Rapid Funding for Bold Ideas: a New DARPA-UCSF Program

Do you have an idea that pushes the leading edge of science? Do you find your idea difficult to fund via more risk-averse conservative means?

Keith Yamamoto, UCSF’s Vice Chancellor for Research has negotiated with the leadership of the Defense Advanced Research Projects Agency (DARPA) Biological Technologies Office (BTO) to establish a direct pipeline for exceptional, innovative UCSF ideas to reach funding decision-makers at the BTO.

The mission of the BTO is to foster, demonstrate, and transition breakthrough fundamental research, discoveries, and applications that integrate biology, engineering, and computer science for national security. BTO seeks to establish and invest in new communities of scientific interest at the intersection of traditional and emerging disciplines. At UCSF, we understand that DARPA areas of interest have significant overlap with our institutional goal to drive transformative solutions in precision medicine, an umbrella that covers all biological discovery research – basic, clinical, social/behavioral and population. BTO’s programs operate across a wide range of scales, from individual cells to complex biological systems including mammalian and non-mammalian organisms and the macro- and micro-environments in which they operate. For more information on the mission of the Biological Technology Office of DARPA, click here.

Multi-disciplinary teams, drawing from expertise and resources at different institutions and across different sectors (academic institutions, national laboratories, private industry, etc.) can be particularly effective in addressing the most complex challenges, and are well-received at DARPA.

How

We will solicit ideas campus-wide and then provide feedback to all research proposal ideas based on feasibility, impact, innovation, and fit to DARPA mission. The initial advisory phase of this pipeline will begin with the submission of a 2-page white paper (plus budget table) due at 5:00 p.m. (PST), May 4th. The Internal Advisory Team will review and provide feedback in the subsequent month, and the final project white papers will be due at 5:00 p.m. (PST), June 1st. All applications will then be submitted to DARPA through the VCR’s office.

After this initial call, the idea pipeline will be fed on a rolling deadline basis with ad hoc meetings of the Internal Advisory Team to provide feedback. For up-to-date information, please visit the Research Development Office (RDO) website.

White Paper Pitch:

If you have a high impact/high risk project that you think might fit the bill, propose and discuss your project in the DARPA-UCSF Pipeline white paper and associated budget form (templates provided) and submit to: darpapipeline@ucsf.edu.

Advisory Team Feedback:

Dr. Yamamoto and an ad hoc committee of area experts and colleagues with DARPA-funding experience, will review and provide feedback relative to the feasibility, impact, innovation, and fit to DARPA mission. Keep in mind that projects should have clear goals that address areas of interest to DARPA BTO, approach a stated problem in a novel way, or develop new tools. Project white papers will then be submitted directly to DARPA BTO through the VCR’s office. The hope (and expectation) is that a number of these bold project ideas will lead to BTO contacting the PI(s) for further conversation and potential funding.

Please direct any questions to Gretchen Kiser (gretchen.kiser@ucsf.edu) in the UCSF Research Development Office (RDO).
White Paper for DARPA-UCSF Pipeline

Title

[Length: Two pages, excluding references and budget table; Arial 12pt, 0.5 in margins.]

Project Time Horizon: [1 year, 2 year, 5 year…]

PI(s):

Other Key Team Members:

Problem Statement and Approach:

- Description of the opportunity: What are you trying to do? Articulate your objectives using absolutely no jargon. What is the problem?
- How is it done today? What are the limits of current practice? Why is it hard?
- Description of your proposed path forward that obviously addresses the problem
- What is the power of your team? Is there a cross-sector, multi-institutional, multi-disciplinary approach?

Expected Impact:

- Who cares?
- If you’re successful, what difference will it make? What impact will success have?
- What are the risks and payoffs
- How will success be measured?

Innovations:

- What are the key innovations? Uniqueness of your approach? of your team? of your goal?
- Why do you think it will be successful?

Schedule and Budget:

- Clear, brief aims/objectives and metrics: What are the midterm and final "exams" to check for success? How will progress be measured?
- How long will it take?
- How much will it cost? Budget, described annually. Provide overall total costs by major budget categories (see budget table template below). If additional budget details are needed for the internal review, the research team will be contacted directly.
<table>
<thead>
<tr>
<th>Category</th>
<th>Total Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salary and Benefits*</td>
<td></td>
</tr>
<tr>
<td>(Included personnel: ........)</td>
<td></td>
</tr>
<tr>
<td>Supplies (supplies, materials,</td>
<td></td>
</tr>
<tr>
<td>computer services, etc.)</td>
<td></td>
</tr>
<tr>
<td>Equipment</td>
<td></td>
</tr>
<tr>
<td>Travel</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
<tr>
<td>Indirects/Overhead</td>
<td></td>
</tr>
<tr>
<td><strong>GRAND TOTAL</strong></td>
<td></td>
</tr>
</tbody>
</table>

* List names (if known) and/or classification of those included in the total cost; Classification: PI, Co-PI, senior personnel, postdoc, graduate or undergraduate student, administrator, or other academic.