

Harvard Grid Fellowship

Overview

The Harvard Grid Fellowship represents an opportunity for inspired, engineering and science-oriented innovators to translate promising research or technologies while honing entrepreneurial skills during a year-long fellowship. Broadly, a researcher will apply with the intent of shaping Harvard research into a viable commercial platform to have global impact. The program is designed to surround fellows with a wide and deep village—market and technical experts, skills and knowledge sprints, mentorship, funding, other entrepreneurs, and more—that combined, creates an ecosystem to help innovators launch successful tough tech ventures that have outsized, positive impact on the world.

For the inaugural fellows cohort, target applicants are final-year Harvard SEAS (John A. Paulson School of Engineering and Applied Sciences) PhD students or current Harvard SEAS postdocs working with a SEAS ladder faculty member.

Fellowship Design

Grid Fellows first co-design project(s) to de-risk their own or other lab-based Harvard research, and at the end of the 12-month fellowship, have all necessary components come together to enable the launch of a new enterprise in a CxO leadership role. 'De-risking' refers to the reduction of perceived commercialization risk (risk in transforming a science experiment into a commercial product) to a would-be investor. Those components are, for example, prototypes/minimally viable product, intellectual property, team (+advisers), funding, customers, supply chains, business plan, and a visionary impact roadmap. Fellows will lead a team (often including one or more of a ladder faculty member adviser, external advisers, Harvard research staff and students, and other external contributors), while integrating training/educational components offered by the Harvard Grid.

Other outcomes include accelerated translation of research, higher visibility and easy access to tech commercialization career paths, and an increasingly energized translational culture in Harvard science and engineering.

Each Grid Fellow will initially work with Grid staff to tailor a year-long schedule and milestones. The fellowship is an in-person, immersive educational experience. It is expected that fellows will work on campus in labs and in cohort environments, such as in the Grid's Node or the i-lab. In broad strokes, the schedule might look like (M = starting month):

First half of fellowship

- Diligence, market landscape, launch planning, identify advisers – M1
- Co-design final de-risking project(s) and IP strategy (data/prototypes/demonstrations required for funding/in-licensing) – M1
- Develop a launch plan (deliverables, milestones); identify and engage a VC and Customer Adviser – M2
- Tech immersion – M2
- Grid Tough Tech Start-up Bootcamp and/or another Harvard venture course/workshop
 - Leadership, building a team, am I the CEO?
 - IP moats and strategies
 - First market/application, customer fit/validation
 - Others: funding, pitching, term sheets, licenses
- Problem/customer validation and fit – M3
- Business planning – M4 (including team, funding strategy, partners)
- Funding pre-wiring – M4

Second half of fellowship

- Business plan evolution
- Build team, entity; socialization with targeted investors – M7
- Launch planning/execution (including incorporation, space) – M8
- Grid SEAS community Tough Tech Translation Colloquia practice pitch – M8

- IP licensing – M10
- Ignition Countdown (demo day) - presentation of team, idea, and business plan
- Launch in a leadership role (CxO) – M12

At the start of the fellowship, fellows will be paired 1:1 with a mentor who is a Director of Business Development (DBD) at the Harvard Office of Technology Development corresponding to the Harvard lab from which the focus technology arises. Fellow/DBD steering meetings are expected to occur monthly.

Before or by the end of M2, fellows will also create a Board of Advisers (BoA) with a minimum of one investor adviser (“VC Adviser”) and one industry adviser (“Customer Adviser”). The BoA is minimally constituted by the fellow, VC Adviser, Customer Adviser, and DBD, and will convene monthly during the fellowship. Beyond the minimum, a fellow can augment the BoA at their discretion and also add or substitute advisers as the concept evolves.

Interspersed throughout the fellowship are activities, some mandatory, such as:

- Weekly Fellows ‘all-hands-on deck’ support/peer advisory check-ins (akin to a lab meeting)
- Business building toolkit/sprints (communications, regulatory, pitching, etc.)
- Collaborator requirements and community building programs
- Regular reviews with the VC and Customer Advisers
- Grid event attendance such as Lab-to-launch lounge (LLL), Lab-2-market (L2M) series

Towards the end of the fellowship, a selection of elements that come together in M12:

- Preparation for incorporation
- Funding terms sheet
- IP license agreement
- Customer acquisition strategy
- Supply chain strategy (as necessary)
- Launch team, hiring plan
- Physical launch plan (space, etc.)
- Product roadmap

As described, each fellowship project will identify at least two external advisers: customer and investor. The purpose of the advisers is to ensure regular exchange with a friendly customer and an investor so that the first product concept suits specific market needs and the concept will be sufficiently de-risked for funding by M12. There will be some classes and many events to attend, but the focus of all efforts is startup formation. Some days a fellow might spend in the lab diving deeper into results or further developing the concept. On others, fellows might develop consumer personas, assess markets and their scale, or meet with mentors or customers to assess market fit. On still other days, fellows might seek potential co-founders and advisers or meet with founder agreement, terms sheet, or licensing counsel.

At the conclusion of M12, the items listed above are +/- executed, and the fusion of all of these elements creates enormous energy from creating and igniting a new entity.

Eligibility and Qualifications

Eligibility

- Final-year Harvard SEAS PhD students or current Harvard SEAS postdocs working with a SEAS ladder faculty adviser are eligible to apply. For the fellowship, the Grid Fellow must work under the supervision of a SEAS ladder faculty member as their primary adviser, and the fellowship will be administered as a SEAS appointment. Fellows cannot hold another fellowship or work on another research project concurrently with the Grid fellowship.
- Project and individual is supported by a Harvard SEAS ladder faculty member (i.e., Assistant, Associate, or Full Professor), who will serve as the fellow’s formal Harvard adviser for the fellowship.
- No entity or startup company based on the proposed fellowship project has yet been formed/incorporated.

Additional Qualifications

- Translating applicant's own research or deep knowledge (such as related research or other mastery) of the technology to be translated; in all cases, translating Harvard intellectual property from a physical science or engineering lab.
- Compelling business case is articulated and research is realistically 'de-riskable' in one year (with the support of the ladder faculty member).
- Able to conduct and locate all materials, development/work, IP, and physical nexus in Harvard labs or facilities and accrue IP consistent with Harvard IP policy, including the absence of any commitments to external entities. While a startup may eventually be launched, the Grid Fellowship is a Harvard program and all work done is Harvard work only (i.e., subject to Harvard IP policies, Harvard research policies, etc.) and not the work of, or a collaboration with, any startup company.
- Demonstrates passion, integrity, ownership, teamwork, sharp communication skills, and sincerity in the intent to translate research from Harvard labs out to markets.

Special Instructions

Application

- CV, including expected PhD graduation date for current students or postdoc appointment end date for current postdocs
- Supporting letter from a Harvard SEAS ladder faculty member, including support for use of space and resources in the lab if applicable and commitment to support the Fellow's venture building over 12 months
- 1-2 additional reference(s) from someone who can speak to applicants demonstrated translation interests or experience
- Project statement (maximum 4 pages), which should include the following components:
 - Abstract, including a project idea (if a platform, a first product/application)
 - Status of research-to-date including where conducted, Harvard IP disposition/plan
 - Self-sustaining model
 - Key de-risking milestones ('De-risking' suggests sufficient reduction of technical risk to entice external, commercialization-focused funding or non-research focused funding; venture capital, for example) and launch as a start-up.
 - Comparative advantage to current practice
 - Proposed research plan and timeline
 - Future trajectory of work beyond the fellowship
 - Space within Harvard SEAS lab where work would be done. This should be pre-arranged prior to application.
 - Proposed budget for resources

Only non-confidential information should be included.

A comprehensive business case supporting the application is not expected though all elements above should be included in the application.

Key Evaluation Criteria

- Problem, product, market definition
 - Problem(s) solved, including size/scale of potential commercial impact
 - Product or concept details, including why customers will demand such product(s)
- Differentiated solution
 - Likelihood of generating high-value intellectual property assets
 - Novelty in technology or solution, including intellectual property (filed or contemplated) and comparative strengths/competitive understanding
- Applicant wherewithal
 - "Why you?" assessment of fit between applicant(s) and idea
 - Commitment/support from SEAS ladder faculty member and lab
 - Demonstrated entrepreneurial attributes, including resourcefulness, accuracy, attention to detail, consistency, and ability to effectively manage multiple concurrent workstreams

- Intent to join the start-up full-time post-fellowship
- Plausible approach/plan
 - Early synthesis of a year-long project plan, highlighting key success factors (“what needs to go right?”)
 - Appropriateness of the research objectives and proposed technical milestones
- Overall quality and persuasiveness of application and interview

SEAS is dedicated to building a diverse and welcoming community, and we strongly encourage applications from historically underrepresented groups.

Important Dates

15 Feb 2024 - Application opens, apply via AeRies: <https://academicpositions.harvard.edu/postings/13377>

15 Mar 2024, 11:59p US Eastern time - 2024-2025 Application window closes

16 Mar - 31 Mar 2024 - Application review period

1 Apr - 12 Apr - Interviews for select group of candidates

End of Apr 2024 - Fellowships awarded and applicants notified

Application Portal

Apply at the link below:

<https://academicpositions.harvard.edu/postings/13377>

Questions

Questions on the application and fellowship can be directed to paul_hayre@harvard.edu.

Selection Committee

The selection committee consists of University faculty, staff, and/or external early stage tech investors, plus any others as appropriate. Committee members treat each application confidentially, but no confidential information should be disclosed in applications.

Terms & Considerations

Timing

The Fellowship runs 12 months, commencing 1 September 2024 and ending on 31 August 2025. Other start dates will be considered on a case-by-case basis.

In what is intended to be rare circumstances, with corroboration from key advisers and at the discretion of the Grid Fellowship board, a fellowship can be extended for up to three months, including with a pro-rata stipend. Such requests should be submitted before the start of M10.

Cohort Size

Annually, the Grid Fellowship Cohort will range from a few fellows to as large as 10+ depending on the status and stage of research throughout the engineering and physical sciences community and available program funding.

Stipend

The Fellowship includes a stipend of US \$85,000 for 12 months per fellow. Benefits, including health care, will be provided at the same level as a Harvard SEAS postdoctoral fellow. The fellow should work on the fellowship with full effort; no teaching and other research projects are permitted while a fellow, and the faculty adviser of a fellow must free them from other concerns in the lab during the course of this fellowship so that they may focus on the fellowship project. Other members of the fellowship-focused project team may bring additional resources to bear as long as no conflicts or intellectual property rights conflicts/division are introduced (except as noted in the IP section).

Development Fund

Each Fellowship project (the idea or concept promulgated by a Fellowship recipient) can access up to US \$25,000 for operating expenses, subject to pre-approval. Example uses are regulatory assistance, prototyping/product development, lab consumables, materials/supplies, research core service fees, facilities access, cloud services, software licenses, third-party software consultants, website services, industry (not scientific) conferences, customer visits, etc. In all instances, Harvard University policies and procedures prevail. Some noted exclusions for acceptable expenses: patent filings/propagation; incorporation/legal; capital equipment; consulting fees paid to Harvard faculty, Adviser lab researchers, or any staff; anything not directly related to the Fellowship project. Any funds unspent at the end of a Fellowship remain with the Grid.

Intellectual Property

Consistent with University policy, all intellectual property (IP) developed, whether disclosed or not, while a Grid Fellow, is owned by Harvard University, typically via a Participation Agreement. One of the expected elements at the end of the Grid Fellowship is IP that accompanies the fellow and respective start-up via a license negotiated with the Harvard Office of Technology Development (OTD). As inventions are developed, the Report-Of-Invention mechanism and other consultative outreach to OTD is expected to occur throughout the Fellowship. If external collaborators might have joint or related IP claims, OTD should be consulted prior to engaging in such external work/collaboration. In keeping with Harvard University's Intellectual Property policies and other research policies, fellows are required to sign the [Harvard University Participation Agreement](#) by the start of their appointment, if they have not signed it already.

If the project enjoins outside, i.e. *ex-Harvard*, collaboration, such as with another academic institution or researcher, the fellow will coordinate with OTD at the onset of the fellowship to plan an appropriate IP strategy.

Asset Ownership

Any software, tools, prototypes, or other assets or materials/supplies purchased using Development Fund monies remain property of the Harvard Grid post-Fellowship.