

IMPACT BOOKLET | The Journey | Since 2021

*A grant making private foundation under Internal Revenue Code (IRC) Section 501(c)(3) with headquarters at Tampa, Florida, USA.*

# Where Science Meets Purpose.

Co-founded by Dheeraj and Swapna Pandey



Five years of advancing human life through the convergence of computation, biology, and the unwavering conviction that the best science belongs to everyone.

# O'DONNELL FOR APPLIED COM ENGINEERING A



The University of Texas at Austin  
Oden Institute for Com  
Engineering and Scien

201 E. 24th Street



# BUILDING COMPUTATIONAL AND SCIENCES

Computational  
sciences



# Who We Are

*A grant-making foundation at the crossroads of computation and the life sciences.*

Param Hansa Philanthropies (PHP) is a US-registered 501(c)(3) grant-making foundation co-founded by Dheeraj and Swapna Pandey. PHP does not simply fund science. It builds the conditions in which transformative science can happen, through strategic partnerships, long-term commitment, and the belief that the right investment, made at the right moment, can unlock progress that would otherwise take a decade longer.

Param Hansa Philanthropies Foundation in India is a non-profit company [ Pursuant to sub-section (2) of section 7 and sub-section (1) of section 8 of the Companies Act, 2013 (18 of 2013) and rule 18 of the Companies Incorporation) Rules, 2014 by Government of India].



## Mission

Our mission is to collaborate and support research at the intersection of computing and life sciences besides the ideas that harness the power of natural sciences to create better versions of our society.



## Vision

Our vision is to enhance the quality of human life through the power of science, complemented by innovations in technology.

## The Problem PHP Was Built to Solve

Cancer accounts for one in six deaths worldwide. But most fatalities do not come from the initial diagnosis. They come from metastasis, therapy resistance, and relapse. These are not simply medical failures. They are failures of prediction, of modeling, of our ability to understand biological systems of extraordinary complexity. They are, at their core, computational problems.

PHP is driven by a clear commitment: the future belongs to disciplines that converge, not compete. Quantum, biology, AI, and computing must work as one to unlock new learning. This is not giving, it is investing in what will define tomorrow.



Param Hansa Philanthropies harnesses the power of computation and biology to solve the world's hardest health problems—enabling people with bold ideas to create impact that reaches far beyond the lab.



# Five Years. One Journey.

*From a founding commitment to a global ecosystem of science, education, and health.*

PHP's story from 2021 to 2025 is not one of linear growth. It is one of compounding conviction. Each investment opened the door to the next. Each partnership revealed possibilities that did not exist before it was formed.

## Foundation and First Commitment

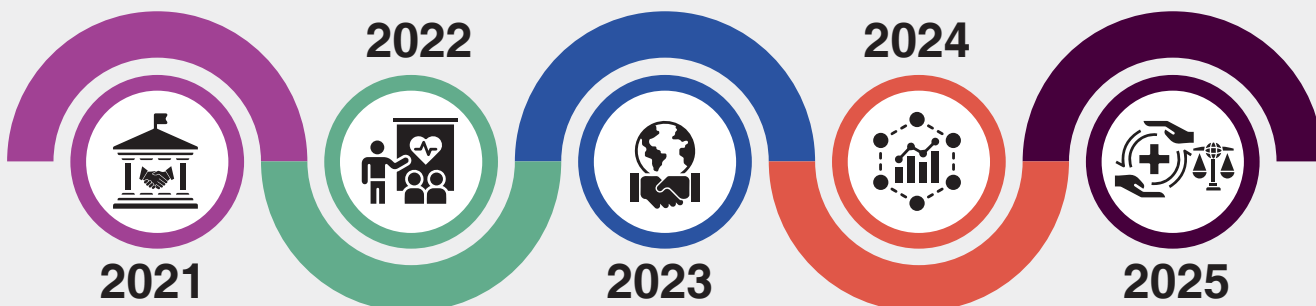
PHP is co-founded as a 501(c)(3) by Dheeraj and Swapna Pandey. Its inaugural commitment: \$10 million to the University of Texas at Austin, bringing together the Dell Medical School, the Oden Institute, and Computer Science in the Joint Computational Oncology Collaboration (JCOC), an architecture that did not previously exist.

## Going Global: India and Stanford

PHP establishes the Param Hansa Centre for Computational Oncology (PHCCO) at IISc Bengaluru with a \$1M commitment. Collaboration with Stanford's Bio-X deepens. A perspective article by PHP-supported researchers enters review at Cell.

## Clinical Milestones and Global Scale

PHP initiates the \$1.5M MITI first-in-human clinical trial at Stanford in October, the first time PHP-supported research reaches a patient. By November, 10+ active global partnerships are established. The network built over five years is producing clinical outcomes.



## Expanding to Education and Health

PHP broadens its portfolio. The Foundation for Excellence (FFE) partnership launches, supporting 32 scholars, 72% from rural backgrounds, with \$101k disbursed. Simultaneously, PHP partners with Heart to Heart Foundation, funding 30 pediatric heart surgeries and supporting 5 rural medical students.

## Infrastructure and Network Growth

A workshop at IIT Patna, combined with the new OSAAT partnership in Bihar, expands the PHCCO network to 2,300+ scientists. The JCOC launches a Center for Computational Medicine at UT Austin. OSAAT's smart classrooms reach 700+ students and teachers.

