

# Washington State Life Sciences Discovery Fund Authority Request for Proposals LSDF 08-02

Innovative research programs  
to improve health and health care

February 27, 2008

## Executive Summary

Applicants are invited to propose research programs to improve health and health care in Washington State. Proposals are invited from Washington public and nonprofit organizations, singly or in collaboration with other public and nonprofit organizations or with for-profit companies.

The Life Sciences Discovery Fund expects to distribute \$18-20 million in grants in this competition. There is no cap on grant amount or duration.

Applications are made through LSDF's on-line application system. Letters of intent are due March 26, 2008, with proposals due June 4, 2008. Award announcements are expected on December 17, 2008.

Proposals will be evaluated by external expert reviewers. All funded programs must have strong scientific, technical and organizational merit and the potential to contribute to the achievement of LSDF's primary strategic goals—promoting life sciences competitiveness, improving health and health care for Washington's citizens, and fostering economic growth.

# Table of Contents

1. Introduction .....	3
1.1. Background .....	3
1.3. Applicant Organizations and Eligibility.....	3
1.4. Principal Investigators and Co-investigators.....	4
1.6. RFP Updates.....	5
1.7. Frequently Asked Questions .....	5
2. Funding Opportunity Description.....	5
2.1. Scope.....	6
2.2. LSDF 08-02 Grant Opportunity.....	6
2.3. Requirements for Research Proposals.....	7
2.4. Questions to Consider Before Applying for LSDF 08-02 Funds.....	7
3. Application Process.....	8
3.1. Key Dates.....	9
3.2. Resubmissions.....	9
3.3. Letter of Intent.....	9
3.4. Proposal Requirements .....	10
3.4.1. <i>Face Page</i> .....	10
3.4.2. <i>Applicant Organization Information, Co-applicant Organization Information and Co-investigator Information</i> .....	11
3.4.3. <i>Proposal Details</i> .....	11
3.4.4. <i>Proposal Narrative</i> .....	12
3.4.5. <i>Required Attachments</i> .....	15
4. Evaluation.....	20
4.1. Expert Review .....	20
4.2. Evaluation Criteria .....	21
4.2.1. <i>Scientific, Technical and Organization Merit</i> .....	21
4.2.2. <i>Importance to Health and Health Care</i> .....	22
4.2.3. <i>Future Economic Returns</i> .....	23
5. Selection of Awards.....	23
6. Grant Agreement.....	24
<a href="http://www.lsdfa.org/grantees/information.html">http://www.lsdfa.org/grantees/information.html</a> .....	24
7. Additional Information .....	24
7.1. Confidentiality and Public Disclosure .....	24
7.2. Conflict of Interest.....	25
7.3. Human Subjects and Vertebrate Animal Research Requirements .....	25
7.4. Intellectual Property.....	26
7.5. Reporting Requirements .....	26
7.6. Publicity.....	27
7.7. Funding Start Date.....	27
7.8. Contact Information.....	27

# 1. Introduction

**LSDF 08-02: Innovative research programs to improve health and health care.**

## 1.1. Background

The Life Sciences Discovery Fund Authority (LSDF) was created in 2005 by the governor and legislature of the State of Washington. LSDF is funded by tobacco settlement bonus payments of approximately \$35 million per year over a ten year period to invest in the state's life sciences sector. Its mission is to support innovative research to promote life sciences competitiveness, enhance economic vitality, and improve health and health care in Washington.

## 1.2. The Niche for LSDF Funding in Washington State

Annual life sciences research expenditures within Washington State are in excess of a billion dollars. In light of this fact, LSDF seeks to make grants where they can have the greatest impact. This often means providing grants that enable organizations to be more competitive for future funding or that help translate discoveries into widespread use. LSDF does not believe that replicating funding programs offered by other granting sources, particularly the National Institutes of Health (NIH), will help it achieve its mission. Consequently, applicants are discouraged from submitting applications to LSDF that would normally be fundable by NIH. In their proposals, applicants will be expected to make a compelling argument for why LSDF dollars are appropriate and necessary to accomplish their research.

## 1.3. Applicant Organizations and Eligibility

Applications for LSDF 08-02 funding are invited from Washington public and nonprofit organizations, singly or in collaboration with other public and nonprofit organizations or with for-profit companies.

The applicant organization is responsible for submitting the application and for leading the research program, administering the research grant and disbursing LSDF funding. An application may include one or more co-applicant organizations. A co-applicant organization employs personnel key to the design, conduct, and reporting of the research and receives a portion of the grant award under a subcontract. Throughout this request for proposals (RFP), the terms "applicant" or "applicant organization" refer to the organization employing the principal investigator.

Within this RFP, the terms “collaborating organization” or “collaborator” refer to an entity that will contribute to the proposed research, but will not share in LSDF grant funds.

There is no limit to the number of applications that may be submitted from an applicant organization.

Eligible applicant organizations are those that have recently engaged in competitively funded, sponsored research, or similar activities, and have the personnel, resources, and experience necessary to accomplish research programs of the sort contemplated by this RFP. Eligible applicants include, but are not limited to, the following:

- public and private universities;
- nonprofit research organizations;
- public health departments;
- public and private hospitals and clinics; and
- health-care systems.

