

Expert Reviewer Guidelines

LSDF 2009 Project Grant Competition

A. Introduction and Background

Introduction. The following guidelines apply to the 2009 LSDF Project Grant competition. Please read the request for proposals (RFP) (at http://www.lsdfa.org/grants/current/2009/Projects_Grants/RFP.pdf) before starting your evaluations. These Reviewer Guidelines will also be posted there.

Contact Information. If you have questions at any point during the evaluation, please contact:
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Background of the Life Sciences Discovery Fund. The Life Sciences Discovery Fund Authority (LSDF) was established in 2005 by the governor and legislature of the State of Washington. LSDF is funded by bonus monies from the Master Tobacco Settlement Agreement of 1998 of approximately \$33 million per year for a ten-year period to invest in the state's life sciences sector on behalf of Washington's citizens. Its mission is to improve health and health care, stimulate economic activity, and promote life sciences competitiveness in Washington.

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 considering LSDF proposals, you are expected to protect the confidentiality of the principal investigators' proposals and of the evaluation 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 evaluate it impartially should be communicated in confidence to AAAS.

1. *Confidentiality.* The proposals and the evaluation process are confidential. 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 evaluate LSDF proposals.

2. *Conflict of Interest.* A perceived or actual conflict of interest in expert evaluation 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 evaluation 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 evaluate a proposal without conflict. As part of your duties as an LSDF expert reviewer, you will be expected to sign a conflict of interest declaration that you have disclosed all conflicts of interest that you may have with the proposals.

Revisions to these guidelines. If revisions or additions to these guidelines are necessary, we will post them on our website and send them to reviewers through AAAS.

B. Competition Goals and General Proposal Evaluation

LSDF 2009 Project Grants Competition Goals. The Life Sciences Discovery Fund is an investment on behalf of the citizens of Washington State. Proposals must serve the LSDF mission. This competition will award up to \$8 million to research projects that have high potential to address all three of LSDF's primary strategic goals—promoting life sciences competitiveness, improving health and health care, and fostering economic growth in Washington. Competitive proposals will serve all three principal evaluation criteria (Section C). 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 project? "Projects," as defined by LSDF, are typically individual scientific studies, investigator-initiated, relatively limited in scope with a sharply defined research focus, and accomplished during the term of the grant. LSDF also funds two other approaches in separate competitions. "Programs" are strategic research initiatives, broad in scope, that are designed to address problems within a field of study and to position an organization or organizations for future competitiveness and leadership. Commercialization grants are highly targeted studies that advance technologies with commercial potential to a stage appropriate for licensing, start-up company formation, or private investment.

All proposed research must be scientifically rigorous. Innovation in funded projects may take many forms and is particularly desirable. Projects may formulate research problems in original ways, reframe issues in a field, and advance new experimental approaches.

Projects must have the potential to be beneficial to health and health care in Washington State—that is, not merely continuing the current state of care or practice, but changing it demonstrably for the better. LSDF expects to fund research including, but not limited to, new approaches to:

- diagnose, treat, prevent or manage disease;
- manage health-care delivery environments and systems;
- promote healthy patient behaviors and patient compliance with care-givers' recommendations;
- better integrate care-givers, patients and health-care systems; or
- accomplish any of the above in a more cost-effective manner.

LSDF desires to fund teams that show a commitment to translating the results of their research into widespread use. Proposals with the potential to attract additional resources to enable broader implementation of the research are especially desirable. Such additional resources may include follow-on research funding and/or investor funding; 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.

Although all research topics that support the mission of LSDF are eligible for funding, the LSDF Board of Trustees particularly encourages research that results in one or both of the following:

- improved disease prevention, and
- increased cost-effectiveness of health care.

Please see Section 2.1 (pages 6 and 7) of the RFP for definitions of “disease prevention” and “cost-effectiveness.” Principal investigators are responsible for indicating with checkboxes whether their proposal addresses either of these topics. In your review, you may note particularly compelling approaches to these issues, but you should not award “bonus points” or otherwise elevate proposals simply because they propose research on one or both of these topics.

Proposal Rating Process and Evaluations. The expert evaluation process consists of an individual preliminary evaluation of proposals and a consensus evaluation developed during an evaluation panel discussion.

First, you will submit your individual assessment of the strengths and weaknesses of the proposals through the AAAS review website. Then, following a phone meeting of the evaluation panel, a consensus evaluation will be written. In the consensus evaluation you will place proposals into one of three rating categories, reflecting your collective recommendation for advancing the proposal for funding. Neither principal investigators nor LSDF will receive individual reviewers’ preliminary comments on proposals or their names. The consensus evaluations will be given to the LSDF Board of Trustees, who will select the awardees, and to principal investigators following the competition. Although the trustees are significantly informed by the expert evaluations, they use additional criteria in making awards. All comments provided must be constructive, accurate, and respectful.

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 reviewed at the same time and against the same criteria and standards as new proposals. They are neither penalized nor ‘fast-tracked’ simply because they are a resubmission.

C. Detailed Proposal Evaluation Criteria

In particular, please read sections 2.1, 3.3.4 and 3.3.5 in the RFP for further context.

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.

