

**Dean's Fund for Scientific Advancement  
2021 Acceleration Award RFA**

**Application Deadline: June 21, 2021 (11:59 PM)**

**Submission requirements:** All applications should be submitted through the Harvard University Funding Portal (HUFPP). See below for more information on submission via HUFPP.

**Contact regarding questions:** Elizabeth Sylvester at [esyvester@hsph.harvard.edu](mailto:esyvester@hsph.harvard.edu) or visit the [Frequently Asked Questions](#) section of our website.

The **Dean's Fund for Scientific Advancement** expands the School's internal research funding program and is designed to create a pipeline of support that facilitates the exploration of early ideas, the development of strong interdisciplinary team science, and the creation of new transformative research collaborations that advance the frontiers of science. Acceleration Awards represent a critical component of the funding program and are intended to nurture research collaborations, develop platforms, and support educational projects.

OVERVIEW AND GOALS OF THE ACCELERATION AWARD

Acceleration Awards are collaboration-focused grants and applications will be accepted across three focal areas: Research Grants; Research Platforms; and Public Health Pedagogy. Research Grant and Research platform applications will require the substantial engagement of at least two Harvard Chan School Departments or Centers and must include collaboration from at least one other Harvard School; Public Health Pedagogy applications do not require collaboration but demonstration of collaborations across departments, units, and even Schools will enhance an application. The actual number of awards distributed in each focal area may vary based on School priorities and the quality of applications received.

**Research Grant** applications submitted in response to this general call will be accepted in any of the School's priorities, which overlap with Incubation Award priorities from last year. Applications in the selected research topic areas will be given special consideration, however we may accept proposals outside of the priority areas and encourage you to reach out to ORSD prior to submission so we can help assess the competitiveness of your application. This year's Acceleration priority areas include:

**i. Anti-Microbial Resistance**

Anti-microbial resistance is one of the most pressing public health challenges of our time and effects millions each year around the globe. Exploration of basic (biological and/or genomic), epidemiological (surveillance and modeling), economic, behavioral and other drivers of anti-microbial resistance is greatly needed along with approaches to prioritize microbial targets and design solutions, ranging from new drugs, diagnostics, vaccines, economic incentives, behavior change approaches, and policy solutions.

**ii. AI/Machine Learning and Causal Inference**

Bringing high-dimensional data together with new technologies and methodologies has the potential to revolutionize health promotion and disease prevention and improve the efficiency by which health services are distributed, especially to underserved or at-risk populations. Continued research and innovation are required to advance sound, scalable, and robust methods for the use of machine learning, artificial intelligence, and causal inference in public health. Examples include ML/AI approaches with the potential to advance individualized treatment or diagnostic tools, methods to identify populations that face elevated health risks and to match those with appropriate interventions, and, more broadly, the application of new approaches in causal inference, AI, ML to improve public health outcomes.

**iii. Health Care Quality and Safety**

To effectively deliver high quality care to all patients in all settings, strengthening our health systems is imperative. In the U.S. and around the world, research is needed to evaluate current systems, develop effective policies and strengthen health care delivery. Particular attention is needed on the provision of care for vulnerable and underserved populations.

**Research Platforms**, defined broadly, are research resources that can be accessed by multiple faculty to support projects in a variety of disciplines. The goal of these awards is to provide one-time support for the development of research platforms that can be funded in the future by other mechanisms. Examples include support for developing a publicly available database of cancer genes, bio-banking samples accessible to multiple research groups, platforms to increase access to shared datasets or software programs, writing shared code for complex data sets, or pooling expertise on health inequities research to incorporate diversity aspects into grant applications.

**Public Health Pedagogy** awards are intended to produce scalable innovations that will improve the quality of teaching and learning at the Harvard Chan School. Special consideration will be given to applications that propose projects that have the potential to be scaled up School-wide to benefit teaching and learning at all levels. The goal is to provide one-time support for the development of pedagogical innovations that can be integrated into our educational programs or funded in the future by external support mechanisms.