For-profit entities are not eligible to apply directly for funding under LSDF 08-02, but are encouraged to join an eligible applicant as a co-applicant or collaborating organization.

Organizations from outside of Washington State are not eligible to apply directly for funding, but they may join an eligible applicant as a co-applicant or collaborating organization. The necessity for the participation of an out-of-state entity will need to be justified.

#### **1.4. Principal Investigators and Co-investigators**

LSDF grant applications are submitted by a single principal investigator, regardless of how many researchers or organizations will be involved in the program. LSDF does not recognize the title of “co-principal investigator.” A principal investigator may submit only one application for this competition, but may serve as a co-investigator on other applications.

An application may include one or more co-investigators. A co-investigator is an individual other than the principal investigator who plays a leading role in the design, conduct, and reporting of the research. A co-investigator can be from the applicant organization, or from a co-applicant or collaborating organization.

The principal investigator must be employed by the applicant organization. He or she will be responsible for leading the proposed program, managing the budget and reporting progress and results. Principal investigators must meet the requirements set by their employer for such status.

The principal investigator and/or the applicant organization may be changed between letter-of-intent and proposal submissions upon prior approval of LSDF.

### **1.5. Programs vs. Projects**

LSDF grant competitions for 2008 will fund two types of research: “projects” and “programs.” “Projects” 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. “Programs” 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 08-02 invites proposals for programs. Proposals for “projects” will not be eligible for this competition.

### **1.6. RFP Updates**

LSDF reserves the right to amend this RFP after its release. Any clarifications or changes in guidelines or requirements will be posted on the 08-02 page of the LSDF website:

[http://www.lsdfa.org/grants/current/08-02/LSDF\\_08-02.html](http://www.lsdfa.org/grants/current/08-02/LSDF_08-02.html)

Applicants are responsible for consulting amendments to be sure they have the latest information regarding this competition.

### **1.7. Frequently Asked Questions**

For brief answers to the most common questions about this LSDF grant opportunity, visit the 08-02 page of the LSDF website:

[http://www.lsdfa.org/grants/current/08-02/LSDF\\_08-02.html](http://www.lsdfa.org/grants/current/08-02/LSDF_08-02.html)

## **2. Funding Opportunity Description**

This section describes the scope and essential underpinnings of a grant award in this competition.

## 2.1. Scope

The purpose of this funding opportunity is to foster the growth of innovative new programs that will help Washington research organizations advance their strategic priorities in health and health-care research. It is expected that the programs funded by LSDF will be characterized by a dynamism and synergy among participating researchers that would not exist but for the organization of their efforts into the program. LSDF 08-02 funded programs will be expected to advance the core goals of LSDF: to promote life sciences competitiveness in Washington, benefit the state's economy and improve health and health care for its citizens.

LSDF expects to distribute \$18-20 million in grants in this competition. There are no restrictions on the dollar amounts or duration of funded grants.

## 2.2. LSDF 08-02 Grant Opportunity

Programs funded under LSDF 08-02 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. Proposals may request support for a variety of activities. A few examples are included here to suggest the range of possibilities:

- 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.

Benefits to Washington State expected to accrue from research programs in this competition include the following:

- 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;
- developing opportunities for new intellectual property creation and commercialization.

### 2.3. Requirements for Research Proposals

All proposed research must be scientifically rigorous. Programs will be evaluated according to their scientific, technical and organizational merit and their potential to benefit health and health care and the economy in Washington State. [Further discussion of anticipated returns on the state's investment in life sciences research is included in the [2006 LSDF Report to the Washington State Legislature](#) found on the LSDF website ([www.lsdfa.org/about/files/12-01-06\\_Report\\_to\\_the\\_Legislature](http://www.lsdfa.org/about/files/12-01-06_Report_to_the_Legislature)).]

Programs selected for funding will:

- be of strategic priority to applicant organizations;
- be innovative within their fields;
- create new synergies among participating researchers;
- build upon established strengths within the participating organization(s);
- have the potential for growth and sustainability over time; and
- show significant commitment of resources from applicant organizations.

Restructuring of existing resources within an organization does not constitute a new "program," as that term is envisioned within this RFP. Nor is an applicant's need for infrastructure development a sufficient basis for a program proposal. Rather, LSDF support is meant to assist with the launch of new initiatives that represent innovative thinking within the participating organizations and the field.

Proposed programs must have clear strategic importance for the applicant organization. Applicants must describe their plans to launch and build the program, the ways the program will advance their strategic direction, and the resource commitments that will be in place to support and sustain the program's growth and development.

LSDF desires to fund teams that show a commitment to translating the results of their research into widespread use. Proposals with the potential to have near-term impact on improving health and health care and/or the capacity 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 other interested parties to adopt a successfully demonstrated strategy or technology.

### 2.4. Questions to Consider Before Applying for LSDF 08-02 Funds

Due to the breadth of research topics that will address LSDF's goals in 08-02, competition in this grant cycle is expected to be rigorous. Because preparation

of a proposal can involve considerable time and effort, applicants are strongly advised to read this RFP carefully and review the questions below before deciding to apply. If applicants cannot make a strong case with regard to each of the following questions, it is unlikely that their applications will be successful.

