



Interview Phase Reviewer Guidelines

Life Sciences Discovery Fund (LSDF) 2009 Program Grant Competition

The following guidelines apply to the LSDF 2009 Program grant competition. American Association for the Advancement of Science (AAAS) expert reviewers will use these guidelines for the **interview phase** of external evaluation.

Please read the Request for Proposals (RFP) (at http://www.lsdfa.org/grants/current/2009/Programs_Grants/) before starting your evaluations. First-phase evaluation criteria are also summarized in the [Appendix](#) of this document. Any revisions or additions to the guidelines will be sent to reviewers through AAAS.

If you have questions at any point during the evaluation, please contact:

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A. Introduction to the LSDF

Overview of the Life Sciences Discovery Fund. LSDF was created in 2005 by the Washington State Legislature to invest in life sciences research. The mission of LSDF is to support innovative research in Washington State to improve health and health care, stimulate economic activity, and promote life sciences competitiveness.

Board of Trustees. LSDF is governed by a board of trustees, which has final decision-making authority, including funding. The board is considerably informed by the expert evaluation process but uses additional criteria in making award decisions.

Expectations of Reviewers. LSDF achieves its mission by funding proposals through a competitive granting process, the success of which depends upon superb expert evaluation. As a reviewer evaluating LSDF proposals, you are expected to protect the confidentiality of the proposals and of the evaluation process itself and to abide by a strict standard in avoiding any conflict of interest. AAAS will provide you with copies of LSDF's confidentiality and conflict of interest policies. Any concerns you may have about a proposal or the ability to evaluate it impartially should be communicated in confidence to AAAS. As part of your duties as an LSDF expert reviewer, you will be expected to sign both a nondisclosure agreement and a declaration that you have disclosed all conflicts of interest that you may have with any proposals.



B. 2009 Program Grant Competition Goals and the Interview Phase

LSDF 2009 Program Grant Competition Goals. This competition will award up to \$15 million for the launch and development of **new** broad-based research initiatives that will help Washington research organizations advance their strategic priorities and leadership/competitive positions in health and health-care research. Programs are expected to demonstrate a dynamism and synergy among participants that would not exist but for the organization of their efforts into the program. Principal investigators may request the budget amount and duration that are appropriate for the work.

Program Proposals Must Serve the LSDF Mission. The Life Sciences Discovery Fund is an investment made on behalf of the citizens of Washington State to improve health and health care, stimulate economic activity, and promote life sciences competitiveness. As a reviewer, you will not be expected to be familiar with the particular environment of Washington State. It is the principal investigators' responsibility to articulate that environment clearly and to define convincingly the specific benefits their research is designed to produce.

What is a Fundable Program? Programs are collaborative, scientifically rigorous research initiatives that address major problems within a field of study.

- **Proposed programs must be built upon an applicant organization's strengths and have clear strategic importance for the applicant organization.** Principal investigators must describe their plans to launch and build the program, the ways the program will advance the applicant organization's strategic direction, and the resource commitments that will be in place to support and sustain the program's growth and development. LSDF expects that applicant organizations will make significant resource commitments (cash and/or in-kind) to support the proposed programs. Such resource commitments demonstrate that the proposed program is of strategic importance to the applicant organization and that the organization is invested in helping the program grow to sustainability. Organizational resource commitments may include but are not limited to:
 - support for key research, technical, or administrative personnel;
 - recruitment of and start-up support for program researchers;
 - absorption of institutional facilities and administration charges;
 - provision of laboratory, clinical, or office space that is newly or specifically designated for program activities;
 - support for renovations of program facilities;
 - purchase of new equipment or supplies, or dedication of existing equipment or supplies to the program; and
 - matching funds from institutional sources.
- **Proposed programs must have a long-term vision and be designed to endure.** The program must not be structured solely around research questions that will be answered within a few years, or without a long-term plan for expanding program activities or evolving to meet new challenges.



- **Programs will create new synergies among participating researchers and organizations.** This is essential to a program, but sometimes difficult to measure. Synergy results from the interchange among participants with complementary strengths and perspectives who are able to develop new programmatic research directions because of the collaboration. In this context, the opposite of synergy would be an assembly of research projects operating in parallel with no added value.
- **Programs must include a well-detailed plan of research.** In addition to detailing the program's structure and operations, principal investigators must describe the program's research activities – including the research focus/agenda and metrics for assessing success – such that reviewers can understand the research priorities and the methodologies to be used.

