain as to whether your research meets the criteria for an exemption please read: Question 2: Is your proposed research described by one of the exemptions in the Federal regulations?

If you need to consider an alternative Scenario, return to the Decision Table for Section e.

After you have completed this section of the application, proceed to Section IV.D.9, Item f, Vertebrate Animals.

SCENARIO D: CLINICAL RESEARCH

Criteria

Human Subjects Research	Yes
Exemption	No
Clinical Research	Yes
Clinical Trial	No
NIH-Defined Phase III Clinical Trial	No

Instructions and Required Information:

Although no specific page limitation applies to this section of the application, be succinct.

Check the box marked "Yes" for item 4 on the Face Page, for item 4a check the box marked "No," and for item 4b enter your OHRP assurance number in the space provided on the Face Page.

In your application narrative, create a section entitled "e. Human Subjects Research" immediately following the last entry in the Research Design and Methods section. Include the following statement below the heading: "This Human Subjects Research meets the definition of 'Clinical Research.'"

Create a subheading for each of the following items, follow the instructions that are identified for each topic, and provide the information that is requested:

1. **Human Subjects Research and Protection from Risks** (click and follow instructions)
2. **Inclusion of Women and Minorities** (click and follow instructions)
3. **Inclusion of Children** (click and follow instructions)

If your application involves collaborating sites, provide the information identified above for each participating site.

Guidance and Additional Instructions

Research that uses **existing (archived)** specimens that **can** be linked to living individuals must address the inclusion of women, minorities and children as identified above, unless the investigator does not have access to the information necessary to address the inclusion of women, minorities and children.

The material that you provide will be used by reviewers as part of their evaluations on the research design and methods of your proposed research.

If you are uncertain as to whether your research meets the criteria for clinical research, read: Question 3: Does your proposed research include clinical research?

If you need to consider an alternative scenario, return to the Decision Table for Section e.

After you have completed this section of the application, proceed to Section IV.D.9, Item f, Vertebrate Animals.

SCENARIO E. CLINICAL TRIALS

Criteria

Human Subjects Research	Yes
Exemption	No
Clinical Research	Yes
Clinical Trial	Yes
NIH-Defined Phase III Clinical Trial	No

Instructions and Required Information:

Check the box marked “Yes” for item 4 on the Face Page, for item 4a check the box marked “No,” and for item 4b enter your OHRP assurance number in the space provided.

In your application narrative, create a section entitled “e. Human Subjects Research” immediately following the last entry in the Research Design and Methods section. Include the following statement below the heading: “This Human Subjects Research meets the definition of a clinical trial.” Create a subheading for each of the following items, follow the instructions that are identified for each topic, and provide the information that is requested:

1. Human Subjects Research and Protection from Risks (click and follow instructions)

2. Data and Safety Monitoring Plan (click and follow instructions)

3. Inclusion of Women and Minorities (click and follow instructions)

4. Inclusion of Children (click and follow instructions)

If your application involves collaborating sites, provide information for each of the issues identified above for each participating site.

Guidance and Additional Instructions

The material that you provide will be used by reviewers as part of their evaluations on the research design and methods of your proposed research.

If you are uncertain as to whether your research includes a clinical trial please read: Question 4: Does your proposed research include a clinical trial? If you need to consider an alternative scenario, return to the Decision Table for Section e.

After you have completed this section of the application, proceed to Section IV.D.9, Item f, Vertebrate Animals.

SCENARIO F. NIH-DEFINED PHASE III CLINICAL TRIAL

Criteria

Human Subjects Research:	Yes
Exempt:	No
Clinical Research:	Yes
Clinical Trial:	Yes
NIH-Defined Phase III Clinical Trial:	Yes

Instructions and Required Information:

Check the box marked “Yes” for item 4 on the Face Page, for item 4a check the box marked “No,” and for item 4b enter your OHRP assurance number in the space provided.

In your application narrative, create a section entitled “e. Human Subjects Research” immediately following the last entry in the Research Design and Methods section. Include the following statement below the heading: “This Human Subjects Research is an NIH-defined Phase III Clinical Trial.”

Follow the instructions that are identified for each of the following topics and provide the information that is requested:

1. Human Subjects Research and Protection from Risks (click and follow instructions)

2. Data and Safety Monitoring Plan (click and follow instructions)

3. Inclusion of Women and Minorities (click and follow instructions)

4. Inclusion of Children (click and follow instructions)

If your application involves collaborating sites, provide the information identified above for each participating site.

Guidance and Additional Instructions

The material that you provide will be used by reviewers as part of their evaluations on the research design and methods of your proposed research. If you are uncertain as to whether your research includes clinical research, read Question 5: Does your proposed research meet criteria for an NIH-Defined Phase III Clinical Trial?

If you need to consider an alternative scenario, return to the Decision Table for Section e.

After you have completed this section of the application, proceed to Section IV.D.9, Item f, Vertebrate Animals.

HUMAN SUBJECTS RESEARCH POLICY

Human Subjects Research Policy includes federal regulations for the protection of human subjects and the following NIH policies related to human subjects research.

PROTECTION OF HUMAN SUBJECTS

The Department of Health and Human Services (DHHS) regulations for the protection of human subjects provide a systematic means, based on established, internationally recognized ethical principles, to safeguard the rights and welfare of individuals who participate as subjects in research activities supported or conducted by the DHHS. The regulations stipulate that an applicant organization, whether domestic or foreign, bears responsibility for safeguarding the rights and welfare of human subjects in DHHS-supported research activities. The regulations require that applicant organizations proposing to involve human subjects in nonexempt research, file a written Assurance of Compliance with the Office for Human Research Protections (OHRP), establishing appropriate policies and procedures for the protection of human subjects. These regulations, 45 CFR 46, Protection of Human Subjects, are available from OHRP, Department of Health and Human Services, The Tower Building, 1101 Wootton Parkway, Suite 200, Rockville, MD 20852 or by contacting OHRP at ohrp@osophs.dhhs.gov.

Under DHHS regulations to protect human subjects from research risks, certain research areas are exempt. However, if an applicant makes inappropriate designations of the noninvolvement of human subjects or of exempt categories of research, this may result in delays in the review of an application or the return of the application without review. The PHS will make a final determination as to whether the proposed activities are covered by the regulations or are in an exempt category, based on the information provided in the Research Plan. When in doubt, consult with the Office for Human Research Protections (OHRP), Department of Health and Human Services by accessing their website http://www.hhs.gov/ohrp/ for guidance and further information.

No non-exempt research involving human subjects can be conducted under a DHHS award unless that organization is operating in accord with an approved Assurance of Compliance and provides verification that an Institutional Review Board (IRB) that is registered under the specific Assurance has reviewed and approved the proposed activity in accordance with the DHHS regulations. No award to an individual will be made unless that individual is affiliated with an assured organization that accepts responsibility for compliance with the DHHS regulations. Foreign applicant organizations must also comply with the provisions of the regulations.

The Center of Biologics Evaluation and Research (CBER), FDA, regulates the use of biological products in humans at the investigational and marketing phases, including somatic cell therapies and gene transfer research. If your work involves these areas or preclinical research that will support later work in these areas, please see the Office of Recombinant DNA Activities website at http://www4.od.nih.gov/oba/.

Federal requirements to protect human subjects apply to most research on human specimens (such as cells, blood, and urine), residual diagnostic specimens and medical information. Research involving the collection or study of existing data, documents, records, pathological specimens, diagnostic specimens, or tissues that are individually identifiable is considered “research involving human subjects.” The NIH has developed a user-friendly brochure to help investigators understand how the human subjects regulations 45 CFR 46 apply to their research. You may download this brochure, entitled "Research on Human Specimens: Are You Conducting Research Using Human Subjects?" from http://www.cancerdiagnosis.nci.nih.gov/specimens/brochure.html.