Overall Comments

The Overall Comments section briefly describes the goals of the proposal and highlights the most significant strengths and weaknesses. This section also discusses issues such as modifications to the budget that are not key criteria (below). Proposals that will result in improved disease prevention and/or cost effectiveness of health care are particularly encouraged in this competition. Please note those proposals with outstanding potential in these areas.

Scientific and Technical Merit

The scientific and technical merit of the proposal will be judged by how well it demonstrates the following qualities:

- the proposed project is innovative, with scientific and technical originality;
- it establishes a research framework with strong potential to achieve novel and important results;
- its proposed research outcomes are clearly defined and realistic;
- 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 project successfully;
- where collaboration is proposed, investigators demonstrate a history of effective collaboration and an appropriate plan to manage the collaborative process; and
- the budget is appropriate to the scope and goals of the proposed project.

Importance to Health and Health Care

The project's importance to health and health care within Washington State will be judged by how well the proposal demonstrates the following qualities:

- it addresses a significant issue in health or health care;
- it has the potential to make a substantial, beneficial and measurable contribution to improving health and health care;
- it will achieve benefits such as the following:
 - 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 project 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 citizens.

Future Economic Returns

Principal investigators must clearly state the proposed benefits of the project to the state's economic environment. Benefits may include, but are not limited to, the following:

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

Your evaluation will also address the following questions directly.

Necessity for LSDF funding (or "Why is LSDF funding appropriate and necessary for this project?") (See section 2.1 of the RFP.)

Reviewers should assess how well the principal investigators established the particular appropriateness and necessity of LSDF funding for their proposals. LSDF leverages its grant monies to enable organizations to be more competitive for future funding or to help translate high-impact discoveries into widespread use. LSDF does not replicate funding programs offered by other granting sources, such as the National Institutes of Health (NIH). Consequently, principal investigators are discouraged from submitting proposals to LSDF that they would normally send to NIH. In their proposals, principal investigators must make a compelling argument for why an LSDF grant is uniquely appropriate and necessary to accomplish their research.

Issues that should be addressed by LSDF staff or the principal investigator

If the proposal is considered for funding, note any areas or issues that should be addressed either by LSDF in making the award or by the PI executing the project. 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. This can include issues that simply need clarification as well as recommendations for substantive changes to the proposal.

D. Clarification of Issues That May Arise During Evaluation

Budget. Principal investigators must provide detailed budgets for each year of requested funding, with costs broken down by category. If any changes in the budget are recommended, please explain what changes should be made and why.

Indirect costs. LSDF grants pay the full costs of doing research (i.e., including what are typically called "indirect" costs, and noted on the LSDF budget forms as "Administrative Costs" and "Facilities Charges") with all costs expressed as direct costs. Principal investigators are not 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 principal investigator arrived at the F & A charges. Awardees will be required to provide a detailed breakdown of all costs.

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.

Innovation. LSDF particularly wishes to support innovative projects, especially within the context of a portfolio of funded projects that spans the spectrum of risk. See also “Outliers,” below.

LSDF participation in consensus evaluation. An LSDF program staff person may listen in during the consensus evaluation phone calls. The program staff person is not acting as a reviewer.

Success of approach vs. importance of problem. Note that you should rate the proposal as presented by the principal investigator and not on the basis of its theoretical potential, e.g. in the absence of its likelihood of success. For example, a principal investigator may propose to cure a devastating disease affecting many Washingtonians but have a poor approach to doing so. In the “Importance to Health and Health Care” criterion, even though this disease is very important and its cure would be extremely valuable, if the proposal’s approach is flawed, the rating for this criterion should not be high.

E. Overall Rating

Funding. This is a highly competitive fund. Eighty letters of intent were received for the 2009 competition, and funds available may be sufficient for no more than six to eight 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 economic return and health-care categories could have outstanding scientific innovation. As reviewers prepare consensus evaluations, LSDF asks them to make special note of compelling opportunities within proposals that might otherwise be considered ordinary or overly risky.

Rating. Please 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

AAAS Review Comment Form LSDF 2009 Project Grants Competition

Proposal Title:
PI:
Applicant Organization:
Request ID:

Note: this form is a sample and will not be provided to reviewers in the Guide. The actual form and mechanism are provided through AAAS' Web-based proposal review system.

Rating Scale

Please use the following scale in your ratings.

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

Please briefly describe the main strengths and weaknesses of the proposal. Include any recommendations for changes to the budget and comment, if relevant, on potential for improved disease prevention and/or increased cost-effectiveness:

Overall comments:

Strengths:

Weaknesses:

Please rate the proposal's responsiveness to the following key criteria and provide constructive comments:

Scientific and Technical Merit

Highly Recommended
 Recommended
 Not Recommended

Overall comments (Include your assessment of the scientific competency of the

principal investigator and team):

Strengths:

Weaknesses:

Importance to Health and Health Care

- Highly Recommended
- Recommended
- Not Recommended

Overall comments (Include whether near-term benefits are likely):

Strengths:

Weaknesses:

Future Economic Returns

- Highly Recommended
- Recommended
- Not Recommended

Overall comments:

Strengths:

Weaknesses:

Does the proposal adequately justify its need for LSDF funding?

- Yes
- No

Comments:

Please note any areas or issues that should be addressed by LSDF in making an award, or by the PI in execution of the project, should the proposal be considered for funding by the Board. 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.

Comments: