



# Life Sciences Discovery Fund Request for Proposals

## 2009 Project Grant Competition

January 6, 2009

### Executive Summary

The Life Sciences Discovery Fund (LSDF), a Washington State grantmaking authority, supports research projects to improve health and health care in Washington State. LSDF invites proposals from Washington public and nonprofit organizations, singularly or collaboratively with other public and nonprofit organizations, or with for-profit companies.

LSDF intends to award up to \$8 million in grants in the 2009 Project competition. Proposals should request the budget amount and duration that are appropriate for the work. Principal investigators must apply online at <http://www.lsdfa.org/grants/apply.html>.

**New:**

- \* This year's competition encourages research that improves disease prevention and/or increases the cost-effectiveness of health care (see section 2.1).
- \* Greater budget detail than in previous competitions will be required (see section 3.3.5).

Key dates include:

- February 18, 2009 Letters of intent due
- April 15, 2009 Proposals due
- August 4, 2009 Award announcement

Proposals will be evaluated according to their potential to advance LSDF's primary strategic goals for Washington State—improving health and health care, stimulating economic activity, and promoting life sciences competitiveness.

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## 1. Introduction

### 2009 LSDF Project Grant Competition

#### 1.1. Background

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. Its mission is to improve health and health care, stimulate economic activity, and promote life sciences competitiveness in Washington.

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

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.

#### 1.3. LSDF Funding Categories

LSDF will fund three types of research in 2009, each of which is covered in a separate RFP:

- Project grants support investigator-initiated studies that will be accomplished during the LSDF award term. Projects typically focus on research topics or concepts that require significant work before commercialization or widespread implementation or adoption.
- Commercialization grants support small-scale, highly targeted studies that move technologies along the commercialization pathway. Awards of up to \$150,000 are expected to advance research with commercial potential to a stage appropriate for licensing, start-up company formation, or private investment.
- Program grants support new collaborative research initiatives that address major problems within a field of study and position organizations for future competitiveness and leadership. Programs must demonstrate significant



organizational commitment and potential for long-term growth and sustainability.

This RFP invites proposals for Projects. Please consult the RFPs for more information on Program grants at: [lsdfa.org/grants/current/2009/Programs\\_Grants/RFP.pdf](http://lsdfa.org/grants/current/2009/Programs_Grants/RFP.pdf) and Commercialization grants at: [lsdfa.org/grants/current/2009/Commercialization\\_Grants/RFP.pdf](http://lsdfa.org/grants/current/2009/Commercialization_Grants/RFP.pdf).

#### 1.4. Applicant Organizations and Eligibility

LSDF invites proposals for 2009 Project grants from Washington public and nonprofit organizations, singularly or collaboratively with other public and nonprofit organizations, or with for-profit companies.

The applicant organization is responsible for submitting the proposal, leading the research project, administering the research grant, and disbursing LSDF funding. A proposal 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 proposals 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 projects. Eligible applicants include, but are not limited to, the following:

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



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

Organizations from outside of Washington State may receive funding as a co-applicant. The proposal must justify the necessity for the participation of an out-of-state entity.

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

A single principal investigator submits the letter of intent (LOI) and proposal for an LSDF grant, regardless of how many researchers or organizations will be involved in the project. LSDF does not recognize the title of “co-principal investigator.” A principal investigator may submit only one proposal for this competition, but may serve as a co-investigator on other proposals.

A proposal may include 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 project, managing the budget, and reporting progress and results. Principal investigators must meet their employer’s requirements for such status.

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

### **1.6. Resubmissions**

LSDF permits resubmission of unfunded proposals. Details regarding resubmissions are provided in Section 3.3.5.

### **1.7. RFP Updates**

LSDF may amend this RFP after its release. Any clarifications or changes in guidelines or requirements will be posted on the LSDF 2009 Project competition webpage at:

[lsdfa.org/grants/current/2009/Projects\\_Grants](http://lsdfa.org/grants/current/2009/Projects_Grants)

Principal investigators are responsible for consulting LSDF amendments to be sure they have the latest information regarding this grant competition.



## 1.8. Frequently Asked Questions

Brief answers to the most common questions may be found on the LSDF 2009 Project competition webpage at:

[lsdfa.org/grants/current/2009/Projects\\_Grants](http://lsdfa.org/grants/current/2009/Projects_Grants)

## 2. Funding Opportunity Description

### 2.1. LSDF 2009 Project Grant Opportunity

Projects funded under the LSDF 2009 Project grant competition must have the potential to improve health and health care in Washington State—that is, not merely continuing current practice, but changing it demonstrably for the better. In addition, funded projects will be expected to advance the other core goals of the Fund—to promote life sciences competitiveness in Washington and foster growth of the state's economy. Review Section 1.3 for the definition of a project.

LSDF intends to fund scientifically rigorous research leading to health and health-care innovations, 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-providers' recommendations;
- better integrate care providers, patients and health-care systems; or
- accomplish any of the above in a more cost-effective manner.

Although all research topics that address 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.

The LSDF Board of Trustees will consider whether proposals address one or both of the above areas in making award decisions (see Section 5), but there will not be a quota or formal scheme to preferentially fund proposals focusing on these topics.

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“Disease prevention” includes but is not limited to:

- primary prevention of disease, such as diabetes or Alzheimer’s disease, in populations without recognized signs or symptoms of the target condition(s). This includes pharmacological interventions, health promotion, and lifestyle changes, such as diet or exercise programs or smoking cessation, and
- methods to identify at-risk populations or detect pre-disease states before significant morbidity or frank disease, leading to prevention of disease onset. Examples include identifying a population carrying a disease susceptibility biomarker and intervening with preventive measures, and detecting pre-cancerous lesions.

Disease management and other efforts to prevent the worsening of established disease are not considered disease prevention for the purposes of this RFP. “Disease” includes conditions, syndromes, and other significant health concerns. It is understood that disease prevention proposals necessarily may have a long timeline before significant clinical impact.

“Increased cost-effectiveness of health care” includes but is not limited to:

- approaches that lower the costs of health care associated with diseases that are particularly relevant to Washington State, or those whose incidence is projected to rise dramatically,
- measures implemented throughout the health-care system—such as in administration and infrastructure and in front-line service to patients, and
- appropriate uses of technology to more efficiently manage health care costs and/or existing resources.

Although disease prevention is an inherently cost-effective means to improve health and health care, this topic is meant to be broader than proposals for disease prevention. Measures to increase cost-effectiveness must maintain or improve the current standard of care.

LSDF intends to distribute up to \$8 million in grants in this competition. Principal investigators may request the budget amount and duration that are appropriate for their work.

LSDF desires to fund research 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 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.



## 2.2. Key Dates

Letter of intent due	Wednesday, February 18, 2009, 5:00PM PST
Proposal due	Wednesday, April 15, 2009, 5:00PM PDT
Awards announcement	August 4, 2009
Funding start date	Upon execution of the grant agreement

## 2.3. Questions to Consider Before Applying for an LSDF 2009 Project Grant

Because preparation of a proposal can involve considerable time and effort, principal investigators are strongly advised to carefully read this RFP. If a principal investigator cannot make a strong case regarding each of the following questions, it is unlikely that his or her proposal will be successful.

- What are the compelling reasons why this project can't be accomplished without LSDF's investment?
- How will Washington State benefit from LSDF's investment in this research:
  - in terms of improving health or health care?
  - in terms of contributing to economic growth?

Principal investigators are strongly encouraged to confer with LSDF programs staff ([programs@lsdfa.org](mailto:programs@lsdfa.org)) regarding the appropriateness of their project for LSDF funding.

## 3. Application Process

### 3.1. General information

It is the sole responsibility of the principal investigator to comply with this RFP and the instructions in the online application system, and ensure that the letter of intent and proposal (collectively, "application") materials are accurate, complete, and submitted on time. Applications that do not adhere to content requirements, are incomplete or incorrect, or are late will not be reviewed.

Principal investigators must complete two steps: (1) an LOI followed by (2) a proposal. Both the LOI and proposal must be submitted via the LSDF website, [lsdfa.org/grants/apply.html](http://lsdfa.org/grants/apply.html), by 5:00PM Pacific Time on the respective deadline date.

In addition to the specific instructions below, principal investigators should refer to the online application instructions for the detailed requirements of each application component.



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.

Principal investigators who discover an error or omission after submitting an LOI or proposal, but before the submission deadline, may notify LSDF at [programs@lsdfa.org](mailto:programs@lsdfa.org) and seek authorization to submit a corrected version. Applications found to be incomplete during or after their evaluation may be disqualified for funding.

Individuals having difficulties submitting applications should contact the LSDF grants administrator ([grantsadmin@lsdfa.org](mailto:grantsadmin@lsdfa.org) or 206-732-6788) immediately for assistance.