Because pedagogical advancements tend to be structured differently than research awards and because they frequently involve work at either the level of the course or the program, this year we will be piloting two different kinds of smaller awards within the Public Health Pedagogy category:

1. Development Awards for up to \$15K

Development Awards are meant for individual faculty, instructional teams, or collaborations between faculty to develop a new solution for an educational problem toward improving the quality of teaching and learning in a particular course or domain at the School. Applicants should state the teaching and learning problem they intend to solve, the new development they propose in order to address the problem, and how the work involved with the award could be a model for others or be scaled after being developed and piloted.

2. Enhancement Awards for up to \$25K

Enhancement Awards are meant for departments, degree programs, or other educational programs to make a significant enhancement to their current teaching and learning activities, for example engaging in a curriculum review and renewal, creating a new pedagogical training initiative, etc. Applicants should state the impact the project would have, the process and steps they propose to make the enhancement, and how the work involved with the award could be a model for others or be scaled after being developed and piloted.

#### AWARD AMOUNT AND DURATION

Research and Platform awards will be made for up to \$100,000 (direct cost) for projects that are designed to be completed in a 12-month project period. Pedagogy awards will be made for up to \$15,000 (direct cost) for Development Awards and up to \$25,000 (direct cost) for Enhancement Awards; all projects are designed to be completed in a 12-month project period. An automatic 6-month no-cost extension will be granted if needed, after which no additional extensions will be allowed.

#### ELIGIBILITY

Principal investigators must be:

- Primary Harvard Chan School faculty whose research operation is based at the Harvard Chan School. Co-investigators or team members may include individuals with any academic appointment.

Applications for Research Grants and Research Platforms must include:

- Coinvestigators from at least two Harvard Chan School Departments or Centers representing interdisciplinary collaboration
- Collaboration with at least one other Harvard School (see below for more details)

For Public Health Pedagogy awards:

- Collaboration is encouraged across departments, units, and even schools.
- Demonstration of such collaborations will enhance an application but is not required.

If you have any questions regarding your eligibility to apply for this award, please contact Elizabeth Sylvester at [esyvester@hsph.harvard.edu](mailto:esyvester@hsph.harvard.edu).

#### COLLABORATION REQUIREMENT DETAILS (For Research Grant and Research Platform Applications)

- The grant application will include a required section called “Interdisciplinary Approach and Coordination” for applicants to explicitly describe how the proposed project, research platform, or pedagogical innovation is interdisciplinary in nature.
- In this section, applicants should describe how collaboration across Harvard Chan School departments or centers and at least one other Harvard school will be operationalized. Topics to be addressed include communication, shared decision-making, conflict resolution, personnel decisions, management of changes in study protocol, and authorship. Administrative and technical responsibilities should also be outlined.
- Any rank of researcher (faculty, research scientists, postdocs, students) will meet the requirement for collaboration with another Harvard School.
- An example of a collaborative approach could include a shared student or postdoctoral fellow working with investigators from multiple departments or Schools. Other models for operationalizing collaboration may include provisions for regular co-investigators and team meetings, or agreements for shared resources and equipment, as appropriate.
- In the last three months of the funding period, all co-investigators involved in funded Acceleration Award teams will be expected to participate in a half-day workshop where each team will present on their progress and exchange feedback on project sustainability, scalability, and future development.
- The inclusion of Harvard Chan School junior faculty as part of a research team is *strongly* encouraged and will be factored into application review and scoring.

#### ADDITIONAL PROJECT SUPPORT

All awardees will receive additional support from the Office of Research Strategy and Development (ORSD) during the project period. Specifically, ORSD will work with teams to identify and connect with additional resources and collaborators, as needed. There will be periodic check-ins with ORSD staff to identify roadblocks and facilitate solutions. The Acceleration Award mechanism is designed to position faculty for external support mechanisms.