The DHHS regulations also require “Evaluation and disposition of applications and proposals for research to be conducted or supported by a Federal Department or Agency” (http://www.hhs.gov/ohrp/humansubjects/guidance/45cfr46.htm#46.120). This independent evaluation is conducted at the NIH through the peer review system and NIH staff review, and, as required, will take into consideration the risks to the subjects, the adequacy of protection against these risks, the potential benefits of the research to the subjects and others, and the importance of the knowledge gained or to be gained. On the basis of this evaluation, the NIH may approve or disapprove the application or proposal, or enter into negotiations to develop an approvable one.

SPECIAL POPULATIONS

Investigators who conduct research involving pregnant women, human fetuses and neonates, prisoners, or children must follow the provisions of the regulations in Subparts B, C, and D of 45 CFR 46, respectively, which describe the additional protections required for these populations. Relevant information may be obtained at the OHRP website http://www.hhs.gov/ohrp/assurances/assurances_index.html. Exemptions 1-6 do not apply to research involving prisoners or subjects who become prisoners (see Subpart C). Also, Exemption 2, for research involving survey or interview procedures or observation of public behavior, does not apply to research with children (see Subpart D), except for research involving observations of public behavior when the investigator(s) do not participate in the activities being observed.

RESEARCH ON TRANSPLANTATION OF HUMAN FETAL TISSUE

In signing the application Face Page, the duly authorized representative of the applicant organization certifies that if research on the transplantation of human fetal tissue is conducted, the applicant organization will make available, for audit by the Secretary, DHHS, the physician statements and informed consents required by section 498A (b)(2) and (c) of the Public Health Service Act, 42 U.S.C. 289g (b)(2) and (c), or ensure DHHS access to those records, if maintained by an entity other than the applicant organization.

RESEARCH USING HUMAN EMBRYONIC STEM CELLS

http://stemcells.nih.gov/index.asp

In signing the application Face Page, the duly authorized representative of the applicant organization certifies that if research using human embryonic stem cells is proposed, the applicant organization will be in compliance with the "Notice of Extended Receipt Date and Supplemental Information Guidance for Applications Requesting Funding that Proposes Research with Human Embryonic Stem Cells" (http://grants.nih.gov/grants/guide/notice-files/NOT-OD-02-006.html).

IRB APPROVAL

NIH does not require certification of IRB approval of the proposed research prior to NIH peer review of an application. See http://grants.nih.gov/grants/guide/notice-files/NOT-OD-00-031.html.

Following NIH peer review, applicants and their institutions will be notified of the need for review and approval of the proposed research by an OHRP-registered IRB. See http://www.hhs.gov/ohrp to register an IRB. Documentation of IRB approval must be sent to the Grants Management Office identified in the notice requesting certification. This IRB certification must include: the PHS application number, title of the project, name of the principal investigator/program director, date of IRB approval, and appropriate signatures.

An institution is automatically considered to be engaged in human subjects research when it receives an NIH award to support nonexempt research. All institutions engaged in human subjects research must obtain a Federal Wide Assurance (FWA) from OHRP. Instructions for applying for a Federal Wide Assurance (FWA) are available from the OHRP website at http://www.hhs.gov/ohrp/assurances/assurances_index.html.

Any modifications in the Research Plan section of the application, required by either NIH or by the IRB must be submitted with the follow-up certification of IRB approval to the NIH before the competing award is made. It is the responsibility of the principal investigator/program director and the applicant organization to submit the follow-up certification.

If a year will have elapsed between the initial IRB review date and the anticipated award date, the awarding unit staff shall require re-review by the IRB prior to award.