- What are the compelling reasons an investment from LSDF is appropriate and necessary to the success of this program?
- What are the features of this program that distinguish it from a research project or a series of projects performed in parallel?
- What significant resources are being provided by the applicant organization to help launch and sustain this program?
- What will be the pay-off to the State of Washington from LSDF's investment in this research:
  - in terms of improving health or health care?
  - in terms of contributing to the growth of the economy?

Applicants' answers to these questions will be evaluated as part of the proposal review process.

Applicants are strongly encouraged to confer with LSDF programs staff ([programs@lsdfa.org](mailto:programs@lsdfa.org)) regarding the appropriateness of their program proposal for LSDF funding in advance of making application.

### 3. Application Process

Compliance with this RFP and assurance that application materials are accurate, complete, and timely is the sole responsibility of the applicant. Applications that do not adhere to content requirements, are incomplete or incorrect, or are late will not be reviewed.

Applicants must complete two steps: a letter of intent (LOI) followed by a proposal. LOIs and proposals are submitted electronically via an on-line application system available on the LSDF website:

[www.lsdfa.org/grants/apply.html](http://www.lsdfa.org/grants/apply.html)

Detailed instructions for submitting the LOIs and proposals are provided in the on-line application system. LOIs or proposals do not need to be completed in one session. They can be saved and returned to later for additional work. Once submitted to LSDF, however, they are no longer available for revision. Technical assistance regarding use of the on-line system can be accessed through the "Need Help?" link in the application system or by e-mailing or calling LSDF at [grantsadmin@lsdfa.org](mailto:grantsadmin@lsdfa.org) or (206) 732-6788.

Applicants who discover an error or omission after submitting an LOI or proposal, but before the deadline for submission, may notify LSDF at [programs@lsdfa.org](mailto:programs@lsdfa.org) and seek authorization to submit a corrected version. Only complete and fully compliant LOIs and proposals received by the deadline will be accepted and reviewed. Applications found to be incomplete during or after their evaluation may be disqualified for funding.

No application should include information that might compromise the applicant's subsequent ability to secure patent or other intellectual property protection.

### 3.1. Key Dates

Letter of intent due	Wednesday, March 26, 2008, 5:00PM PDT
Proposal due	Wednesday, June 4, 2008, 5:00PM PDT
Phase 1 review of proposals	June-August, 2008
Interviewee selection	September 16, 2008
Phase 2 review of proposals	September-November, 2008
Interviews	Week of November 10, 2008
Awards announcement	December 17, 2008
Funding start date	Upon completion of the grant agreement, but no sooner than mid-April, 2009

### 3.2. Resubmissions

Applicants who were not funded in a previous LSDF competition may resubmit an application to this competition. Details regarding resubmissions are provided in Sections 3.3, 3.4.3, 3.4.4 and 4.1. Applicants should contact LSDF staff ([programs@lsdfa.org](mailto:programs@lsdfa.org)) if they are uncertain about whether a proposed submission constitutes a "resubmission."

### 3.3. Letter of Intent

All applicants must submit an LOI stating their intent to submit a proposal. Submitting an LOI does not require the applicant to submit a proposal. However, no proposal will be reviewed unless an LOI has been received.

The LOI is not a pre-proposal. The LOI helps LSDF prepare for expert review of the proposals. If an LOI describes a program that is clearly not suited for LSDF 08-02 funding, the applicant will be notified of that determination.

In addition to other information, LOIs include the following:

- a descriptive, non-confidential title for the program;
- a list of co-applicant organizations;
- an abstract of 500 words or less, stating the objectives of the program, the strengths and resources the program will build upon and its most important scientific, health and health-care and economic benefits; and
- up to five keywords descriptive of the program. A single “keyword” may be a short phrase.

The grant request amount and request period stated within the LOI may be changed within the proposal without prior approval of the LSDF.

If the LOI is a resubmission of a previously unfunded application to LSDF, the applicant must indicate this in the space provided within the on-line system.

Upon receipt of the LOI by LSDF, an e-mail acknowledgement will be sent to the principal investigator along with an invitation code to be used when logging in to the on-line system to work on the proposal.

### **3.4. Proposal Requirements**

The proposal is expected to consist of the same subject matter as that within the LOI.

The on-line application system requires the applicant to input information under the following headings:

- Face Page
- Applicant Organization Information
- Co-applicant Organization Information
- Co-investigator Information
- Proposal Details
- Proposal Narrative
- Required Attachments

An e-mail acknowledgement will be sent to the principal investigator when LSDF receives the proposal.

#### *3.4.1. Face Page*

The face page contains essential information for identifying, processing, and tracking the proposal. The face page also contains the signature of the authorizing individual, the person with authority to commit the applicant organization to the implementation of the proposed program. Principal investigators may not authorize proposals from their own organizations.

The face page includes the following elements:

- the name and Entity Identification Number (EIN) of the applicant organization;
- a descriptive, non-confidential program title;
- the principal investigator name and contact information;
- the names of co-applicant organizations;
- the dates of requested program support;
- the budget amount being requested;
- answers to questions regarding financial conflict of interest policies and whether the program research will include human or animal subjects;
- the name and contact information of the authorizing individual; and
- the authorizing signature.