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

### **3.2. Letter of Intent**

Principal investigators must submit an LOI stating their intent to submit a proposal. Submitting an LOI does not require submission of a proposal. However, the LOI is required for a proposal to be reviewed.

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

LOIs include the following:

- a descriptive, non-confidential title for the project;
- an estimated budget total;
- a list of co-applicant organizations;
- resubmission information, if applicable;
- an abstract of 500 words or less; and
- up to five keywords descriptive of the project (include "disease prevention" and/or "cost-effectiveness" if applicable to your proposal).

### **3.3. Proposal Requirements**

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



The online application system requires the principal investigator to input information under the following headings:

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

### *3.3.1. 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 project). 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;
- the project title;
- the principal investigator name and contact information;
- the names of co-applicant organizations;
- the dates of requested support;
- the budget amount being requested;
- whether the research will include human or vertebrate animal subjects;
- the name and contact information of the authorizing individual; and
- the authorizing signature.

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

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

### *3.3.3. Proposal Details*

The following additional information is required.

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Abstract. Provide an abstract of 500 words or less. The text of the proposal abstract may be different than the text of the LOI abstract.

Keywords. Provide up to five keywords that are descriptive of the project. If your proposal addresses “disease prevention” and/or “cost-effectiveness,” indicate this with keywords.

Proposal reviewers. Principal investigators may indicate the names of reviewers whom they would prefer not review their proposal.

Patents and Inventions. Describe any invention disclosures made, patent applications filed, or license agreements executed or pending related to the subject matter of the proposal.

New Company Formation. Describe any plans and activities to date related to starting a company based upon the subject matter of the proposal. If a company has been formed within the last two years, provide a summary of its business plan in two pages or less.

### 3.3.4. Proposal Narrative

The narrative must be no longer than 20 pages and conform to the following format requirements:

- 8½-by-11-inch portrait-oriented page dimensions;
- Single spaced with all margins measuring at least 1 inch;
- 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 name (*i.e.*, LSDF 2009 Project Grant Competition), and the page number, using the format: “Page x of xx.”

All tables, charts, or graphs must be contained within the 20-page limit. Consult the online proposal instructions for specific information about the format of tables, charts, or graphs. If considering the submission of information in color, principal investigators should be aware that proposal reviewers may be performing their reviews using black and white hard copies. References are to be included at the end of the narrative, but are not counted in the 20-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.



The proposal narrative should include sufficient information needed to evaluate the scientific and technical merit and beneficial returns of the project, independent of any other document. The narrative must include all the following sections.

*A. Specific Aims*

List the objectives of the specific research project being proposed, e.g., to test a stated hypothesis, solve a specific problem, challenge an existing paradigm or clinical practice, address a critical barrier to progress in the field, or develop a new procedure or treatment to improve health or health care.

*B. Background, Significance, and Relevance to LSDF Program Goals*

Briefly describe the background leading to the present research, critically evaluate existing knowledge, and specifically identify the gaps that the project is intended to fill. Ensure that all the following questions are answered:

- What health or health-care related problem does this project address?
- What is the significance of this problem in Washington State?
- How is this problem addressed currently?
- What approaches other than that being proposed are under development to alleviate the problem?
- If appropriate, detail how your proposal uniquely contributes to improved prevention of disease and/or increased cost-effectiveness of health care.
- How does the proposed research lead to an improved solution for the problem?
- How does this research advance the mission of LSDF of improving health and health care, stimulating economic activity, and promoting life sciences competitiveness in Washington?
- Why is LSDF funding particularly appropriate and necessary to accomplish the work being proposed?

*C. Preliminary Studies*

Describe the principal investigator's preliminary studies pertinent to this proposal, including relevant data.

*D. Research Design and Methods*

Describe the conceptual framework, research design, procedures, and analyses to be used to accomplish the project. Include how the data will be collected, analyzed, and interpreted. Describe any novel concepts, approaches, tools, or technologies deployed for the proposed studies.

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### *E. Challenges*

Discuss the potential difficulties and limitations of the proposed project and alternative approaches to achieving the project's aims.

### *F. Timeline and Milestones*

Provide a timeline for the research keyed to the project's objectives. Identify major milestones, propose target dates for their accomplishment, and define the criteria by which achievement of each of the milestones will be assessed.