Programs may include establishment of core facilities or infrastructure. However, proposals that seek only to develop such resources in the absence of clearly articulated research objectives are not fundable. Similarly, a program to implement an innovation (e.g., an improved clinical method) or to train a cadre of professionals in the absence of research questions is not fundable. Translation of innovations to broader practice must be accompanied by investigation of research questions.

- **LSDF desires to fund teams that show a commitment to translating the results of their research into widespread use.** "Translation" includes transitions from the laboratory into practice and/or expanding local practice into broad acceptance and use. Translation can involve intra- or inter-organizational adoption of research results into practice, public policy initiatives, and commercialization.

Proposals with the capacity to attract additional resources to enable translation or broader implementation of the research are especially desirable. Such additional resources may include follow-on research and/or investor funding; recruitment of scientific talent or companies to Washington; commitments to commercialization of research discoveries through the formation of a new company or licensing to an existing company; and commitments from research partners or others to adopt a successfully demonstrated strategy or technology.

- **Proposals with the potential to have near-term impact on improving health and health care are of particular interest.** All proposals are expected to provide health-related returns to the state. Such returns may include, but are not limited to, enhancement of disease prevention, diagnosis, treatment, or management; and improved efficiencies in health and health-care systems.

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;



- acquiring major equipment to accelerate advances within a new research program;
- training the state's scientific workforce, particularly in emerging industries; and
- establishing research infrastructure to support commercialization of multiple technologies over a sustained period of time.

Restructuring of existing resources within an organization without developing new resources or capabilities does not meet LSDF's definition of a "program." Rather, LSDF support is meant to assist with the launch of new initiatives that represent innovative thinking within the participating organizations and the field.

Program Proposal Rating Process and Evaluation. The interviews that you will be conducting complete a two-phase expert evaluation process convened by AAAS for LSDF. The first phase, or "mail evaluation," resulted in consensus summaries of individual proposals prepared by expert panels according to the evaluation criteria described in Sections 1.2 and 4.2 of the 2009 Program Grant Competition RFP and summarized in the [Appendix](#).

Purpose of the Interview. The proposals proceeding to the interview phase were chosen by the LSDF Board of Trustees. The purpose of the interview phase is to gather more information on the application, including that which is only possible through direct interaction with the proposal team. The outcome will be a funding recommendation from the interview panel that represents the panel's overall impressions of the proposal, based on both the first-phase evaluation and the additional information obtained from the interview process. The LSDF Board of Trustees will consider the interview panel's recommendations in making awards in this competition.

Technical Commentary. If you believe that additional scientific or technical expertise is necessary to evaluate a proposal, you should not solicit it yourself, but instead notify AAAS to make arrangements for outside assistance.

Resubmissions. Proposals may be resubmitted to LSDF, and principal investigators are responsible for including previous evaluation comments and a response. Resubmissions are treated as new proposals, i.e., they are neither penalized nor "fast-tracked" simply because they are a resubmission.

C. Interview Phase Process

Preparation for the Interview. Through AAAS, you have received proposals and comments from the first phase of evaluation, and you have been assigned as lead reviewer for some proposals. Principal investigators are preparing a limited amount of supplementary information: a response to the first-phase evaluation and an update on the development of their programs. The deadline for submission of supplementary information to LSDF is December 8, 2009. Supplementary information will be forwarded for distribution to reviewers. Please evaluate all assigned proposals, evaluation comments, and supplementary information thoroughly as described in Section D, [Overall Rating and Evaluation](#). **For the proposals for which you have**



been designated as lead reviewer, please be prepared to ask the first question(s) during the question-and-answer portion of the interview (see [Interview Process](#) below).

All members of the review panel will meet for dinner on Sunday, January 10 at the Talaris Conference Center, Seattle (see [Interview Logistics](#) below) to prepare for the interviews, including identifying key issues to be addressed for each proposal. More detailed information will be provided closer to the interviews.

Composition of the Review Panel. The panel is composed of expert reviewers chosen by AAAS to represent the expertise required to evaluate the proposals and interview the teams. Some of the reviewers may have participated in the first phase of evaluation. Additionally, LSDF Board of Trustees members may participate in the interviews. Board members will typically ask questions that relate to the impact of the proposal within Washington State but may ask any question that will help the board make its funding decisions.

