



Reviewer Guidelines

LSDF 07-02: Innovative Programs to Advance Health Research

A. Introduction and Background

Introduction. The following guidelines apply to LSDF 07-02 and are for AAAS expert reviewers to follow. Please read the request for proposals (RFP) for this grant competition before starting your reviews. This RFP can be accessed via the "Grants" section at www.lsdfa.org.

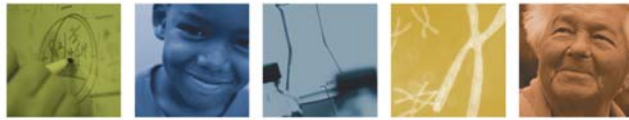
Contact Information. If you have questions at any point during the review, please contact:
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Background of the Life Sciences Discovery Fund. LSDF was created by the Washington State Legislature to receive \$350M in tobacco settlement bonus payments over a period of 10 years to invest in life sciences research. The mission of LSDF is to support innovative research in Washington State to promote life sciences competitiveness, enhance economic vitality, and improve health and health care.

Expectations of Reviewers. LSDF achieves its mission by funding proposals through a competitive granting process, the success of which depends upon superb expert peer review. As a reviewer considering LSDF proposals, you are expected to protect the confidentiality of the applicants' proposals and of the review process itself and to abide by a strict standard in avoiding any conflict of interest. Any concerns you may have about a proposal or your ability to review it impartially should be communicated in confidence to AAAS.

1. *Confidentiality.* The proposals and the review process are confidential. If you believe that additional scientific expertise is needed to review a proposal, you should not solicit it yourself, but instead notify AAAS to make arrangements for outside assistance. You must not contact applicants or the LSDF Board of Trustees under any circumstances. You will be asked to sign a nondisclosure agreement prior to your engagement to review LSDF proposals.

2. *Conflict of Interest.* A perceived or actual conflict of interest in scientific peer review exists when a reviewer has an interest associated with a grant proposal that may bias his or her evaluation of it. There are several bases for a conflict of interest: employment, financial arrangements, personal or professional relationships or other personal interests. Any one condition may serve to disqualify you from participating in the review of a proposal. If you feel that there may be a perception of conflict, notify AAAS, who will make the determination about your ability to review a proposal without conflict. As part of your duties as an LSDF peer reviewer, you will be expected to sign a declaration(s) that you have disclosed all conflicts of interest that you may have with the proposals.



B. Program Goals and General Proposal Review

LSDF 07-02 Goals. This competition will award approximately \$20 million to programs that will be innovative within their fields, build upon established strengths within the participating organization(s), have the potential for growth and sustainability over time, and benefit their organizations, their communities, and the state. All funded proposals will support the LSDF's mission to support innovative research in Washington State to promote life sciences competitiveness, enhance economic vitality, and improve health and health care. Knowledge generation is not the primary desired outcome of LSDF grants.

What is a program? This competition provides seed money to launch programs that have the following characteristics: multiple investigators working under a common theme; the potential to be enduring; the ability to attract funding from a variety of sources; and where the whole of the program's activities are greater than the sum of its parts.

Innovation in funded programs may take many forms. Programs may formulate research problems in original ways, reframe issues in a field, and advance new experimental approaches. They may accelerate the development of answers to important questions—creating new collaborations within and outside the applicant organization, creating cross-disciplinary perspectives that have the potential to make life sciences inquiry more productive.

Program proposals may request support for many kinds of activities, including:

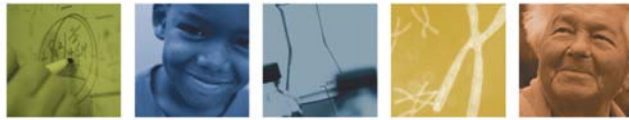
- establishing new centers for research;
- creating new multi-institutional consortia;
- recruiting outstanding scientists to lead new research programs; and
- acquiring major equipment to accelerate advances within a new research program.

The benefits derived from programs in this competition are varied, including:

- enhancing the ability of the state's life sciences sector to solve important problems in health and health care;
- attracting additional financial resources to life sciences research;
- advancing the scientific leadership position of Washington research organizations;
- promoting the training of the state's workforce, particularly in an emerging industry;
- drawing new scientific talent to Washington in the form of students, post-doctoral fellows, researchers, and companies; and
- developing opportunities for new intellectual property creation and commercialization.

Examples of areas of research expected to improve health and health care include:

- new approaches to diagnosis, treatment, prevention, and management of disease;
- translation of basic science discoveries to health-care practice;
- implementation of predictive and preventive health-care strategies;
- advances in human nutrition;
- scale-up of effective health-care practices from individuals to populations;
- demonstrations of improved efficiencies and outcomes in health-care delivery; and
- innovations in health-care cost effectiveness.



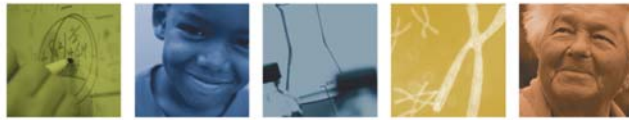
Proposal Requirements

Programs proposed for LSDF 07-02 funding must be based on a rigorous scientific and organizational rationale. In establishing that rationale, all proposals will be expected to describe:

- the proposed program and the innovations it brings to the field;
- the problem or area of study to be addressed and its importance;
- the strategic importance of the program to the applicant organization;
- the roles of the participating organizations and how their activities will be coordinated;
- the potential for the program's research to benefit the health of the state's citizens or to beneficially impact the state's health-care systems, as well as the time frame for doing so;
- how the proposed program builds upon the organizations' and investigators' prior research and experience, and capitalizes on their established strengths and excellence;
- the facilities in which the program will be housed and the major equipment and other tangible resources that will be made available to the program;
- the scientific personnel who will be involved in the program, their roles and any plans for expansion of personnel;
- the support personnel and their roles;
- how the program will be structured, managed, funded, and developed during its first five years, including milestones, budgets and sources of funding;
- how the program will increase the future competitiveness of the Washington life sciences sector;
- the economic benefits that have the potential to flow from the new program;
- expected outcomes, clearly articulated and capable of being documented;
- how and at what intervals the program will be evaluated; and
- tangible commitments from the participating organizations to support the proposed program that are commensurate with the strategic importance of the program to the participants.

LSDF intends to provide grant support that is not readily available from other sources. Its purpose is to play a catalytic role in helping investigators and their organizations apply their strengths in new areas of research. Proposals should clearly detail why the program is not necessarily eligible for other funding opportunities. They should explain how their program's purpose and scope make the LSDF a particularly appropriate source of funding.

At the time of application, it is not necessary for the applicant to have secured all of the funding and resource commitments upon which the program proposal is predicated. LSDF may make an award contingent upon the applicant's ability to secure the additional resources necessary to launch the initiative. The period reserved to satisfy any contingencies shall be specified by the LSDF. In order to be selected for a contingent award, the proposal must detail convincingly how, from whom, and by when the remaining commitments will come. Programs in which LSDF dollars can be used to leverage those from other entities in building a new initiative will be regarded as especially strong.



Programs funded by LSDF 07-02 grants will be expected to demonstrate sustained institutional commitment to long-term results. Therefore, although the duration of grants is not limited, the RFP asks applicants to describe program operations, growth projections, and funding plans for five years or the grant period, whichever is longer.

Proposal Rating and Evaluations. The peer review process has three phases—individual preliminary review of proposals; a consensus evaluation developed during a review panel discussion; and a panel interview of candidates selected by the LSDF Board of Trustees. Your objective, in the first and second phases, is to place proposals into one of three rating categories, reflecting your individual and collective recommendation for advancing the proposal for an interview. LSDF’s goal for the interview stage is approximately 12 applicants, so ideally approximately 25 proposals would be rated “Highly Recommended” as a result of the consensus review stage.

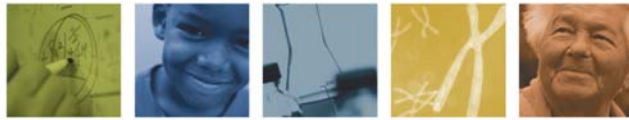
First, you will review and evaluate proposals individually, according to your judgment of the strengths and weaknesses of the proposal as a whole. Then, following a phone meeting of the review panel, a consensus evaluation will be written. If any member of the review panel has an opinion that diverges markedly from the consensus, that divergence will be noted and explained. The consensus reviews will be presented to the LSDF Board of Trustees, who will select the interviewees.

A panel of peer reviewers, at least partially composed of reviewers from the earlier review phases, will conduct interviews with the selected applicants. Trustees will be invited to participate in the interviews. Finally, the Board will select the awardees from the interviewed applicants.

Following the competition, applicants will receive the consensus reviews of their proposals, so these evaluations must be constructive and written with care, accuracy, and respect. Neither applicants nor LSDF will receive individual reviewers’ preliminary comments on proposals.

In preparing both preliminary and consensus evaluations, follow these guidelines. The overall evaluation should consider all aspects of the proposal. Do not describe the investigator’s plans in detail, but briefly describe the overall goals of the proposal. Then summarize the strengths and weaknesses of the proposal according to each of the three core review criteria of the LSDF: (1) scientific, technical, and organizational merit, (2) the potential to improve health and health-care, and (3) the future economic potential. Weigh each of the criteria equally. Put strengths and weaknesses in perspective by indicating their relative magnitude. A very strong proposal will be innovative, address important issues, and generate confidence that the proposed research will make a significant impact.

Reviewers should also assess how well the applicants established the particular appropriateness of LSDF funding for their proposals.



C. Detailed Proposal Review Criteria

In particular, please read sections 3.3.2 and 3.3.3 in the RFP for further context.

Proposals Must Serve the LSDF Mission. The Life Sciences Discovery Fund is an investment on behalf of the citizens of Washington State. Competitive proposals will serve all three principal review criteria (below). As a reviewer, you will not be expected to be familiar with the particular environment of Washington State. It is the applicants' responsibility to articulate that environment clearly and to define convincingly the specific benefits their research is designed to produce.

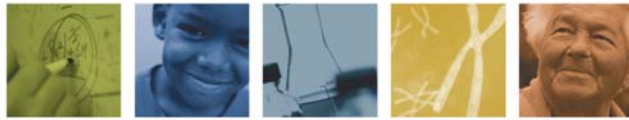
Specific Criteria for LSDF 07-02. The principal review criteria for this grant competition are derived from the Fund's mission. You will evaluate proposals with regard to their (1) scientific, technical, and organizational merit, (2) importance to health and health-care, and (3) future economic returns. In addition, there are several related criteria you will be asked to specifically address in your reviews.

Review Criteria in Detail. Each criterion, paraphrased from section 4.3 of the RFP, is intended to guide you in evaluating and rating proposals.

Scientific, Technical, and Organizational Merit

First and foremost, the proposal must meet LSDF's definition of a program. The scientific, technical and organizational merit of the proposal will be judged by how well it demonstrates the following qualities of the proposed program:

- the proposed program is innovative, with scientific and technical originality;
- it focuses on a significant problem or complex set of problems and provides promising new approaches or ways of thinking;
- it proposes innovative hypotheses or addresses critical barriers to research progress in the field;
- it establishes a research framework with strong potential to achieve novel and important results;
- the program has the potential to make a substantial contribution to its field of research;
- it has the potential to establish the applicant organization and any co-applicants as leaders in the field;
- its proposed research outcomes are clearly defined;
- the principal investigator and team have the scientific and organizational competence to ensure the program's success;
- the program is demonstrably superior to alternate approaches in achieving its scientific outcomes;
- where collaboration is required, investigators demonstrate a history of effectively working together and an appropriate plan to manage the collaborative process;
- the proposed program builds upon the already established strengths of the applicant organization;
- the proposed program has the potential to increase the life sciences competitiveness of the applicant organization and of Washington State;



- the objectives of the program are consistent with the strategic priorities of the applicant and co-applicant organizations;
- the applicant and co-applicant organizations demonstrate strategic alignment by committing resources to enhance the probability of the proposed program's success; and
- the budget is appropriate to the scope and goals of the proposed program.

Importance to Health and Health Care

The program's importance to health and health care will be judged by how well the proposal demonstrates that it possesses the following qualities:

- the program has the potential to make a substantial and measurable contribution to improving health and health care in Washington;
- it will move the current state of knowledge in health or health care forward; and
- it will achieve one or more of the following benefits: improved diagnosis, treatment, prevention, and management of disease and improved delivery of health-care services.

The range of possible proposed improvements is understood to be broad, and the intended health results of the proposed program may be near- or long-term. Priority will be given to proposals that address significant health and health-care problems and that provide compelling evidence that they have the potential to yield the greatest benefits for Washington citizens.

Future Economic Returns

The proposed program must have the potential to benefit Washington's economy. Applicants must clearly state the proposed economic benefits of the program and how those benefits improve the state's economic environment. Benefits may include, but are not limited to, the following:

- direct economic activity entailed in the operations of the program and the conduct of its research;
- measurable savings in the cost of health care due to the application of program research results;
- future economic consequences of program-induced improvements in health;
- new training and employment opportunities fostered by the program's research enterprises;
- success in attracting life sciences researchers, companies, and jobs to Washington;
- success in creating new companies and jobs and attracting investment capital to Washington;
- creation of intellectual property, presenting attractive licensing opportunities for start-up and existing companies; and
- future life sciences research funding.

Your evaluation of proposals is expected to be based on your judgment of the extent to which a proposal meets each of the criteria listed above. However, your review should also address each of the following questions directly.



Program versus Project (or “Is this a program?”)

You will be asked if the proposal meets the LSDF criteria of a program. As LSDF defines them, “projects” are individual scientific studies, relatively limited in scope, with a sharply defined research focus. Other LSDF grant competitions fund projects. “Programs,” on the other hand, are strategic research initiatives, broader in scope, designed to address problems within a field of study and to position an organization or organizations for future competitiveness and leadership. LSDF 07-02 is intended to fund only programs.

Restructuring of existing resources or projects within an organization does not constitute a new program, as the term “program” is envisioned within this competition. Nor is an applicant’s need for infrastructure development a sufficient basis for a program proposal. An assembly of projects, even when some are new, which is not designed to lead to constructive synergy is not a program.

Degree of Institutional Commitment (or “Is there sufficient institutional resource commitment to assure success?”)

LSDF expects that an applicant organization will demonstrate the importance of the proposed program to its strategic direction by committing tangible resources at a level that helps to assure the program’s success. The institutional commitment is not defined as a percentage contribution, but is purposely left flexible. Co-applicants should also be making resource commitments at a level consistent with their participation in the program.

D. Clarification of Issues That May Arise During Review

These are not issues that you are required to comment on, but our responses to applicant questions may help you in evaluating proposals.

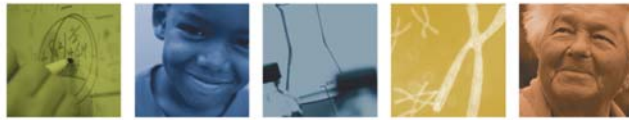
Personnel detail. Because programs can have a large number of people associated with them, it is acceptable that biosketches are provided only for key personnel.

Budget detail level. Although some applicants may provide detailed budgets, applicants were given the freedom to propose LSDF budgets that were unallocated and should not be penalized for doing so. If any changes in the budget are recommended, please explain what changes should be made and why. A detailed budget will be required of awardees.

Indirect costs. LSDF is willing to pay the full costs of doing research (i.e., including what are typically called “indirect” costs, and noted on the LSDF budget as “Administrative Costs” and “Facilities Charges”) when expressed as direct costs. Applicants are not supposed to apply their Federally-negotiated indirect cost rate to their “direct” costs to derive Facilities and Administration (F & A) charges. You are not expected, however, to determine how the applicant arrived at the F & A charges. Awardees will be required to provide a detailed breakdown of all costs.

Description of the research plan. Applicants had very limited space in which to describe the various elements of their proposed program. Consequently, there may reasonably not be extensive preliminary results, background to the research plan, or research details of the various projects that would occur in the program.

Eligibility. You may assume that organization eligibility has been reviewed by LSDF staff, but you may raise concerns with AAAS if you feel strongly that an organization is ineligible.



E. Overall Scoring and Rating

Funding. This is a highly competitive fund. Over 120 letters of intent were received for the LSDF 07-02 competition, and funds available may be sufficient for no more than four to six awards. The Board of Trustees will take the consensus reviews into account in making award decisions, but will have state-specific interests to consider as well.

Outliers. LSDF understands that proposal quality will vary across the core review criteria. For example, a proposal that may not be scientifically innovative may offer a major opportunity to impact health-care cost effectiveness. Similarly, a mid-level proposal in the scientific and health-care categories could have outstanding economic potential. As reviewers prepare consensus reviews, LSDF asks them to make special note of compelling opportunities within proposals that might otherwise be considered ordinary.

Rating. Please use the following general guidelines to rate proposals:

Highly Recommended: outstanding, deserves highest priority for an interview

Recommended: good, worthy of consideration for an interview

Not Recommended: poor, lacking in one or more critical areas; interview not recommended