After the data are entered into the on-line system under the Face Page heading, the applicant generates the face page by selecting the “print” button. After the authorizing individual has signed the form, the page must be scanned to a Portable Document Format (PDF) file and uploaded to the proposal. The signature of the authorizing individual on the face page is a requirement. If this signature is missing the proposal will be considered incomplete.

#### *3.4.2. Applicant Organization Information, Co-applicant Organization Information and Co-investigator Information*

Applicants are required to input basic information about the applicant organization and their co-applicants and co-investigators.

#### *3.4.3. Proposal Details*

Instructions for providing the required information under the Proposal Details heading are in the on-line system. The following additional information is to be provided.

Resubmissions. If the proposal is a resubmission of a previously unfunded proposal to LSDF, the applicant must indicate this in the space provided and identify the competition in which the proposal was last considered.

Abstract. Applicants must provide an abstract of 500 words or less, in prose understandable to a lay audience, stating the objectives of the proposed program, the strengths and resources the program will build upon and its most important scientific, health and health-care and economic benefits. The text of the proposal abstract may be different than the text of the LOI abstract.

Keywords. Applicants must provide up to five keywords that are descriptive of the program. A single “keyword” may be a short phrase.

Proposal evaluators. Applicants may indicate the names of reviewers whom they would prefer not to review their application in the space provided.

Patents and Inventions. Applicants must describe any invention disclosures they have made and any patent applications filed or license agreements executed or pending related to the subject matter of their proposal.

New Company Formation. Applicants must describe any plans and activities to date related to starting a new company based upon the subject matter of their proposal. If a new company has been formed, applicants must provide a summary of its business plan in two pages or less and upload it in PDF form through the on-line system.

#### *3.4.4. Proposal Narrative*

The proposal narrative is to be uploaded in PDF form to the proposal in the on-line application system.

The narrative must be no longer than 25 pages and conform to the following format requirements:

- 8½” by 11” portrait-oriented page dimensions;
- Single spaced with all margins measuring at least 1”;
- At least 12 point font in Times New Roman or Arial (not proportionally reduced); and
- In the upper right-hand corner of each page, inclusion of a header with the name of the principal investigator, the grant competition number (*i.e.*, LSDF 08-02), and the page number, using the form: “Page x of xx.”

All tables, charts, or graphs must be contained within the 25-page limit. Consult the on-line application instructions for specific information about the format of tables, charts, or graphs. When contemplating the submission of information in color, applicants should be aware that proposal reviewers may be performing their reviews using black and white paper copies. References are to be included at the end of the narrative, but do not figure in the 25-page limit. A maximum of five pages of references will be accepted. Website addresses (URLs) or attachments should not be used to provide additional information necessary to the narrative.

Proposals that do not comply with these length and format requirements will not be reviewed.

The proposal narrative should include sufficient information needed to evaluate the scientific and technical merit and beneficial returns of the program, independent of any other document. The narrative must include all sections (A-J) listed below.

Resubmitted proposals must be accompanied by the following documents:

- a complete copy of the previous expert reviewers' comments;
- a written response to the previous reviewers' comments, and a summary of where and how those comments have been addressed in the current proposal, not to exceed five pages.

These documents must be uploaded in PDF form according to instructions provided in the on-line application system.

#### *A. Program Objectives*

List the immediate and long-term objectives of the proposed program. Explain its importance to the strategic direction of the applicant organization and how it will advance the organization's research strengths.

#### *B. Background and Significance*

Describe the background planning and preparation leading to the proposed program and the important scientific and health needs it is designed to address. Ensure that all the following questions are answered:

- What health or health-care problem(s) does this program address?
- What is the significance of the problem(s) in Washington State?
- How is/are the problem(s) addressed currently?
- What approaches other than that being proposed are under development to alleviate the problem(s)?
- How does your programmatic research lead to a solution for the problem(s)?
- Why is an investment from LSDF appropriate and necessary to the success of this program?

#### *C. Established Organizational Experience*

Describe the principal investigator's and applicant organization's experience in launching, growing and conducting comparable initiatives or programs. Include relevant experience with strategic planning; organizational leadership; collaborative structures; personnel and budget management; the coordination of multi-faceted research activities; success in attracting and retaining talent; management of sustained institutional buy-in; and support and effective use of major facilities, equipment, and instrumentation.

#### *D. Program Description*

Explain the research focus of the program and provide a detailed account of the proposed program's structure, operation, research agenda, and anticipated results. Give examples of the types of studies to be performed and the methodologies to be used.

If the proposal involves the acquisition of a major piece of equipment, explain in detail the role the equipment will have in achieving the program's objectives. Indicate also the provisions that have been made for its use and maintenance.

Summarize how the program will advance and grow for the first five years and the possibilities for growth beyond that time. Describe its future directions and the applicant organization's resource commitments to its long-term sustainability. Describe also the schedule and methods of evaluation by which the program and its research will be assessed.

#### *E. Challenges*

Discuss the difficulties the proposed program may face in achieving its objectives and the plans being developed to overcome these challenges.