### *G. Personnel*

Identify key project personnel: principal investigator, co-investigators, and other individuals who will be responsible for the project. Define their roles, and explain how their work will be coordinated.

### *H. Budget Justification*

The budget justification should provide enough detail to allow reviewers to determine that the budget is appropriate for accomplishing the proposed work. Describe the complete funding plan, detailing any support from other sources. Include any instances in which other resources complement LSDF funding, including matching funds or cost sharing provided by the applicant organization, significant resources paid for by other sources or other ongoing related support. Highlight and explain the need for any extraordinary expenditures. Describe any other research support received or applied for that is related to the subject matter of the project. If an LSDF award is made, describe how any funding overlap issues will be handled. Detailed budget figures must be included on the relevant form provided in the online application system. (See Section 3.3.5.)

### *I. Facilities and Equipment*

Describe the facilities, equipment, and resources available for the project. If new equipment is requested and will be available to support other efforts outside the scope of the project, explain how time will be allocated to it.

### *J. Outcomes and Future Plans*

Describe how the project will contribute to the broad, long-term strategic goals of LSDF—improving health and health care, stimulating economic activity, and promoting life sciences competitiveness in Washington. Ensure that the following questions are answered:

- What is the estimated timeline for translating the results of the project for the benefit of health and health care?
- What is the potential for this project to foster economic gains?



Describe the next steps in capitalizing on the project's success, including both the near-term and long-term outcomes the project is designed to achieve. Describe the following:

- the potential for follow-on research funding;
- clinical or organizational implementation of project-developed scientific findings, e.g. changing ways that practitioners work or how organizations and governments deploy their resources; and
- a commitment from the research team, applicant, co-applicant and collaborating organizations or others to translate the project's results into practical application through commercialization.

### 3.3.5. Attachments

The following information is to be provided using relevant forms provided in the online application system under the Attachments heading.

Budget. Detailed budgets are to be completed using the form from the online application system.

The budget must be appropriate for the scope and goals of the proposed project. Costs must be reasonably associated with the conduct of the proposed project and must be in accordance with the applicant organization's fiscal policies. All should be listed as direct costs, including costs typically associated with facilities and administration.

The following budget categories are provided:

- salaries;

Salaries include wages, benefits and stipends. Provide the compensation requested for research staff associated with the project. Salaries should be calculated on the basis of the individual's percent effort on the project.

- equipment;

Include equipment with a unit cost greater than \$5,000 that is specifically required for project research. Include only items of property with an expected service life of more than one year.

- administrative costs;

Include administrative salaries and other associated administrative costs that support the project, 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 apply that portion of the organization's indirect cost rate attributed to institution-wide or central costs to the total project budget (after subtracting equipment to be

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purchased) and include the resulting value within administrative costs. Departmental or other “local” administrative costs must be calculated as direct costs before inclusion. A one-time fee of up to \$15,000 may be charged by the applicant organization for administration of each subcontract.

- facilities costs;

Include the cost of using existing facilities for the project. Do not apply the organization’s Federal indirect cost rate to the total project budget to calculate facilities costs.

- supplies;

Include consumable materials and supplies required for the project, including equipment having a unit price at or under \$5,000. Expenses for personal computers are not allowable unless primarily used for the project.

- services;

Include work performed by entities other than the applicant or co-applicant organizations in support of the project, including project consultants. Services are provided as a regular part of such entities’ normal business operations.

- subcontracts;

Include the expenses of project research performed by co-applicants. Co-applicant companies will be expected to pay for their own internal costs associated with research and development activities performed on a best-effort basis. Companies that provide products and/or services as deliverables to the project can be reimbursed for associated expenses.

- travel;

Include expenses required for field work, attendance at meetings and conferences, and other travel required for the proposed project, including per diem allowance, subject to the applicant organization’s usual accounting practices.

- other.

Itemize costs falling outside of the typical budget categories above, including education fees for trainees.

Neither costs associated with facilities construction and remodeling, nor for patient care beyond what are required for project research, are allowed by LSDF.

Biographical Sketches. Biographical sketches are limited to four pages. Provide biographical information on key research personnel using biosketch forms provided. The biosketch form used for National Institutes of Health grant applications (Form 398/2590) may be substituted for the LSDF form. Each biosketch must be uploaded as an individual PDF document. Do not combine biosketches into one PDF file.

Key Personnel Roster. Supply a roster of the research and administrative personnel involved in the project using the form and instructions provided.