Interview Logistics. You will separately receive information on arranging your travel. The panel will conduct interviews on Monday, January 11 and Tuesday, January 12. Both the pre-interview preparation meeting/dinner and the interviews will be held at the Talaris Conference Center in Seattle (<http://www.talarisconferencecenter.com/maps-directions.php>).

Interview Process. Interviewees will receive a panel roster and short biographies, so introductions of the review panel will not be necessary. Your identity will not be confidential, but proposal teams are not allowed to contact you before or following the interview. Please be objective and respectful of proposal teams during the interview, as the interview process reflects on LSDF and AAAS. Panelists will receive a list of proposal team members attending the interview in advance.

The review panel will have approximately 10 minutes before each interview for final discussions and preparations. Proposal teams will then have five minutes to load optional presentation files onto the LSDF laptop for use during the interview. Proposal teams will have a maximum of 15 minutes to highlight information that they think is critical to an understanding of the strengths and benefits of their program to Washington State.

Following this, the review panel, starting with the assigned lead reviewer, will have a maximum of 45 minutes to:

- question the team about issues raised in the comments from the first-phase reviewers (if not already or sufficiently addressed);
- question the team about any new issues or concerns that the panel has identified from the supplementary information provided in advance of the interview; and
- evaluate the strength of the research team, as suggested by their interactions during the interview.



Questions may cover, but are not limited to, the following topics:

- science and technology (including details of research plans);
- budget, including non-LSDF sources of revenue, the resource contribution of the applicant organization, and how the proposed LSDF monies are to be allocated;
- program organization;
- synergy; *i.e.*, how the program as a whole is greater than the sum of its parts;
- plans for long-term sustainability;
- plans for translating program outcomes into widespread use, *e.g.* through commercialization, practice adoption, or policy implementation;
- potential impacts on health and health care and the economy within Washington State; and
- appropriateness of and necessity for LSDF support.

AAAS staff will be the timekeeper and indicate when discussions need to wrap up or end. Following each interview, the review panel will then meet privately for a maximum of 15 minutes to discuss the interview and assign preliminary ratings using a standard form.

LSDF board and staff members in attendance will meet separately to summarize their own impressions of the interview.

Proposal teams may bring tangible objects to show the panel during their interview, but cannot assume that they will be passed among the panelists. Proposal teams are not to bring reprints or other materials to pass out at the interview. AAAS will intervene if teams bring excessive material.

After all interviews have been conducted, the review panel will finalize its ratings and evaluations of the proposals in a closed-door session. Proposal teams' presentations will be available to the review panel in the final closed door session.

D. Overall Rating and Evaluation

Proposal Rating and Evaluations. Your objective, in the interview phase, is to place each proposal into the rating category that reflects your collective recommendation for funding. Use the following general guidelines to rate proposals:

Highly Recommended: outstanding, deserves highest priority for funding

Recommended: good, worthy of consideration for funding

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

Indicate the overall proposal rating (Highly Recommended, Recommended, or Not Recommended) at the top of the review form. The overall rating must consider **all** aspects of the proposal, including

- scientific and technical merit;
- organizational merit;
- importance to health and health care;



- future economic returns;
- appropriateness of and necessity for LSDF funding;
- whether the proposal describes a “program” as defined by LSDF; and
- any budgetary issues.

A very strong proposal will address important issues through a well-structured initiative that meets LSDF’s definition of a “program;” generate confidence that the proposed research will make a significant impact; and contribute significantly to LSDF’s core goals of improving health and health care, fostering economic development and enhancing the competitiveness of the life sciences sector in Washington State.

Complete the remainder of the review form:

1. *Overall Comments*. Give your overall impressions of the proposal and team and describe the rationale for the overall proposal rating. Do not simply repeat points made during the first-phase evaluation. Include in your discussion: 1. how well the issues and concerns outlined in the first-phase evaluation were addressed; 2. how the first-phase evaluation, combined with new information from the supplementary materials and the interview, together informed the overall proposal rating and 3. as appropriate, the rationale for any discrepancies between the first-phase and interview-phase evaluations or ratings.
2. *Overall Strengths and Overall Weaknesses*. List the major strengths and weaknesses of the proposal, putting each in perspective by indicating its relative magnitude.
3. *Key Criteria*. Provide constructive comments regarding how well the proposal met each criterion.
4. If the overall proposal rating is “Not Recommended,” describe the key issues that resulted in the lowering of the proposal’s rating after the interview. Note areas or issues that should be addressed if the proposal is not funded and the principal investigator resubmits the proposal for a later competition.