#### SUBMISSION PROCESS

Proposals are to be submitted through the [Harvard University Funding Portal](#) (HUFPP). If you are using the application portal for the first time, you must complete a short registration process (see below). Please note, you can search for awards without logging in but you must be registered and logged in with your Harvard Key to submit an application. There is an option to assign a proxy for proposal submission but your grant manager cannot use your Harvard Key to submit your application. Please see below for more information on registering for an account and assigning a proxy.

**Registering your HUFPP Account:** Select “Log-in” in the top right corner of the HUFPP webpage, which will bring you to a log-in page with two options. Select the “with Harvard Key” icon, which will prompt you to enter your Harvard Key. You will be led through a short three-question registration process. Once registered, you will be able to log in with your Harvard Key to submit applications.

Assigning a Proxy for Submission: Before beginning an application, both the proxy and the PI must register for individual accounts in HUFPP using their Harvard Key credentials. Once the proxy and the PI are registered, the proxy can begin an application on behalf of the PI. The Proxy will indicate that they are a proxy applicant and will be asked to locate their PI in HUFPP. Proxies should never “Add User” in HUFPP. Once this is done, both the PI and the proxy will be able to access and edit the application.

Please contact ORSD ([esyvester@hsph.harvard.edu](mailto:esyvester@hsph.harvard.edu)) if you have any questions about using HUFPP.

#### PROPOSAL CONTENT AND PAGE LIMITS

You must complete all sections within the application portal before submitting your application. The sections within the application portal are as follows:

1. Applicant Information

2. Collaborators
3. Project Information: In this section, you must complete a 200-word research abstract and upload the following documents as a single PDF:
  - a. Project Proposal: Maximum of 4 pages of text, not including items b. – e. listed below. Figures and references are allowable in addition to this page limit. No other appendix material will be accepted.
    - o Within the project proposal, please describe any key challenges that may arise during the course of this project and how you will manage them.
  - b. Additional Required Forms by Award Type:
    - o All Applications: Interdisciplinary Approach & Coordination Form. Maximum of 1 page of text. Use this [Downloadable Form](#) as a template.
    - o Research Platform Applications: Sustainability Form. Maximum of 1 page of text. Use this [Downloadable Form](#) as a template.
    - o Public Health Pedagogy Applications: Generalizability Form. Maximum of 1 page of text. Use this [Downloadable Form](#) as a template.
  - c. Biosketch: Current [NIH Biosketch](#) for each participating investigator.
  - d. Budget Request: Budget estimates should be submitted on [NIH PHS 398 detailed budget form](#) with major divisions of funds (personnel, equipment, etc.). PIs may include effort and salary support commensurate with their effort. The full amount of the award may be used for direct costs. **PLEASE NOTE: Indirect costs, including indirect costs on sub-contracts, cannot be charged to internally funded awards.**
  - e. Budget Justification
4. Electronic Signature

#### REVIEW PROCESS AND CRITERIA

Proposals will be reviewed by a standing committee of faculty with broad representation across the School's disciplinary clusters (life sciences, quantitative sciences, social & policy sciences, and educational leadership). The purpose of the Acceleration Award is to encourage collaborations and support innovative ideas that capitalize on the strengths of an interdisciplinary perspective. As such, reviewers will evaluate applications based on the following review criteria:

#### Research Grant Review Criteria:

- a. **Overall Impact:** The likelihood of the project to exert a sustained, powerful influence on the research field(s) involved, in consideration of the review criteria below.
- b. **Significance:** The extent to which the application addresses an important problem or a critical barrier in one of the identified priority areas or other important public health problem central to the mission of the School.
- c. **Innovation:** The extent to which the application seeks to shift current research or clinical practice paradigms by utilizing novel theoretical concepts, approaches or methodologies, instrumentation, or interventions.
- d. **Feasibility:** The extent to which the application demonstrates that measurable results are achievable within an 18-month timeframe and the potential for the project to be scaled-up.
- e. **Interdisciplinary Approach:** The extent to which the application provides evidence of the ability of the team of investigators to work together in an interdisciplinary fashion and the likelihood that the proposed interdisciplinary approach will yield new insights into the problem being addressed.

#### Research Platform Review Criteria:

- a. **Overall Impact:** The likelihood for the project to exert a sustained, powerful influence on the research field(s) involved and the likelihood that the platform will fill a critical gap in the intellectual infrastructure of the Harvard Chan School, in consideration of the review criteria below.

- b. **Significance:** The extent to which the project addresses an important problem or a critical barrier to progress in the field?
- c. **Innovation:** The extent to which the application seeks to shift current research or clinical practice paradigms by utilizing novel theoretical concepts, approaches or methodologies, instrumentation, or interventions.
- d. **Feasibility & Sustainability:** The extent to which the application demonstrates that measurable results are achievable within an 18-month and includes a well-defined and appropriate plan to ensure the long-term sustainability of the research platform.
- e. **Interdisciplinary Approach:** The extent to which the application provides evidence of the ability of the team of investigators to work together in an interdisciplinary fashion and the likelihood that the proposed interdisciplinary approach will yield new insights into the problem being addressed.

Public Health Pedagogy Review Criteria:

- a. **Overall Impact:** The likelihood for the project to exert a sustained improvement in the quality of education, teaching, and learning at the Harvard Chan School, in consideration of the review criteria below. Overall impact may be gauged in terms of the likelihood that the work will be integrated into existing educational structures and continue when the individuals who apply for the award work are no longer involved.
- b. **Innovative Solution for a well-defined Education Problem:** The extent to which the application seeks to develop a novel and/or well-designed approach to an education problem that can be articulated clearly and that will generalize across other domains. Reliance on the scientific basis for educational best practices is strongly encouraged.
- c. **Feasibility:** The extent to which the application demonstrates that implementation is achievable within an 18-month timeframe.
- d. **Transfers or Scales:** The extent to which the project has the potential to be a model for other parts of the School or could be scaled up School-wide to benefit teaching and learning at all levels.
- e. **Cross-Unit Approach and Collaboration:** The extent to which the application crosses departments or units and helps to build a collaborative community of practice around teaching and learning at the School.

Other considerations include:

- Successful applications will make a compelling case that articulates the public health, research platform or pedagogical need to be addressed and specific goals/impact to be achieved with the aid of the grant.
- Measurable results must be achievable within an 18-month timeframe.
- Project goals should emphasize not only the significance and innovation of the project, but also demonstrate how an interdisciplinary approach will maximize the potential impact of the work – the potential to create new scientific paradigms, develop transformative technologies and platforms, or establish entirely new and improved pedagogical approaches.
- For Research Platforms: Particular attention will be given to the likelihood of long-term sustainability.
- For Public Health Pedagogy: Particular attention will be given to the scalability of the pedagogical approach.
- The inclusion of Harvard Chan School junior faculty as part of a research team is strongly encouraged and will be factored into application review.

Additional Budget Guidelines:

- **Subcontracts:** External collaboration beyond Harvard is permitted in cases where there is a clear scientific rationale for why the work needs to be done externally. A letter describing the subcontractor's commitment to the work outlined in the proposal and the scope of their contribution should be submitted at the time of

application. All other paperwork needed to set up the subcontract can be submitted if and when the project is funded.

- **Outside spending/salary support:** Funds may be used for project-related expenses at other Harvard Schools, though they cannot provide salary support for faculty outside of the Harvard Chan School whose salaries are already fully covered by institutional funds.
- **Indirect costs:** Indirect costs should not be included. The full award should be used to support direct project costs.

#### REPORTING

- A mid-term progress report will be due 9 months following the start of the funding period. A progress report template will be sent to awardees one-month prior to the due date.
- A final report will be due 30 calendar days after the end of the 18-month funding period that summarizes the impact of the project and progress towards broader dissemination of knowledge. A final report template will be sent to awardees one-month prior to the close of the award.

#### ADDITIONAL TERMS OF THE AWARD

- Should the PI leave the Harvard Chan School, the remainder of the award will be forfeited (i.e., may not be transferred to another institution).
- Awarded projects will receive additional development support from ORSD.