Letters of Support. Letters of support are required to confirm the commitment of time and resources to the project from key personnel and organizations. Letters of support must be submitted by the principal investigator as individual PDF files through the online application system and not sent directly to LSDF by the individuals writing them.

Intellectual Property Certification. LSDF supports 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 project will be owned and managed. Principal investigators must complete the form according to the instructions provided. (See Section 7.4 for related information.)

Proposals must clarify whether the applicant organization has policies regarding ownership and management of IP developed by its 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 project, the principal investigator must provide an explanation of and justification for such provision.

Principal investigators 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 project.

Resubmissions. Resubmitted proposals must be accompanied by:

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

## 4. Evaluation

Submitted proposals 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.

It is unlikely that a resubmitted proposal will be evaluated by the same expert panel.

LSDF reserves the right to invite principal investigators for a personal interview or to require a site visit as part of the expert review process. LSDF will be responsible for any reasonable travel costs incurred by principal investigators for these visits.

Names of reviewers will not be made available. Applicants, principal investigators and their representatives may not contact reviewers or members of the LSDF Board of Trustees regarding submitted proposals. Any such contact or attempt to contact may result in the disqualification of the proposal from the competition.

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

#### 4.2. Evaluation Criteria

All proposals will be expected to have the potential to contribute to LSDF's primary strategic goals: to improve health and health care, stimulate economic activity, and promote life sciences competitiveness in Washington. Within this general framework, reviewers will use the following criteria to evaluate proposals, placing proposals in one of three categories based on their recommendation for funding: Not Recommended, Recommended, and Highly Recommended. Also, if a principal investigator indicates a focus on disease prevention and/or increased cost-effectiveness of health care, reviewers will evaluate the likelihood of meaningful results.

##### 4.2.1. *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;

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- 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.

### *4.2.2. 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.



#### 4.2.3. *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 IP that presents attractive licensing opportunities; and
- 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. For proposals that self-identify as addressing disease prevention and/or increased cost-effectiveness of health care, the board will consider the proposed mechanisms and timelines for translating the research results into broad use within Washington State. 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. Award decisions cannot be appealed. No award is final until a grant agreement has been executed.



## 6. Grant Agreement

Awards are subject to grant agreements that will be negotiated between the grant recipient organizations and LSDF. Funds will be disbursed to applicant organizations on a cost-reimbursement basis subject to progress towards mutually agreed upon milestones and timelines. LSDF may withhold reimbursement payments if progress reports have not been provided or milestones have not been met in a timely fashion.

The grant agreement templates that will be used for Project competition grants can be found on the LSDF website:

- For organizations that are public entities (e.g. public universities):  
[www.lifesciencesdiscoveryfund.org/grants/current/08-01/08-01\\_Grant\\_Award\\_Agreement\\_for\\_WA\\_State\\_Organizations.pdf](http://www.lifesciencesdiscoveryfund.org/grants/current/08-01/08-01_Grant_Award_Agreement_for_WA_State_Organizations.pdf)
- For organizations that are private, non-profit entities:  
[www.lsdfa.org/grants/current/08-01/08-01\\_Grant\\_Award\\_Agreement.pdf](http://www.lsdfa.org/grants/current/08-01/08-01_Grant_Award_Agreement.pdf)

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



Once a proposal has been funded, LSDF will publicly release certain additional information from the proposal, including a summary 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 proposal under Washington State law, LSDF may provide further information from the proposal 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 proposal, it will notify the applicant organization of the 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. In accepting an award, the applicant organization will certify to LSDF that potential financial conflicts of personnel participating in the funded research, including those identified by LSDF, 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 project 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. The research site's procedures must also comply with all U. S. Department of Health and Human Services 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 have been approved by the applicable human subjects oversight bodies before the principal investigator initiates the human studies.



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 have been approved by the applicable animal use and care oversight bodies before the principal investigator initiates the animal studies.

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

Projects involving 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, unless otherwise stated by LSDF. One example of an appropriate agreement for this purpose is 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,”* which can be found online at:

[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 considerable importance for calculating 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 project and financial reports, and post-project 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 projects.

#### **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, project titles, the field(s) in which the research will be conducted, descriptions of proposals funded, and reports about project progress and outcomes. Recipient organizations and principal investigators will be expected to provide LSDF with reasonable assistance in communicating funded research and its related 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 may be as early as September, 2009.

### **7.8. Contact Information**

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