Note that you should evaluate the proposal as presented by the principal investigator and not on the basis of its theoretical potential. For example, a proposal may propose to cure a devastating disease affecting many Washingtonians but have a poor approach to doing so. Accordingly, the comments regarding the importance to health and health care should describe the weaknesses in the proposal’s approach.

Following the competition, principal investigators will receive the panel’s consensus evaluations of their proposals (not to include the comments of LSDF board members). Thus, these evaluations must be constructive and written with care, accuracy, and respect. Neither principal investigators nor LSDF will receive individual reviewers’ comments on proposals.

Funding. This is a highly competitive fund. Nineteen proposals (from 29 letters of intent) were received for the LSDF 2009 Program grant competition, and funds available will be sufficient for no more than three to five awards. The Board of Trustees will take the consensus evaluations 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 evaluation 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 evaluations, LSDF asks them to make special note of compelling opportunities within proposals that might otherwise be considered ordinary.

Appendix – 2009 Program Grant Competition First-Phase Evaluation Criteria

The information below, adapted from the 2009 Program Grant Competition RFP and the instructions to the first-phase reviewers, is essential to review, particularly if you did not participate during the first phase of evaluation. Although you are not repeating the evaluation conducted in the first phase, it is important to familiarize yourself with the criteria used to advance the proposal to the interview phase. In particular, please read sections 1.2, 2, 3.3.4, 3.3.5, and 4.2 in the RFP for further context.

The principal evaluation 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, you will be asked to specifically address (1) the appropriateness of and necessity for LSDF funding, (2) whether the proposal meets the LSDF's definition of a program, and (3) any budgetary issues. Further, you will be asked to list any areas or issues that should be addressed in a resubmission.

Please note that if a proposal includes application of a technology platform (e.g., a drug delivery technology or a diagnostic tool), you must evaluate both the application and the platform with regard to all of the criteria described below.

Scientific and Technical Merit

The proposed program must be of high scientific and technical merit. These will be judged by how well the proposed program demonstrates the following qualities:

- it meets LSDF's definition of a "program" and offers the likelihood of synergistic outcomes;
- it is innovative, with scientific and technical originality;
- it focuses on a significant problem or complex set of problems;
- it builds upon the established strengths of the applicant organization;
- its objectives are consistent with the strategic priorities of the applicant organization;
- the applicant organization commits significant resources to enhance the probability of the proposed program's success;



- it establishes a research framework with strong potential to achieve novel and important results;
- its proposed research studies, methodologies, and metrics for success are clearly described;
- its proposed research outcomes are clearly defined, significant, and realistic;
- it has the potential to establish the applicant organization and any co-applicants as leaders in the field;
- it has the potential to increase the life sciences competitiveness of the applicant organization and of Washington State;
- the principal investigator and any co-investigators demonstrate the commitment, experience, and ability to execute the proposed program successfully;
- for proposals that involve the development of research infrastructure to enhance commercialization, the principal investigator presents a clear description of the commercial opportunities that the program will address, the potential for industrial participation in the program, and the plans for selecting research projects for the program, sustainably fostering commercialization of multiple projects, monitoring progress, and addressing various types of potential delays and difficulties;
- the budget is appropriate to the scope and goals of the proposed program; and
- the principal investigator makes a clear case for why an investment from LSDF is appropriate and necessary to the success of the program.

Organizational Merit

The proposed program must be of high organizational merit. "Organization" refers to the structure and governance of the program itself, not the applicant organization. Merit will be judged by how well the proposed program demonstrates the following qualities:

- investigators demonstrate a history of effective collaboration and an appropriate plan to manage the collaborative process;
- it is organized in a clear way that facilitates communication among participants, decision-making and future growth;
- procedures exist to coordinate and prioritize the work of the program; and
- a coherent decision-making structure (governance) exists.

Importance to Health and Health Care

The proposed program must have the potential to benefit health and health care of Washington residents. The program's importance to health and health care will be judged by how well the proposal demonstrates that it possesses the following qualities:

- it addresses a significant issue in health or health care;
- it has the potential to make substantial, beneficial, and measurable contributions to improving health and health care;



- it will achieve benefits such as:
 - improved diagnosis, treatment, prevention, or management of disease;
 - better management of health-care delivery environments and systems;
 - promotion of healthy patient behaviors and patient compliance with care-givers' recommendations;
 - better integration of care-givers, patients, and health-care systems; or
 - accomplishing any of the above in a more cost-effective manner.
- it proposes a credible mechanism for how research results will be translated into benefit, e.g. through practice adoption, policy implementation, or commercialization.

Principal investigators may propose a broad range of improvements in health or health care, and the impact of the proposed program may be near- or long-term, with near-term benefit being especially desirable. LSDF will give priority to proposals that address widespread health and health-care problems and that provide compelling evidence that they have the potential to yield benefits for the greatest number of Washington State citizens.

Future Economic Returns

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

- providing direct economic activity through the conduct of program research;
- producing measurable gains in cost-effective health care due to the application of research results through practice adoption, policy implementation, or commercialization;
- contributing to future economic gains through program-induced improvements in health or health care; e.g., through restoring work time that would otherwise be lost;
- fostering new training and employment opportunities through program research;
- attracting life sciences researchers, companies, and jobs to Washington;
- creating new Washington companies and jobs and attracting investment capital to Washington;
- creating intellectual property that presents attractive licensing opportunities;
- obtaining future life sciences research funding enabled by the LSDF grant.

Additional Evaluation Criteria

Your evaluation must also address the following questions directly:

Does the proposal adequately justify the appropriateness of and necessity for LSDF funding? (or, "Why is LSDF funding appropriate and necessary for this program?") (See Section 1.2 of the RFP.)



Reviewers should assess how well the principal investigators establish the particular appropriateness and necessity of LSDF funding for their proposals. 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 various areas of research. Proposals should clearly detail why the program is not necessarily appropriate for other funding opportunities and why the program cannot be accomplished without LSDF's investment. They should explain how the program's purpose and scope make LSDF a particularly appropriate source of funding.

Does the proposal describe a "program," as defined by LSDF?

Principal investigators should clearly detail how the proposed work meets the LSDF definition of a "program" – a strategic, synergistic research initiative, broad in scope, that is designed to address problems within a field of study and to position an organization for future competitiveness and leadership. One of the characteristics that defines a program is significant institutional commitment. This is not measured by a minimum cost-sharing percentage or other formulaic, quantitative criterion, but rather should be judged as significant in the context of the applicant and co-applicant organizations' resources. Institutional commitment can take forms other than cash, such as commitment of space and faculty hiring.

Program budget

Principal investigators provided complete funding plans with their initial submissions, detailing the sources of revenues for the first five years of the program or LSDF grant period, whichever is longer, and how those revenues will be allocated. Reviewers are urged to evaluate the budgets carefully and suggest any modifications that they think appropriate, and indicate if any of the suggestions are essential in an award.

If your overall proposal rating is "Not Recommended," please note any areas or issues that should be addressed if the proposal is not funded and the principal investigator resubmits the proposal for a later competition.

These can include issues that simply need clarification as well as recommendations for substantive changes to the proposal.



Interview Comment Form

Life Sciences Discovery Fund (LSDF) 2009 Program Grant Competition

Proposal Title:

Principal Investigator:

Applicant Organization:

Request ID:

Rating Scale

Please use the following scale in your ratings. Only the consensus evaluation will be shared with principal investigators, not individual evaluations.

Highly Recommended: outstanding, deserves highest priority for funding

Recommended: good, worthy of consideration for funding

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

Overall proposal rating: Highly Recommended
 Recommended
 Not Recommended

Give your overall impressions of the proposal and team and describe the rationale for the overall proposal rating. Discuss:

- How well the issues and concerns outlined in the first-phase evaluation were addressed;
- How the first-phase evaluation, combined with new information from the supplementary materials and the interview, together informed the overall proposal rating;
- As appropriate, the rationale for any discrepancies between the first-phase and interview-phase evaluations or ratings; and
- The main strengths and weaknesses of the proposal.

Overall comments:

Strengths:

Weaknesses:



Key Criteria: Evaluate the proposal according to each criterion and provide constructive comments:

Organizational Merit

To what extent is the program organized and governed in a manner that will allow it to effectively carry out its work and grow?

Comments:

Importance to Health and Health Care (including whether near-term benefits are likely)

Comments:

Future Economic Returns

Comments:

How well does this proposal describe a "program," as defined by LSDF?

Comments:

Describe any budgetary issues that should be explored if the program is selected for an award.

Comments:

If your overall proposal rating is "Not Recommended," describe the key issues that resulted in the lowering of the proposal's rating after the interview. Please note any areas or issues that should be addressed if the proposal is not funded and the principal investigator resubmits the proposal for a later competition.

Comments: