Pre-Proposal Application 2024

Informational

The Health Tech Accelerator is a year-long, cohort-based program that is intended to provide support through advising and funding aimed at accelerating the development of innovative health technologies. Support may include technical de-risking (e.g., prototype development, proof of concept, etc.) and/or commercial de-risking (e.g., setting development milestones, clinical strategy, regulatory strategy, reimbursement strategy, etc.) with the goal of attracting further financial support and eventual commercialization and impact.

SCOPE

Submissions across ALL unmet clinical need areas within medical devices and health technologies are encouraged to apply.

Proposals must be translational in nature, i.e., focused on efforts to translate research results and/or novel ideas into innovative medical devices and health technologies that have potential for commercialization and societal benefit. Projects that propose to undertake early-stage discovery research will not be considered and may be more suitable for our other funding mechanisms (including our sponsored opportunities such as the NEMO prize and the IDEA prize).

All unmet clinical needs are encouraged to apply, but some areas of special interest are:

1. Connected Health: sensors, AI/ML, software as a medical device
2. Pediatric Devices: diagnose or treat disease and conditions from birth to age 21
3. Surgery: instruments for cardiovascular, neuro, orthopedic, and other procedures

ELIGIBILITY

Applicants must be Penn or CHOP faculty or staff.

Additional individuals may be added as collaborators for the applications. There is no eligibility requirement for collaborators. They are permitted to view, edit, and submit the application.

WHAT IS INCLUDED IN THE AWARD?

- Funding in the range of $5,000 to $75,000, customized to project needs, with potential for additional funding based on project progression
- Hands-on advising to support development
- Access to industry experts and complementary programs to assist with engineering and design, manufacturing, regulatory guidance, and reimbursement assessment
- Participation in optional HTA Boot Camp

HTA BOOT CAMP

Penn Health-Tech (PHT) hosts a strategic innovation education program (known as the HTA "Boot Camp"), teaching the basics of commercialization of technologies developed in academic settings, with application to your specific project. The goal of the Boot Camp is to support the development of a high-quality translational proposal and pitch for funding consideration by PHT and other future partners.

Expectations: Enrollment in the Boot Camp is optional for teams that are invited to submit a full proposal to PHT. However, if teams decide to enroll in the Boot Camp, participation is mandatory, including committing to sending a team representative to each session.

Student Involvement: This program is also part of a for-credit course for graduate students that is offered in partnership with PHT. PHT teams MAY be assigned a team of students (unless equivalent support is already available) to support your project. Inclusion of students on your project team is not guaranteed. The first in-person session on 1/22 will include an introduction of your project – students will subsequently be matched with specific project teams by 1/29. Depending on the number of project teams and the number of students participating, it is possible that teams may not be assigned a student.

Time and Location

• A Pre-Course Orientation will occur on Wednesday, January 15th, 4-5 PM, via ZOOM.
• The Boot Camp will run for 10 sessions on Wednesdays, 3:30-6:30 PM, starting January 22nd.
    • Sessions are held in-person on the Penn Medicine campus.

APPLICATION PROCESS

The application process is multi-stage, starting with submission of a pre-proposal. A subset of project teams is then selected as semifinalists and are invited to participate in the Innovation & Commercialization workshop series, which consists of interactive sessions that help each team prepare a competitive full proposal and pitch deck. Teams then submit these full proposals and "pitch" their projects for funding consideration to our panel of experts.

Date	Important Date
September 18, 2024	Pre-Proposal Application Launch
October 16, 2024	Virtual Information Session
November 6, 2024	Pre-Proposals Application Deadline
November – December 2024	Applicant Interviews
December 2024	HTA Semi-Finalist Cohort Announced
January - April 2025	HTA Boot Camp
February 2025	Full Proposal Application Launch
April 2025	Full Proposal Submission Deadline[2]
May 2025	Call for Proposals Finalist Pitch[2]
July 2025	HTA Program Kick-off for 2024 Cohort[2]

[2] Dates in 2025 to be communicated in Semifinalist announcement

REVIEW PROCESS

HTA proposals are evaluated on the basis of the team's expertise and commitment and the project's (1) potential for impact, (2) potential for commercialization, (3) technical feasibility, and (4) the potential of obtaining further financial investment to bring the proposed solution to the bedside.

Pre-Proposals and Full Proposals will be reviewed by a panel of judges composed of clinicians, investors, entrepreneurs, and experts in industrial R&D, intellectual property and technology transfer.

Semifinalist notifications will be made within six weeks of the application submission deadline. HTA award notifications will be made by June 2025. Awarded funds are contingent on your acceptance of the terms and conditions of the award.

EXPECTATIONS OF AWARDEES

Penn Health Tech employs a hands-on, active project management style. Funding and advancement are tied to achievement of specific technical and business milestones. Teams should be willing and able to devote the necessary time and resources to their project and be open to receiving mentorship and advice related to the development of their idea towards commercialization.

BUDGET AND USE OF FUNDS

The Health Tech Accelerator (HTA) employs a "stage-gate model" of project management. Accordingly, funding is **NOT** guaranteed (unlike federal grants). Instead, funding is issued in tranches, with issuance at each tranche subject to achievement of agreed upon milestones.

Penn Health-Tech issues awards through internal funding through the University of Pennsylvania or by providing direct payments for expenses and services. Penn Health-Tech does not issue funding to Penn start-ups. Formal contracts with the University must be in place with approved vendors in order to issue a direct payment to that vendor.

Funds may be used for salary and fringe benefits for project personnel (other than PI or Co-PIs), materials and supplies, consumable equipment (e.g., components for systems), and costs for human studies (e.g., IRB fees, patient recruitment fees, etc.). Past funding has also been used for consultation around regulatory, reimbursement, market, and other areas necessary for commercialization. Funds may NOT be used for salary or fringe for PIs or Co-PIs, tuition, space and renovation, legal or intellectual property fees, or indirect costs.

Pre-Proposal Form

*The pre-proposal includes all the sections described. To download a preview of the proposal questions, **click here.***

🔲 Section 0: Team Information

NOTE: Applicants must provide the contact information of one team member at minimum to serve as the point of contact for the project. Up to 3 entries are provided. Designated personnel will receive follow up emails and updates pertaining to the application process.

🔲 Team Member #1

🔷 Name of Faculty PI/ Project Leader and Project Role:

Ex. Brian Litt, MD, Faculty PI
Note: This person will serve as the main point of contact for the project.

_____

🔷 Email Address:

_____

🔲 What is your primary affiliation?

• University of Pennsylvania
• Children's Hospital of Pennsylvania

🔲 Select your school or organization:

• Perelman School of Medicine/ Penn Medicine
• School of Engineering and Applied Science
• School of Arts & Sciences
• School of Nursing
• School of Veterinary Medicine
• School of Dental Medicine
• The Wharton School
• Stuart Weitzman School of Design
• Annenberg School for Communication
• Graduate School of Education
• School of Social Policy & Practice

🔲 Select your department or division:

• Anesthesiology and Critical Care
• Dermatology
• Emergency Medicine
• Family Medicine and Community Health
• Medicine
• Neurology
• Neurosurgery
• Obstetrics and Gynecology
• Ophthalmology
• Oral and Maxillofacial Surgery
• Orthopaedic Surgery
• Otorhinolaryngology
• Pathology and Laboratory Medicine
• Pediatrics
• Physical Medicine and Rehabilitation

- Podiatry and Podiatric Surgery
- Psychiatry
- Radiation Oncology
- Radiology
- Surgery

Select your division within the Department of Medicine:

- Cardiovascular Medicine
- Endocrinology Diabetes and Metabolism
- Gastroenterology
- General Internal Medicine
- Geriatrics
- Hematology and Oncology
- Hospital Medicine
- Infectious Diseases
- Palliative Care
- Pulmonary, Allergy and Critical Care
- Renal Electrolyte and Hypertension
- Rheumatology
- Sleep Medicine
- Translational Medicine and Human Genetics

Select your division within the Department of Surgery:

- Breast Surgery
- Cardiovascular Surgery
- Colon and Rectal Surgery
- Endocrine and Oncologic Surgery
- Gastrointestinal Surgery
- Pediatric Surgery
- Plastic Surgery
- Thoracic Surgery
- Transplant Surgery
- Traumatology, Surgical Critical Care and Emergency Surgery
- Urology
- Vascular Surgery and Endovascular Therapy

Select your SEAS department:

- Bioengineering (BE)
- Chemical and Biomolecular Engineering (CBE)
- Computer and Information Science (CIS)
- Electrical and Systems Engineering (ESE)
- Materials Science and Engineering (MSE)
- Mechanical Engineering and Applied Mechanics (MEAM)

Select your CHOP department:

- Anesthesiology and Critical Care Medicine
- Biomedical and Health Informatics
- Pathology
- Pediatrics
- Psychiatry
- Radiology
- Surgery

⊟ Which best describes your position?

• Faculty
• Staff
• Post-doc
• Resident
• Other

⊟ Would you like to add an additional team member?

○ Yes
○ No

▭ Team Member #2

🔠 Name of Team Member and Project Role:
Note: This person will be contacted concerning the application status and the project.

_____

🔠 Email Address:

_____

⊟ What is your primary affiliation?

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• Children's Hospital of Pennsylvania

⊟ Select your school or organization:

• Perelman School of Medicine/ Penn Medicine
• School of Engineering and Applied Science
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• School of Nursing
• School of Veterinary Medicine
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• Family Medicine and Community Health
• Medicine
• Neurology
• Neurosurgery
• Obstetrics and Gynecology

- Ophthalmology
- Oral and Maxillofacial Surgery
- Orthopaedic Surgery
- Otorhinolaryngology
- Pathology and Laboratory Medicine
- Pediatrics
- Physical Medicine and Rehabilitation
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- Psychiatry
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- Gastroenterology
- General Internal Medicine
- Geriatrics
- Hematology and Oncology
- Hospital Medicine
- Infectious Diseases
- Palliative Care
- Pulmonary, Allergy and Critical Care
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- Cardiovascular Surgery
- Colon and Rectal Surgery
- Endocrine and Oncologic Surgery
- Gastrointestinal Surgery
- Pediatric Surgery
- Plastic Surgery
- Thoracic Surgery
- Transplant Surgery
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⊞ Which best describes your position?

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• Staff
• Post-doc
• Resident
• Other

⊞ Would you like to add an additional team member?

○ Yes
○ No

▭ Team Member #3

⊿ Name of Team Member and Project Role:
Note: This person will be contacted concerning the application status and the project.

_____

⊿ Email Address:

_____

⊞ What is your primary affiliation?

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• Children's Hospital of Pennsylvania

⊞ Select your school or organization:

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- Plastic Surgery
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- Computer and Information Science (CIS)
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📋 Select your CHOP department:

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- Pathology
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📋 Which best describes your position?

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📄 Section 1: Non-confidential Title and Abstract

🔤 Provide a non-confidential title intended for a lay audience to succinctly convey: a) what the envisioned product is, b) what it does, and c) what problem it solves.
No more than 10 words.

Example 1: Smartphone app to reduce readmissions of acute myocardial infarction patients. **Example 2:** Home-based test to predict and monitor risk of preterm birth.

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🔤 Provide a non-confidential abstract.
No more than 100 words.

The abstract should succinctly describe the unmet need you are addressing, the envisioned product and enabling technology, key features and advantages of the envisioned product over the gold standard/state of the art, and what key milestone (s) you hope to achieve with the HTA Program funding.

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📄 Section 2: Unmet Need

🔤 Briefly describe the unmet need you are solving **AND** the current standard of care **in no more than 250 words**.
No more than 250 words.

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⊞ Section 3: Proposed Solution & Stage of Development

🔠 What is the proposed solution and how is it an improvement compared to the standard of care? What has been accomplished to date to demonstrate feasibility?
No more than 500 words

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_____

⊞ Section 4: Intellectual Property

🔢 What steps have you taken to ensure your idea is protected?

Please note: To be eligible for participation in the HTA program, you must submit an invention disclosure to the technology transfer office (Penn Center for Innovation or CHOP Office of Technology Transfer) before application deadline.
• None
• Disclosure submitted
• Provisional patent filed
• Non-provisional patent filed
• Patent granted

🔢 Which is your office of technology transfer?

• Penn Center for Innovation (PCI)
• CHOP Office of Technology Transfer (OTT)
• Other

🔠 Who is your technology licensing officer (from PCI or OTT)?
Put N/A if unknown.

_____

⊞ Section 5: Key Milestones, Path to Market, and Budget

🔠 What key milestones (over a 12-month period) do you hope to achieve with this HTA Program funding and advisory support?

_____
_____
_____

🔢 Please complete and submit the budget template provided.

NOTE: The budget you submit as part of this pre-proposal application will serve as an initial outline of your proposed milestones and an estimate of your funding needs. We expect that the scope and details will evolve as you refine your approach and develop your full proposal.

Template can be downloaded here: **Click here**

Accepted formats: .xlsx, .pdf, .xls.

⊞ Section 6: HTA Boot Camp Participation

🔲 Semifinalists will be invited to participate in a strategic development and innovation education program, known as the HTA "Boot Camp", teaching the basics of commercialization of technologies developed in an academic setting. The goal of the Boot Camp is to support the development of a high-quality translational proposal and pitch for funding consideration by PHT. The Boot Camp takes place in-person on Wednesday afternoons starting in mid-January and running for 10 sessions. More information, including time commitment required for teams, can be found **here**.

▤ Would you like to participate in the optional HTA Boot Camp?

○ Yes

○ No - We have already validated the problem/solution fit and product/market fit for our technology and have developed a commercialization plan (if selected, submit pitch deck, business plan, or equivalent documentation to htec@pennmedicine.upenn.edu)

○ No - I have another reason (please provide context below)

▤ Are you interested in working with a team of graduate students to support your project in the HTA Boot Camp?

○ Yes

○ Maybe/No, I need more information and/or have another reason (please provide context below)

○ No, I already have a team of graduate students (or other trainees) who will participate in the Boot Camp (list names and emails of graduate students in section below)

▰ Please share any questions or additional comments you have for PHT regarding the HTA Boot Camp.

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