REQUIRED EDUCATION IN THE PROTECTION OF HUMAN RESEARCH PARTICIPANTS

NIH requires education on the protection of human research participants for all individuals identified as Key Personnel before funds are awarded for applications or contract proposals involving human subjects. For information relating to this requirement, see the following see the following notices (http://grants.nih.gov/grants/guide/notice-files/NOT-OD-00-039.html and http://grants.nih.gov/grants/guide/notice-

files/NOT-OD-01-061.html), and Frequently Asked Questions found at: http://grants.nih.gov/grants/policy/hs_educ_faq.htm. Prior to award, applicants will be required to provide a description of education completed in the protection of human subjects for all Key Personnel. Although NIH does not endorse programs, there are curricula available that can provide guidance or that can be modified to provide training in this area. See http://ohsr.od.nih.gov/ for computer-based training developed for NIH that can be downloaded at no charge. For information on facilitating education and developing curricula, see http://www.nih.gov/sigs/bioethics.

RELEVANT POLICIES AND INFORMATION

PROCEDURES FOR SUBMISSION OF COMPLIANCE DOCUMENTS TO THE HUMAN PLURIPOTENT STEM CELL REVIEW GROUP FOR THE RESEARCH USE OF HUMAN EMBRYONIC GERM CELLS	NOTICE: NOT-OD-02-049 http://grants1.nih.gov/grants/guide/notice-files/NOT-OD-02-049.html
GUIDANCE FOR INVESTIGATORS AND INSTITUTIONAL REVIEW BOARDS REGARDING RESEARCH INVOLVING HUMAN EMBRYONIC STEM CELLS, GERM CELLS AND STEM CELL-DERIVED TEST ARTICLES	NOTICE: NOT-OD-02-044 http://grants1.nih.gov/grants/guide/notice-files/NOT-OD-02-044.html
IMPLEMENTATION ISSUES FOR HUMAN EMBRYONIC STEM CELL RESEARCH - FREQUENTLY ASKED QUESTIONS	NOTICE: NOT-OD-02-014 http://grants1.nih.gov/grants/guide/notice-files/NOT-OD-02-014.html
FEDERAL GOVERNMENT CLEARANCES FOR RECEIPT OF INTERNATIONAL SHIPMENT OF HUMAN EMBRYONIC STEM CELLS	NOTICE: NOT-OD-02-013 http://grants1.nih.gov/grants/guide/notice-files/NOT-OD-02-013.html
NOTICE OF EXTENDED RECEIPT DATE AND SUPPLEMENTAL INFORMATION GUIDANCE FOR APPLICATIONS REQUESTING FUNDING THAT PROPOSES RESEARCH WITH HUMAN EMBRYONIC STEM CELLS	NOTICE: NOT-OD-02-006 http://grants1.nih.gov/grants/guide/notice-files/NOT-OD-02-006.html
NOTICE OF CRITERIA FOR FEDERAL FUNDING OF RESEARCH ON EXISTING HUMAN EMBRYONIC STEM CELLS AND ESTABLISHMENT OF NIH HUMAN EMBRYONIC STEM CELL REGISTRY	NOTICE: NOT-OD-02-005 http://grants1.nih.gov/grants/guide/notice-files/NOT-OD-02-005.html
NIH FUNDING OF RESEARCH USING SPECIFIED EXISTING HUMAN EMBRYONIC STEM CELLS	NOTICE: NOT-OD-01-058 http://grants1.nih.gov/grants/guide/notice-files/NOT-OD-01-059.html

NIH POLICY ON THE INCLUSION OF WOMEN AND MINORITIES IN CLINICAL RESEARCH

It is the policy of NIH that women and members of minority groups and their subpopulations must be included in all NIH-supported biomedical and behavioral research projects involving clinical research unless a clear and compelling rationale and justification establishes to the satisfaction of the relevant Institute/Center Director that inclusion is inappropriate with respect to the health of the subjects or the purpose of the research. Exclusion under other circumstances may be made by the Director, NIH, upon the recommendation of an Institute/Center Director based on a compelling rationale and justification. Cost is not an acceptable reason for exclusion except when the study would duplicate data from other sources. Women of childbearing potential should not be routinely

excluded from participation in clinical research. All NIH-supported biomedical and behavioral research involving human subjects is defined as clinical research. This policy applies to research subjects of all ages.

The inclusion of women and members of minority groups and their subpopulations must be addressed in developing a research design appropriate to the scientific objectives of the study. The research plan should describe the composition of the proposed study population in terms of sex/gender and racial/ethnic group, and provide a rationale for selection of such subjects. Such a plan should contain a description of the proposed outreach programs for recruiting women and minorities as participants. See http://grants.nih.gov/grants/funding/women_min/women_min.htm.

NIH POLICY ON INCLUSION OF CHILDREN

(See Definition of "child.")

Research involving children must comply with the NIH Policy and Guidelines on the Inclusion of Children as Participants in Research Involving Human Subjects, issued March 6, 1998. The following excerpts provide the key policy statements. Investigators should obtain full copies of the Policy and Guidelines from NIH staff, or from the NIH grants Web site under the *NIH Guide for Grants and Contracts* (http://grants.nih.gov/grants/guide/notice-files/not98-024.html).

NIH policy requires that children (i.e., individuals under the age of 21) must be included in all human subjects research, conducted or supported by the NIH unless there are clear and compelling reasons not to include them. This policy applies to all NIH-conducted or supported research involving human subjects, including research that is otherwise "exempt" in accord with Section 401 (b) of 45 CFR 46 Subpart A - Federal Policy for the Protection of Human Subjects. The inclusion of children as subjects in research must be in compliance with all applicable subparts of 45 CFR 46 as well as with other pertinent federal laws and regulations. Therefore, proposals for research involving human subjects must include a description of plans for including children. If children will be excluded from the research, the application or proposal must present an acceptable justification for the exclusion.

Additionally, IRBs have special review requirements to protect the well-being of children who participate in research. These requirements relate to risk, benefit, parental/guardian consent, and assent by children, and to research involving children who are wards of the state or of another institution. The local IRB approves research that satisfies the conditions set forth in the regulations.

NIH POLICY ON REPORTING RACE AND ETHNICITY DATA: SUBJECTS IN CLINICAL RESEARCH

The Office of Management and Budget (OMB) (http://www.whitehouse.gov/omb/fedreg/ombdir15.html) defines minimum standards for maintaining, collecting and presenting data on race and ethnicity for all Federal reporting agencies (including NIH). The categories in this classification are social-political constructs and should not be interpreted as being anthropological in nature. The standards were revised in 1997 and now include two ethnic categories, "Hispanic or Latino" and "Not Hispanic or Latino." There are five racial categories: American Indian or Alaska Native; Asian; Black or African American; Native Hawaiian or Other Pacific Islander; and White. Reports of data on race and ethnicity shall use these categories. NIH is required to use these definitions to allow comparisons to other federal databases, especially the census and national health databases. The following definitions apply to the minimum standards for the ethnic and racial categories.

Ethnic Categories:

Hispanic or Latino: A person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race. The term, "Spanish origin," can be used in addition to "Hispanic or Latino."

Not Hispanic or Latino

Racial Categories:

American Indian or Alaska Native: A person having origins in any of the original peoples of North, Central, or South America, and who maintains tribal affiliation or community attachment.

Asian: A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam. (Note: Individuals from the Philippine Islands have been recorded as Pacific Islanders in previous data collection strategies.)

Black or African American: A person having origins in any of the black racial groups of Africa. Terms such as "Haitian" or "Negro" can be used in addition to "Black or African American."

Native Hawaiian or Other Pacific Islander: A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.

White: A person having origins in any of the original peoples of Europe, the Middle East, or North Africa.

Ethnic/Racial Subpopulations: In addition to OMB ethnic and racial categories, NIH uses the following definition for ethnic/racial subpopulations:

Subpopulations: Each ethnic/racial group contains subpopulations that are delimited by geographic origins, national origins, and/or cultural differences. It is recognized that there are different ways of defining and reporting racial and ethnic subpopulation data. The subpopulation to which an individual is assigned depends on self-reporting of specific origins and/or cultural heritage. Attention to subpopulations also applies to individuals who self identify with more than one race. These ethnic/racial combinations may have biomedical, behavioral, and/or social-cultural implications related to the scientific question under study. (http://grants2.nih.gov/grants/funding/women_min/guidelines_amended_10_2001.htm)

GUIDANCE ON COLLECTING RACE AND ETHNICITY DATA FROM STUDY SUBJECTS

When an investigator is planning to collect data on ethnicity and race, the categories identified above should be used. The collection of greater detail is encouraged, for example on ethnic/racial subpopulations. However, any collection that uses more detail must be designed in a way that data can be aggregated into these minimally required categories. Use self-report or self-identification to collect this information by asking two separate questions – one on ethnicity and one on race. Collect ethnicity information first followed by the question on race and provide subjects with the option to select more than one racial category. An example of a format for collecting information from study subjects in the US and that meets the OMB requirements can be found in the Ethnic Origin and Race section of the Personal Data Form Page (MS Word or PDF) in the PHS 398.

See NIH Policy on Inclusion of Women and Minorities.

Collecting Data on Foreign Populations: If you are conducting clinical research outside of the US, you should design culturally sensitive and appropriate data collection items and instruments that allow subjects to self-identify their ethnic and racial affiliation in a culturally appropriate manner. These items, however, should be designed in a way that allow you, the investigator, to aggregate the information into the OMB minimally required ethnic and racial categories when reporting the information to NIH.

Submitting Applications or Proposals Using Existing Data in Clinical Research with No Plans for Collecting New/Additional Data:

Investigators are instructed to provide plans for the total number of subjects proposed for the study and to provide the distribution by ethnic/racial categories and sex/gender. Under these circumstances, investigators are not required to re-contact subjects solely to comply with the newly revised categories. If the existing data on ethnicity and race allow accurate correspondence with the new categories, the investigator can use the format in the Targeted/Planned Enrollment table (MS Word or PDF). However, if the existing data do not allow accurate correspondence with the new categories, information may be reported using the former categories and according

to the format in the 4/98 Version of the Inclusion Table
http://grants.nih.gov/grants/funding/women_min/InclusionOld_Form.pdf

Annual Progress Reports (Type 5 applications) and Competing Supplement Applications

In annual Progress Reports and competing supplemental applications, investigators conducting clinical research are required to provide the cumulative total enrollment of subjects to-date (as well as any proposed additions to the Targeted/Planned enrollment in the case of competing supplement applications) and to present the distribution by ethnic/racial categories and sex/gender.

If Data Collection is Ongoing, Such that New Subjects Will be Enrolled and/or Additional Data Will be Collected from Human Subjects:

Investigators may choose to report ethnicity/race and sex/gender sample composition using EITHER the format in the former 4/98 Version of the Inclusion Table (MS Word or PDF) OR the new Inclusion Enrollment Report http://grants.nih.gov/grants/funding/phs398/enrollmentreport.pdf

[Note: If investigators with on-going data collection choose to report information using the new Inclusion Enrollment Report, they must continue to use this format for the remaining years of the project.]

If Data Collection is Complete, Such that No New/Additional Subject Contact is Planned:

Investigators may EITHER continue to report using the former categories and according to the 4/98 Version of the Inclusion Table, OR, if data allow accurate correspondence with the new categories, use the format in the new Inclusion Enrollment Report.

Additional Information

Additional information on NIH policy regarding the Inclusion of Women and Minorities in Clinical Research can be found at the website http://grants.nih.gov/grants/funding/women_min/women_min.htm.