

## 2022 Barbara L. Crow Investigator-Concept Grant: Request for Proposal

The Barbara L. Crow Investigator-Concept Grant (ICG) is a research effort in which the investigator designs the study and LVG/Grantor acts as the study sponsor, not the investigator. As the sponsor, LVG/Grantor assumes all responsibilities for complying with applicable regulatory requirements. The investigator may support the study in the form of product or technical input where necessary.

### Important Deadlines

Full proposal – August 31, 2022

Award Announcement at the 2022 American Academy of Ophthalmology meeting (Oct. 3, 2022)

### Introduction

*Currently the World Health Organization estimates that 253 million people worldwide live with vision impairment: 36 million blind and another 217 million with moderate to severe vision impairment.*

*Globally, chronic eye diseases are the main cause of vision loss, and it's estimated that over 80% of all vision impairment can be prevented or cured.*

The use of donor ocular tissue in the development of treatments and surgical interventions has a long history. From the treatment of cataracts to the sequencing of genes in glaucoma, research utilizing donated cadaveric eyes has been part of the advancement of ocular medicine for over 100 years. In recent years the cost of recovery and provision of human eyes for research has climbed significantly due to regulatory changes, researcher demands on timelines and preservations, and countless other factors. Because of this increase in cost, many eye banks have limited research tissue recoveries or stopped recovering for non-transplant uses all together. As a result, it can be difficult for clinicians and scientists to conduct early-stage studies using donor ocular tissues. Thus, Lions VisionGift (LVG) has created a mechanism to help stimulate innovative early-stage projects that may lead to life-changing treatments for ocular diseases.

### Funding details

The goal of this Grant is to develop novel approaches through the proof-of-concept stage for the treatment of ocular diseases. These approaches should demonstrate the potential for the development of a commercial technology to improve patient outcomes. The Barbara L. Crow Investigator-Concept Grant is intended to support clinicians and scientists in the early stages of product/treatment feasibility. Two grants will be awarded this cycle (1 to clinical/academic researchers and 1 to pharmaceutical/industry researchers per year). LVG will provide all cadaveric ocular tissue and staff for all research and testing necessary to complete the value of the grant. There will be **no monetary exchange** between LVG and grant recipients, and the value for tissue and research performed will be a maximum of \$15,000.

### LVG Laboratory Resources

LVG's Vision Research Laboratory boasts contemporary clinical and engineering design and features common to modern operating rooms. We have more than 330 square ft of ISO Certified processing rooms. With a dedicated Research & Development department, LVG has completed numerous laboratory and clinical research projects (including contract research), from which we have published peer-reviewed scientific reports that have helped shape the field of corneal transplantation and vision

research (see our [publications](#)). In addition to our own internal laboratory resources, LVG has access to research instrumentation and techniques such as DNA/RNA sequencing, mass spectrometry, electron microscopy, and histology services through our extensive network of collaborators.

### **Applicant Eligibility**

Academic and industry groups are eligible to submit applications.

### **Application Guidelines**

#### **Project proposal**

Please limit your application to a maximum of 3 pages (excluding Budget and Biographical Sketches).

#### ***A complete application must include:***

##### **1. Cover page with identifying information: (Limit: 1 page)**

- Project Title
- Name and Title of PI
- Department/Institutions
- PI's E-mail
- Telephone
- Co-PI's or Research Mentor/Supervisor Name
- Co-PI's or Research Mentor/Supervisor Contact Information

##### **2. Executive Summary: (Limit: 2 pages)**

- Provide a clear, concise description of the proposed project including target population and their needs. If the project is successful, what are the long-term objectives for future studies. How will patients potentially benefit from this research and therapy?
- Without disclosing propriety information, briefly summarize how the tissue will be used to study a specific condition or develop a specific therapy.

##### **3. Budget & Justification: (Limit: 1 page)**

- Provide a detailed accounting of how this funding up to \$15,000 will be directed using the figure of \$1850 per pair of donor whole eyes taking into consideration that further tissue dissections and preservations will increase the cost of the tissue.

##### **4. Biographical Sketches of CVs: (Please limit each Biosketch to 5 pages).**

- Include a Biosketch for PI and any Key personnel
- Blank NIH Biosketch templates can be obtained from the NIH Grants and Funding page (link provided below).
  - <https://grants.nih.gov/grants/forms/biosketch.htm>



**Additional Information**

Interested parties are encouraged to contact Lions VisionGift Research with any questions regarding tissue costs or about the application itself prior to the application deadline.

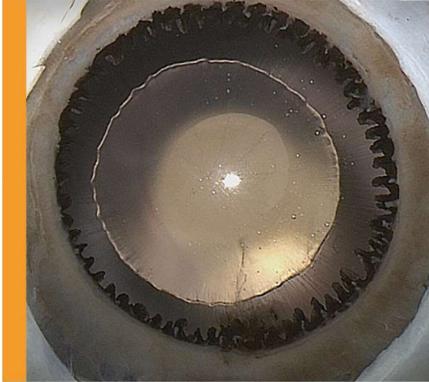
Please direct emails to: [Research@VisionGift.org](mailto:Research@VisionGift.org)

**Submission Guidelines**

Applications must be submitted via email to: [Grants@VisionGift.org](mailto:Grants@VisionGift.org)

If submitting additional hard copy, please send to:

Khoa D. Tran, PhD  
VP of Research & Development  
Lions VisionGift  
2201 SE 11<sup>th</sup> Avenue  
Portland, OR. 97214



## Ocular Tissue for Research

### We provide all parts of the eye

- Whole eyes
- Corneas
- Posterior Parts
- Custom tissue dissection
- Isolated tissues: lens, iris, retina, choroid, trabecular meshwork, optic nerve, etc.

### Healthy tissue and specific pathology

- AMD
- Glaucoma
- Diabetic retinopathy
- Others as requested
- Age-matched healthy controls

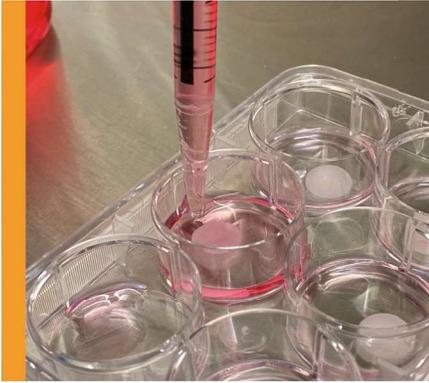
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## Custom Preservations

### Preservation Options

- Moist chamber
- Cold storage media
- LN<sub>2</sub> flash freezing
- OCT freezing
- Paraffin or plastic embedding
- Formalin and PFA
- Davidson's
- Hartmann's
- RNA Later
- DMEM
- Other as specified





## Contract Laboratory Services

### We follow your protocol

- Retina explant culturing (28 day protocol)
- Delivery of therapeutic compound
- Treatment via viral vectors
- Treatment of any ocular tissue with sponsor-provided compound
- Your protocol as requested

### Imaging Services

- Light and fluorescence microscopy
- Specular microscopy
- Slit lamp imaging
- Optical coherence tomography

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## Additional Capabilities

### Supportive services

- Serological testing
- Death-to-preservation intervals of 6 to 24 hours
- Focused ophthalmic history review
- Detailed inclusion and exclusion criteria
- Domestic and international shipping via FedEx and cold chain courier

