August 23, 2016

The Paul G. Allen Family Foundation Request for Proposals (RFP) Life Science Focus – 2016

RFP release date: August 23, 2016

RFP submission deadline: November 22, 2016

Purpose

The Paul G. Allen Family Foundation seeks to select investigators to pursue new, pioneering research that collectively 'moves the needle' towards answering broad scientific questions. **The most promising proposals will incorporate novel, creative, and ambitious approaches.** For this reason, the program is especially interested in proposals that are unlikely to receive funding from traditional government sources.

This 2016 request for proposals (RFP) focuses on the tissue level mechanisms of acute physiology/injury associated with concussion and the associated 30-60 day repair process.

We expect to fund 1-2 projects with a total funding of \$9-10M spanning a 5-year period. The Paul G. Allen Family Foundation has a 0% indirect cost policy. Such support is intended to provide a sustainable funding stream for up to 6 collaborating research lab groups, allowing them sufficient time to investigate big questions in-depth using risky, novel approaches.

Research Initiative Details

Description: We seek proposals whose focus would provide insights into tissue level mechanisms of concussion and repair.

One of the ongoing challenges in addressing the changes in physiology surrounding concussion remains the lack of ability to make measurements directly in the human brain and its native environment (vascular, blood brain barrier, immune system, etc.). Although there are a variety of model systems available (human tissue - native and fabricated; animal models – large, small, and non-human primate), each have differences in terms of their ability to be interrogated, perturbed, and assessed, in addition to variances in anticipated time, cost and outcomes.

We are seeking pioneering new approaches that would take current clinical concussion insights and utilize them to leverage experimental model systems and quantitative modeling to advance our understanding of the mechanisms associated with brain injury and repair. There are significant gaps in knowledge between induced cellular injury and injury in the *in vivo* intact brain, and such proposals should aim to bridge this gap and catalyze the field's basic mechanistic understanding on concussion.

This call welcomes interdisciplinary teams that include researchers in the field of concussion paired with researchers in other fields (tissue engineering, quantitative modeling, cerebro/vascular biology, physiology, etc.). This research approach should target incorporation of select models to provide integrated, informative, quantitative insights on the physiology of concussion injury and repair. The proposed level of funding for this effort (\$9-10M/5 years) should allow sufficient support for initial advances at this new frontier.

Lines of Inquiry will focus on acute mechanisms of concussion including (but not limited to):

- Cellular/Molecular neuron, glial, vascular (transient changes), immune components
- Tissue/circuit level alterations structure (micro to macro)
- Single mechanism viewed in isolation and during interaction: receptors, channels, blood brain barrier, network structure, metabolism
- Moderate/high throughput approaches or platforms to investigate mechanism(s)

And a focus on repair pathways associated with concussions, delineating

- Determinants of repair rate
- Systematic manipulation of environment to alter repair rate (flow, metabolism, activity, cell, molecular)
- Quantitative model for integrated response

Proposal Format

We request that all submissions be on 8 ½ x 11 paper, using Times New Roman, 12 point font, single spaced, with 1" margins top, bottom, left and right. Submissions will have the following proposal sections and associated length limits:

a)	Cover page (see attached template)	
	Technical project summary	Short paragraph – (300 word limit)
c)	Lay project summary and big picture impact	Short paragraph – (300 word limit)
d)	Project description*	8 pages
e)	Biographical sketch	3 pages (for each PI and co-PI)
f)	Facilities and leverage**	2 pages
g)	Risk/innovation assessment	1 page
h)	Technical project milestones [†]	2 pages
i)	Related prior and current grants	1 page
j)	Collaboration	3 pages
k)	Budget (see attached template) [‡]	see the ten of the
<u>l)</u>	Letter of Support [§]	1 page see the top of the

*References are not included in the page count of the project description. Up to 10 figures are permitted. The figures must be included in an appendix, and will not count towards the page count.

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**The term leverage is used in regards to the utilization of any resource to further the proposed research. Such a resource could be physical (equipment, a unique product/reagent, tissue line, etc.) or theoretical (expertise, people, skills, new results etc.) in nature.

[†]Technical project milestones should be specific, measurable, achievable, relevant, and timebound.

*The Paul G. Allen Family Foundation has a 0% indirect cost policy. Use the provided template and modify as needed. Supply a detailed budget for each award and sub-award. Include a narrative. Funds will be provided in US dollars.

SoM Pls: send your Word document draft letter to Dr. Harry Greenberg, Senior Associate Dean for Research; H&S PIs: send your Word document letter to Dr. Kam Moler (c/o Kristi): SoE Pls: send your Word document draft letter to Dr Stacey Bent, Senior Associate Dean

The Letter of Support can come from the Office of Research or any similar agency. Please refer to the following sentence as a guide when writing the letter. "The University of X supports the submission of the proposal, <Insert proposal title here> to the Paul G. Allen Family Foundation for consideration under the Request for Proposals, <Insert RFP Title here>."

Program Goals

The primary goal of this program is to advance the state of the art and increase human knowledge and understanding in the targeted topic areas. The program also seeks to have a lasting impact on the direction of research, aiming to serve as a catalyst upon which future research is founded.

This program seeks to enable scientists to take risks with new ideas and approaches, and strongly believes in interdisciplinary approaches that allow scientists to look beyond their own disciplines, and to explore approaches with colleagues in other disciplines in order to bring new perspectives to challenging problems where traditional approaches within a discipline may be 'stuck.' For the purposes of this call, we welcome submissions from interdisciplinary **teams.** Only one member of the team needs to have received an invitation. Team collaborations should delineate the effort of each group and collaborations of two or more laboratories should clearly specify the value and integration of such a union. Methodological and technological advances are often necessary complements to scientific advance and yet these are often difficult to fund through traditional sources. This program encourages and supports researchers including novel methodological, theoretical and technological elements in their proposals.

Supported projects are expected to have interim milestones and clearly described anticipated outcomes. Scientific goals in the topic area should be achievable within the award period.

Eligibility Requirements

Scientists at any stage of their career may apply. The includes but is not limited to both

Stanford faculty with PI eligibility-UTL, MCL, NTLR appts.

supporting the careers of exceptional young scientists showing particular promise as thought leaders in their fields and supporting more established researchers with ambitious, high-risk ideas that could have a revolutionary impact in the field but remain outside the scope of traditional funding sources.

Nomination and Application Process

Only invited researchers and institutions may submit proposals for the application process. The program does not accept unsolicited applications or nominations from uninvited institutions. The program seeks novel approaches and encourages risk taking to address the target area specified by the question. The most creative proposals are most likely to succeed.

Applications must include a description of the proposed project, an explanation of how the proposed project fits with the research agenda focused on a topic area and why it has significant potential to 'move the needle' towards answering a broad scientific question posed for the cohort. The interdisciplinary elements of the project should be described. The proposal should also include an explanation of why the proposed project is unlikely to receive funding through traditional sources.

Proposals are due by 11:59 p.m. PST on November 22, 2016 and can be submitted at LifeScienceProposals@pgafamilyfoundation.org.

The proposal, budget, and letter of nomination must be sent as a **single PDF** file with the following filename:

Investigator name (first initial.last name) Institutionname 2016Concussion.pdf

Example: J.Smith University 2016Concussion.pdf

Ouestions

Please submit questions to <u>LifeScienceProposals@pgafamilyfoundation.org</u>. Subject: 2016 Concussion Question.

Questions must be submitted by midnight PST on November 15, 2016. Questions received after this date may not be answered. Responses will be sent no later than November 19th, 2016.

Selection Process

Nominated proposals are reviewed by a panel of experts tailored for each RFP topic, and this panel will make recommendations to the Paul G. Allen Family Foundation. The Foundation has the final decision on the awards.

Members of the panel of experts and any advisors serve anonymously. Their identities as well as correspondence, evaluations and deliberations are kept confidential. This policy enables advisors and evaluators to provide their honest impressions independent of outside influence. Past awardees may be asked to act as future evaluators and advisors.

Post-award Activities

The Foundation will announce awards and release biographies of investigators along with summary descriptions of their projects to the press and on the Foundation website and other communication channels.

The Foundation believes post-award engagement is important and seeks to build a relationship with investigators. We strive to promote interaction among awardees to stimulate idea exchange around the broad scientific question asked of the team. Recipients may be required to participate in an annual symposium.

Reporting Requirements

Recipients are required to provide annual reports describing progress towards milestones and anticipated outcomes as well as any barriers encountered since the last report and how they are being addressed.

The Foundation will typically conduct annual site visits of current awardees to gain first-hand understanding of the research progress, team engagement, and institutional support.

A final report must be submitted at the end of the grant period describing the results of the project, including successes, barriers encountered and anticipated next steps. The final report should also include a discussion of how the outcomes attained 'moved the needle' towards answering the question posed for the cohort.

We require recipients to provide annually updated budget information as well as identify and explain any major deviations (>10%) from previously reported budgets.