#### *F. Timeline and Milestones*

Provide a timeline for developing, funding, launching, and conducting the program. Identify major milestones of progress, target dates for accomplishment, and criteria by which achievement of each of the milestones will be assessed.

#### *G. Personnel*

Identify the person(s) who will lead and manage the program's operations, describing their various roles. If researchers from multiple organizations will participate in the proposed program, explain how decision-making authority will be distributed among them. Identify all the key personnel responsible for conducting the program's research. Provide a brief summary of their background and research expertise.

Provide a description of how the program will be organized, how key decisions will be made and how work will be coordinated to fit the program.

If the proposal involves the recruitment of a leading researcher, explain the role and responsibilities he or she will assume in the program, and describe how his or her ongoing research will complement the program's scientific mission.

#### *H. Budget Justification*

Describe the complete funding plan for the first five years of the program. Provide the rationale for both the costs and revenue itemized in the proposal budget. Highlight and explain the need for any extraordinary expenditures.

Explain the resource commitments of the applicant organization and any co-applicant or collaborating organizations, the amounts and sources of other program support, and projections for follow-on funding from other sources.

Describe any other research support received or applied for that is related to the subject matter of the program being proposed to LSDF.

Detailed budget figures are to be provided elsewhere. (See Section 3.4.5.)

#### *I. Facilities and Equipment*

Describe the facilities, equipment, and other laboratory, clinical, and office resources available for program activities. Summarize the arrangements and agreements that have been made to ensure that these facilities will continue to be available and maintained in support of the program.

If new equipment is part of the proposal request, describe available equipment and explain why it cannot be used. If the new equipment will be available to support efforts outside the scope of the program, explain how time will be allocated to it. Describe plans for facilities and equipment maintenance necessary for the sustained success of the program.

#### *J. Outcomes, Future Plans and Relevance to LSDF Goals*

Describe both the near-term and long-term outcomes the program is designed to achieve. Estimate the timeline for translating the results of the program for the benefit of health and health care and describe the translation plan. Describe also how the program will contribute to the broad, long-term strategic goals of LSDF—scientific competitiveness, improved health and health care and economic benefit for Washington. Include in the description the potential for returns in the following areas:

- the potential for follow-on research funding;
- clinical or organizational implementation of program-developed scientific findings;
- commitments from the applicant, co-applicant and collaborating organizations or other interested parties to maintain and grow the program and translate the program's results into practical application;
- the potential for the program to foster economic gains; and
- commercialization of program developments including formation of new companies, attraction of investment capital or licensing to existing companies.

#### *3.4.5. Required Attachments*

The following information is to be provided using the on-line application system under the Required Attachments heading.

## *A. Budget*

*1. General requirements.* Applicants are to provide a total program budget projection showing the costs of operating the program and the anticipated resource providers (*i.e.* providers of cash and/or in-kind funding) during the first five years or, if longer, the period of LSDF support. Opportunities for LSDF to leverage its support with that of other contributors are particularly desirable.

LSDF expects that applicant organizations will make tangible resource commitments 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. Resource commitments may include, but are not limited to, the following:

- creation and support of positions for key programmatic researchers;
- support of technical and administrative personnel;
- provision and improvement of facilities;
- absorption of facilities and administrative costs; and
- matching funds from institutional sources.

At the time of proposal submission, 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 additional resources. The period reserved to satisfy any contingencies shall be specified by LSDF. In order to be selected for a contingent award, the proposal must detail how, from whom, and by when the remaining commitments will be made.

In proposals including for-profit collaborating companies, the companies will be expected to pay for their own internal costs associated with program activities and for exploratory research and development activities performed on a best-effort basis. Monies may be subcontracted from the applicant organization to a company for products and services provided as deliverables to the program. For more detailed information, applicants should contact LSDF staff.

*2. Budget template.* Program budgets are to be completed using the on-line application system and uploaded in PDF form. The budget must be appropriate for the scope and goals of the proposed program. All budgets must be submitted on the LSDF spreadsheet template which consists of two pages:

- a resource/expenditure page; and
- a subcontractor and "other" costs page.

The following fields are to be completed on the budget resource/expenditure page of the budget template:

- Resource providers. List the types of providers that are anticipated to be contributing resources to the program. Provider types typically include: the applicant and co-applicant organizations, and state, federal, foundation and corporate entities. If program income is anticipated (*e.g.* income from the provision of services to third parties), it should also be listed.
- Name of providers. List the specific names of the providers contributing resources to the program, *e.g.* NIH or American Cancer Society. List each unique provider in a separate column.
- Type of resource. List the type of the resource being provided. Choices are:
  - cash – *e.g.* grants, gifts or internal funds; and
  - in-kind - elements of value contributed to the program including waiver of fees or costs. Equipment that is less than one year old may be included as an in-kind resource, if directly applicable to the program.

Cash and in-kind resources should be separated into separate columns.

- Status of resource contributions. Please list the status of each of the resource contributions. Status choices are:
  - funded – resources are in-hand and committed to the program;
  - applied – applicant or co-applicant organization has applied for the resources (or will apply for the resources within the period of the proposed program); and
  - contingent – applicant or co-applicant organization is only able to utilize the resources if other conditions are met. The conditions that allow contingent resources to become “funded” resources must be noted in the budget justification section of the proposal narrative or on the subcontractor/other page of the budget template.

Please do not mix multiple resource status categories within the same column of the spreadsheet.

*3. Budget allocation.* Resources that are to be provided by LSDF or that are funded or contingent must be allocated across the budget categories listed below. Costs must be reasonably associated with the conduct and completion of the proposed program. All should be listed as direct costs, including costs typically associated with general facilities and administration.

The following budget categories are provided:

- salaries and fringe;

- Include compensation for both key personnel (research and administrative) and related research staff in this item. Salaries should be calculated on the basis of an individual's percent effort in the program.
- recruitment;  
Include the specific costs related to attracting and hiring new staff to the program.
  - general administrative costs;  
Include administrative salaries and other associated administrative costs that support the program, including clerical and fiscal support. If it is impossible to break down administrative costs that are charged on an institution-wide or central basis, you may estimate such costs by applying that portion of the applicant organization's indirect cost rate that covers central administrative costs to the total program budget (after subtracting equipment to be purchased) and including this value as part of the general administrative costs. Departmental or other "local" administrative costs must be calculated as direct costs before inclusion. At the time of award, the applicant organization will be expected to provide the details of the components that comprise administrative costs.
  - facilities costs;  
Include the cost of using existing facilities for the program. Do not apply an existing indirect cost rate to the total program budget to calculate facilities costs. At the time of award, the applicant organization will be expected to provide the details of the components that comprise administrative costs.
  - equipment costs;  
List the cost of equipment purchased to be used in the program. Equipment is an item of property with an expected service life of more than one year and a unit value equal to or greater than \$5000.
  - supplies;  
Include general types of consumable materials and supplies, and equipment with a unit value of less than \$5000. Note that equipment such as personal computers is not eligible for support unless primarily or exclusively used for the program.
  - services;  
Include the cost of work performed for the program by entities as a part of their regular operations and where such work is generally available to many different purchasers or customers, such as lab testing, report printing, *etc.* Service work typically has specific deliverables and no potential for the creation of patentable or copyrightable intellectual property. The services category includes the cost of program consultants or contracting out for deliverables on a best effort basis where the contracted entity is not involved in the research or its design, nor does it have an interest in intellectual property stemming from the program.

- sub-contracts;  
Sub-contractors are involved in the design, conduct and reporting of the program research and may have an interest in any intellectual property that may result from the program. They are generally listed as co-applicants. The names of sub-contractors and total dollar amounts allocated to each must be detailed on the subcontractor page of the budget template.
- travel;  
Include travel related to the proposed program activities. Funds may be requested for field work, attendance at meetings and conferences, and other travel required for the proposed work, including per diem allowance, if per diem is part of applicant's usual accounting practices. In order to qualify for support, however, attendance at meetings or conferences must enhance the principal investigator's ability to perform or otherwise contribute to the work. Allowance for air travel normally will not exceed the cost of round-trip, economy airfares, purchased in advance.
- other;  
Applicants must describe each component of "other" expenses, including dollar allocations on the subcontractor/other costs page of the budget template.

Costs associated with patient care beyond what are required for program research are not allowed by LSDF.

#### *B. Biographical Sketches*

Applicants must provide biographical information for key research personnel using biosketch forms according to instructions provided. The biosketch form used for National Institutes of Health grant applications (form 398/2590) may be substituted for the LSDF form, but the length of the submission must not exceed LSDF's four-page limit. For each non-technical key person (*e.g.* the executive director of a program), a *curriculum vitae* or resume, not to exceed four pages, may be substituted for the biosketch form.

#### *C. Key Personnel Roster*

Applicants must supply a roster of the research and administrative personnel involved in the program using the form and instructions provided.

#### *D. Letters of Support*

Letters of support are required to confirm the commitment of time, financial, in-kind and other resources to the program from key personnel and organizations. The letters must be converted to PDF documents and uploaded to the proposal.

### *E. Intellectual Property Certification*

LSDF grants support research that may lead to discoveries having commercial potential. The intellectual property (IP) certification is required for LSDF to assess how IP developed under the program will be owned and managed. (See Section 7.4 for related information.)

Proposals must clarify whether the applicant organizations have policies regarding ownership and management of IP developed by their employees. If a party other than the applicant, co-applicant or collaborating organization(s) will own or have rights to IP developed under an LSDF-funded grant, the applicant must provide an explanation of, and justification for, such provision.

Applicants must describe how IP developed under an LSDF grant will be managed for commercialization. Applicant organizations with established IP management infrastructures can meet this requirement by referencing the policies, practices, and structures they already have in place. Organizations without an IP policy or an established infrastructure to manage IP should contact LSDF ([programs@lsdfa.org](mailto:programs@lsdfa.org)) before submitting their proposal to discuss how they plan to manage and commercialize IP associated with the proposed program.

## 4. Evaluation

Following the proposal deadline, all proposals will be screened for compliance with this RFP. Those that are judged to be compliant will proceed to expert review.

### 4.1. Expert Review

Proposal evaluation will be conducted by expert reviewers from outside of Washington State, convened by the American Association for the Advancement of Science. Expert reviewers will be required to sign nondisclosure agreements.

In the case of resubmissions, it is unlikely that the resubmitted proposal will be evaluated by the same expert panel.

Expert review will occur in two phases. The first phase will be conducted by expert panels that will provide a consensus review of all proposals. In the second phase, a subset of applicants will be invited for interviews with a second expert panel that will provide a consensus review of all interviewed proposals. Interviewees will be chosen by the LSDF Board of Trustees based upon the first-phase consensus reviews, the availability of funds, and the goals of the LSDF program. Grant recipients will be chosen from among the applicants interviewed.

Interviewees will be selected in mid-September, with interviews expected to be conducted in Seattle during the week of November 10, 2008. Shortly after interviewees have been selected, all applicants will be notified as to whether they have been invited to an interview.

Principal investigators chosen for interviews will be notified in advance of the time and place of their interview and will be provided a copy of the first-phase expert reviewers' comments and instructions regarding the interview format.

Interviewees will be given an opportunity to submit supplementary information regarding their proposals prior to their interview; specifics regarding submissions will be described in the interview instructions.

Names of first-phase reviewers will not be made available to applicants. Applicants and their representatives may not contact reviewers or members of the LSDF Board of Trustees regarding submitted applications. Any such contact or attempt to contact may result in the disqualification of that applicant's proposal from the competition.

Principal investigators will receive copies of the expert reviewers' consensus evaluations of their proposals.

## **4.2. Evaluation Criteria**

All funded proposals will be expected to have the potential to contribute to LSDF's primary strategic goals: to promote life sciences competitiveness, improve health and health care for Washington's citizens, and foster economic growth. Within this general framework, reviewers will use the following criteria to evaluate proposals for LSDF 08-02.

### *4.2.1. Scientific, Technical and Organization Merit*

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

- it is innovative, with scientific and technical originality;
- it meets LSDF's definition of a "program" and offers the likelihood of synergistic outcomes;
- it builds upon the established strengths of the applicant organization;
- its objectives are consistent with the strategic priorities of the applicant organizations;
- it focuses on a significant problem or complex set of problems and provides promising new approaches or ways of thinking;

- it establishes a research framework with strong potential to achieve novel and important results;
- 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;
- its proposed research outcomes are clearly defined and realistic;
- it has the potential to generate significant outcomes;
- it is organized in a clear way that facilitates communication among participants, decision-making and future growth;
- the principal investigator and any co-investigators demonstrate the experience and ability to execute the proposed program successfully;
- investigators demonstrate a history of effective collaboration and an appropriate plan to manage the collaborative process;
- the applicant organization commits resources to enhance the probability of the proposed program's success;
- the budget is appropriate to the scope and goals of the proposed program; and
- the applicant makes a clear case for why an investment from LSDF (as compared to other potential sources) is appropriate and necessary to the success of this program.

#### *4.2.2. Importance to Health and Health Care*

The proposed program must have the potential to benefit health and health care within Washington State. 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 in Washington State;
- it will move the current state of knowledge in health or health care forward;
- it has the potential to make a substantial, beneficial and measurable contributions to improving health and health care in Washington;
- its research results will be translatable to a larger population and a translation plan will be evident; and
- 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;

- o better integration of care-givers, patients and health-care systems;  
or
- o accomplishing any of the above in a more cost-effective manner.

The range of possible proposed improvements in health or health care is understood to be broad, and the intended impact of the proposed program may be near- or long-term, with near-term benefit being especially desirable. Priority will be given to programs 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.

#### *4.2.3. Future Economic Returns*

The proposed program must have the potential to benefit Washington's economy. Applicants 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 and operations;
- producing measurable gains in cost-effective health care due to the application of research results;
- contributing to future economic gains through program-induced improvements in health;
- 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.

## **5. Selection of Awards**

Expert reviewers will recommend proposals to the LSDF Board of Trustees for funding. The board's award selections will be based on these recommendations, the availability of funds, and the goals of the grant competition. Consistent with these and with its enabling legislation, the board may also consider the following in making award decisions:

- diversity of research topics;
- variety of health, health-care and economic benefits; and

- geographic impact.

The board will select proposals which in its judgment are the most meritorious. All award decisions are final and cannot be appealed.

## 6. Grant Agreement

Awards are subject to grant agreements that will be negotiated between the grant recipient organizations and LSDF. Research funding will be disbursed to applicant organizations on a cost-reimbursement basis subject to the achievement of mutually agreed upon milestones and timelines. The grant agreement will include the right of LSDF to withhold research payments if progress reports have not been provided or milestones have not been met in a timely fashion.

The LSDF grant agreement template can be found at:

<http://www.lsdfa.org/grantees/information.html>

## 7. Additional Information

### 7.1. Confidentiality and Public Disclosure

Information in grant applications is received by LSDF with the understanding that it shall be used or disclosed solely for evaluation of applications or as required by law. LSDF holds all applications confidential in accordance with its confidentiality policy ([www.lsdfa.org/grants/Conf\\_Policy.pdf](http://www.lsdfa.org/grants/Conf_Policy.pdf)) and subject to the public disclosure laws of the State of Washington. [For more information about Washington public disclosure law, applicants are referred to RCW 42.56 and to the amendments to the exemption provisions in RCW 42.56.270(14).]

Typically, when it receives LOIs and proposals, LSDF releases to the public the name of the principal investigator, the applicant organization, the title of the program, the dates of the proposed grant period, the funding amount requested, and miscellaneous contact and demographic data. For unfunded applications, LSDF will not release the abstract, keywords, or narrative of the proposed work, the budget, or any identifiers regarding co-investigators or co-applicant organizations, as disclosure of these items might reasonably be expected to result in private loss to the applicant organizations or investigators.

Once a proposal has been funded, LSDF will release to the public certain additional information from the application, including an abstract of the work

and the names and contact information of any co-investigators or co-applicant organizations.

In response to a public records request for a funded application under Washington State law, LSDF may provide further information from the application to the requestor, but only to the extent that provision of such information would not reasonably be expected to result in private loss to the providers of such information.

If LSDF receives a public records request for a funded or unfunded application, it will notify the applicant organization of such a request in a timely manner in order to allow that organization the opportunity to assert objections to disclosure in any applicable proceeding.

## **7.2. Conflict of Interest**

When performing LSDF-funded research, it is essential that the personal interests of investigators do not impede their judgment or compromise their objectivity. Even the perception of a conflict of interest has the potential to erode the public's confidence in the research process. It is essential that applicant organizations have a financial conflict of interest policy in place and that all proposals funded by LSDF will have been vetted according to that policy. In accepting an award, the applicant organization will certify to LSDF in the grant agreement that potential financial conflicts of personnel participating in the funded research have been disclosed and that all conflicts have been eliminated or mitigated. Applicant organizations that do not have a financial conflict of interest policy should consult with LSDF ([programs@lsdfa.org](mailto:programs@lsdfa.org)) early in the application process to discuss how the financial conflict of interest review will be performed.

## **7.3. Human Subjects and Vertebrate Animal Research Requirements**

If a program will include research involving human subjects, the research site must operate under an appropriate Office of Human Research Protections-approved assurance for the protection of human subjects. Its procedures must also comply with all Department of Health and Human Services (DHHS) human-subjects-related policies. In accepting an award from LSDF, an organization certifies that it has a system that complies with federal, state and local government regulations to protect the rights, well-being and personal privacy of human subjects in research and that any LSDF-funded research involving human subjects will be reviewed and approved by the applicable human subjects oversight bodies.

For research involving vertebrate animals, the applicant organization must ensure that all performance sites hold Office of Laboratory Animal Welfare-approved assurances. In accepting an award from LSDF, an organization certifies that it has a system that complies with federal, state and local government regulations to humanely, efficiently, effectively and legally use live vertebrate animals in research. Further, it certifies that any LSDF-funded research involving vertebrate animals will be reviewed and approved by the applicable animal use and care oversight bodies.

Any LSDF-funded research involving human subjects or vertebrate animals will need to have been reviewed and approved prior to execution of the grant agreement.

#### **7.4. Intellectual Property**

Programs involving multiple collaborating organizations must be supported by an agreement that makes explicit provision for the disposition of IP rights among the organizations. Such an agreement must clearly allocate the rights that the organizations will have in any IP developed during LSDF-funded research and identify which of the organizations will be responsible for commercialization. The IP rights disposition agreement does not need to be submitted with the proposal but must be in place before the grant agreement is signed. One example of an appropriate agreement for this purpose can be found in the Federal Small Business Technology Transfer Research Program—*"The Allocation of Rights in Intellectual Property and Rights to Carry Out Follow-On Research, Development, or Commercialization"*:

[www.dodsbir.net/solicitation/pdf/AllocationofRights.pdf](http://www.dodsbir.net/solicitation/pdf/AllocationofRights.pdf)

#### **7.5. Reporting Requirements**

LSDF grants are an investment by the State of Washington in the future of its citizens. Full and timely reporting of the progress and results of funded research by principal investigators has great importance for evaluating the returns on that investment.

Reporting requirements, specific for each funded proposal, will be finalized in the grant agreement. LSDF requires the following reports: semi-annual progress reports, annual financial reports, final program and financial reports for the grant period, and post-funding annual reports for a period of five years. Site visits to, and in-person briefings from, principal investigators may be used by LSDF as tools to track the progress of funded programs.

## **7.6. Publicity**

LSDF reserves the right to publicly disseminate information about its granting activities. LSDF communications to the public may include lists of LOIs and proposals received, the names of principal investigators and applicant organizations, program titles, the field(s) in which the research will be conducted, descriptions of proposals funded, and reports about program progress and outcomes. Recipient organizations and principal investigators will be expected to provide LSDF with reasonable assistance in communicating funded research and its impacts to the public.

## **7.7. Funding Start Date**

Funds will not be authorized for expenditure by LSDF until the grant agreement between LSDF and the recipient organization is completed. The funding start date is subject to completion of the grant agreement, but may not be any sooner than mid-April, 2009.

## **7.8. Contact Information**

For further information about LSDF or grant administration, visit the LSDF website at [www.lsdfa.org](http://www.lsdfa.org), or contact [programs@lsdfa.org](mailto:programs@lsdfa.org).