DPI-Shield T3 Research Partnerships in Personalized Health Diagnostics

Call for Proposals

Overview

Due Date: July 6, 2022, 11:59 PM CT

Funding available: Proposals can request awards of $125,000 to $300,000 for a target period of up to 12-18 months.

Eligibility: Open to all academic or commercial institutions. Not limited to University of Illinois System staff or faculty.

Overview:

The Discovery Partners Institute (DPI) and Shield T3 invite faculty and researchers from all academic or commercial institutions to submit proposals in the area of personalized health diagnostics. We are looking for proposals that will support the development of a new business that uses individual health data, diagnostics results and data analytics to provide individuals with tailored action plans to drive better health, and where appropriate, help them navigate the healthcare system. Proposals should focus on one or more of the following areas:

- Development and use of diagnostic tools to support individual risk profiling and ongoing monitoring, including use of existing health risk morbidity/mortality calculators and/or the
development of a saliva-based epigenetic tool to effectively measure biological versus chronological age
• Direct-to-consumer user experience tools and applications that connect individual consumers to Shield T3 Health and Wellness offering, including:
  o Results reporting from at-home diagnostic devices and of home-to-lab based diagnostics
  o User registration and input of data, including personal health history, risk factors, previous and existing medical conditions
  o Provision of tailored guidance, specific actions, and/or interface points with medical care providers based on diagnostic results, patient provided information and analytics.
  o Tools and methods that support individual behavioral change in support of specific health goals and/or a healthier lifestyle.
  o Community building and provision of support resources.
  o Access to subject matter experts and referrals to qualified medical practitioners.
• Development of saliva-based diagnostics and assays that can be delivered via an at-home diagnostic device.
• Rapid prototyping and contract manufacturing capabilities to support scaling production of at-home testing device utilizing LAMP based technology.

Proposals should draw upon the advances in technologies, including the applications of data analytics or computing technologies, to problems facing these sectors in order to address these important societal challenges.

After successful proposals are selected, awards will be provided in the form of a research contract between the PI/their institution and Shield T3.

About DPI
The Discovery Partners Institute’s ambition is to propel Chicago and Illinois into a pre-eminent and inclusive tech economy over the next decade. Led by the University of Illinois System in partnership with top research universities, it does three things: tech talent development, Research & Development, and business building. DPI prepares diverse students and workers to step into high-demand tech jobs. It also builds research teams and matches them with new funding. With state investment and a new innovation district in development, DPI has the resources to attract, develop and leverage the most ambitious people and companies into its ecosystem.

You can read more about the vision of DPI and plans for the future [here](#).

About Shield T3
Shield T3 is a wholly owned subsidiary of the University of Illinois Board of Directors. It was born out of necessity as a mission-based testing company that provides high-quality FDA EUA approved saliva-based COVID-19 PCR testing for K-12 schools, universities, camps, and businesses across the country. As the pandemic has evolved, Shield T3 has leveraged the expertise and experience gained in fighting COVID to also establish a wastewater testing business (in partnership with DPI); a novel diagnostics business focused on innovating new genetic testing for under-served, but critical diseases and conditions; and the development of a personal health business oriented around at-home testing capabilities and the development of insights and guidance to provide individuals with a longer, healthier life.

Use of Funds
Proposals can request awards of $125-300k for a target period of up to 12-18 months.
Characteristics of a Successful Proposal

1. A minimum of two researchers. Proposed teams are encouraged to include members from multiple partner universities or other organizations.
2. Focus on personalized health diagnostics in the areas of interest outlined above.
3. Economic impact and Commercialization potential. We expect teams to be interested in realizing the commercial potential of their research, however, no prior experience in commercialization is expected.
4. Proposes broader Impacts. This could include meaningful external engagement with private, public, or non-profit entities in underserved communities.
5. Potential for future external funding. The project should lay the groundwork for the submission of external grant applications and/or proposals for industry-funded R&D partnerships. Priority will be given to teams that propose specific large grants that they hope to pursue in the coming year.
6. Proposed team’s distinction and leadership in the field.
7. Project feasibility in the timeframe that is provided.
8. Budget accurately reflects the needs of the proposed activities.

Proposal Content

Cover page(s) must include the following:

Project Name

1. Name and Title of PI
2. University (or Company) and Department of PI
3. Names and Titles of Co-PIs and other Senior Research Personnel
4. Institution (or Company) and Department of co-PIs

Proposal Sections:

1. Abstract (maximum 250 words)
2. Description of team, background, and proposed activities (not to exceed four pages)
3. Statement of work and timetable for the grant activities (not to exceed one page).
4. Statement on external (governmental, foundation, corporate, philanthropic, etc.) funding.
   a. List any existing external funding commitments which currently support the applicants’ research activities that relate to the proposed team
   b. List any identified external funding programs/prospects that the proposed team intends to pursue
5. Faculty and team members, include short CVs (not to exceed two pages each)
6. Letters of support from partners (if any) that describe their role on the project
7. Bibliography of relevant scholarship that is related to the project
8. Budget for requested funding (up to $300k). Budgets must include required overhead, fringe, and tuition remission (if needed).
Information Session and Team Facilitation Meeting

DPI will hold an information session on Friday, June 24 from 10:15-10:45am. The meeting will include an informational presentation and include time for questions and answers. Please send questions ahead of time so we can include answers in the presentation.

You can register for the information session at the following link:
https://illinois.zoom.us/meeting/register/tZUlOUoqzgiEtbswY_bN82s_yLrN6mr8NRA

How to apply

Please apply by visiting the following link: https://dpi.uillinois.edu/dpi-shieldt3-research-partnership/. If you have any questions please reach out to Michael Fitzsimons (fitzm@uillinois.edu).