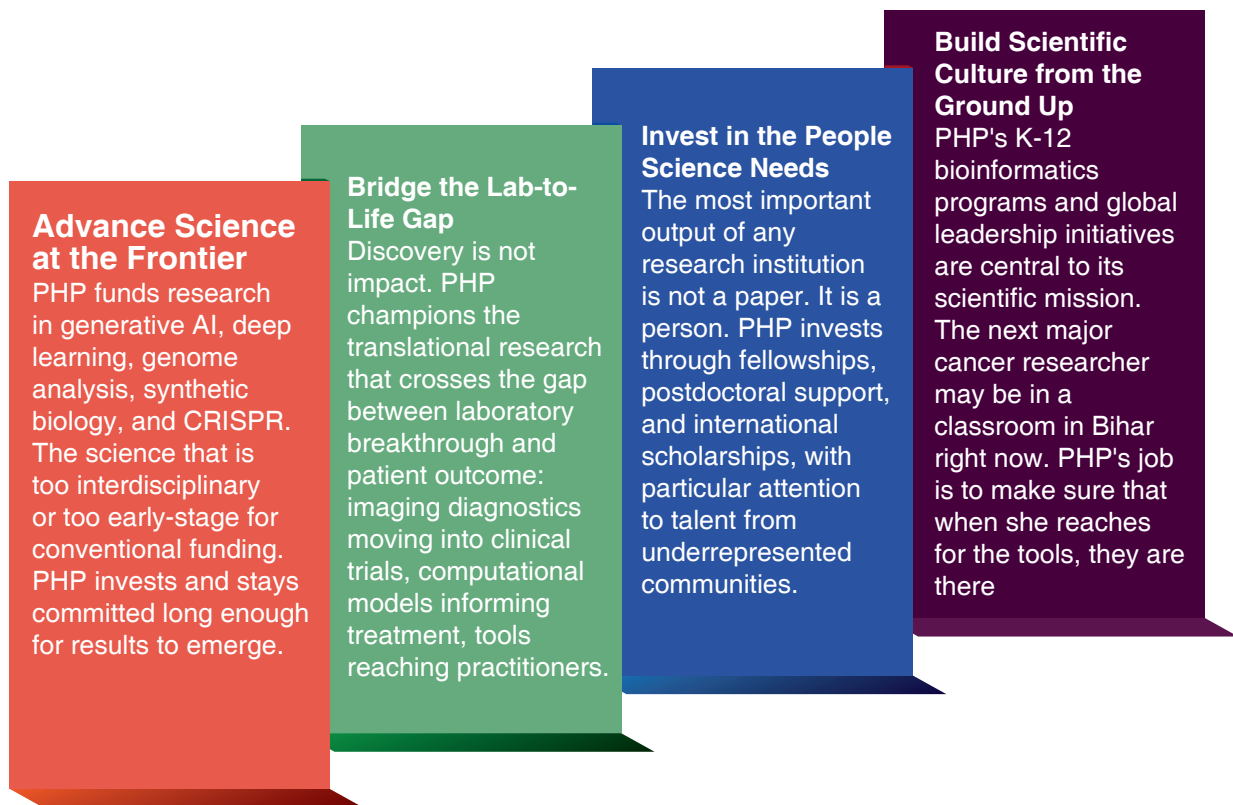
## The arc of these five years tells one clear story

PHP began by funding the science. Then it invested in the people. Then it built the institutions. And by 2025, those institutions were producing clinical results. This is what a compounding philanthropic strategy looks like when it works.

# Four Pillars, One Purpose

*Every grant, every partnership, every initiative connects back to the same four principles.*

PHP's model is deliberately designed to close the gap between scientific discovery and human impact, not through any single investment, but through the cumulative force of four pillars working in concert.



## The Technology PHP Champions

The Computational Engine	Biological Frontiers
<p><b>Generative AI and Deep Learning</b>                      Predictive modeling for synthetic cell biology and protein structure, applied to cancer research at Stanford Bio-X.</p> <p><b>AI-Powered Lab Assistants</b>                      Utilizing AI for predictive experiment design and automation of complex laboratory sequences.</p> <p><b>GPU-Accelerated Data Processing</b>                      Leveraging NVIDIA Parabricks for large-scale, high-speed genome analysis.</p>	<p><b>Synthetic Biology and Biological Computing</b>                      Engineering complex biological systems for therapeutic and computational purposes.</p> <p><b>Precision Gene Editing (CRISPR)</b>                      Advancing functional genomics to create targeted gene therapies for patients.</p> <p><b>Microbiome and Neurodegeneration Research</b>                      Harnessing patient-derived models to uncover new therapeutic candidates.</p>

## Institutional Collaborations

Technology Area	Partner Institution
Generative AI	Stanford Bio-X
Deep Learning in Medicine	UT Austin Dell Medical School
Bioinformatics Education	The Harker School, San Jose



# Impact in Numbers

*Every figure below is a decision made before the outcome was certain.*

PHP invests at the frontier, where the research is early, the partnerships are new, and results are never guaranteed. These numbers are the outcome of staying committed long enough for compounding returns to develop.



## Partnerships and What They Built

PHP does not write cheques and wait. It builds partnerships, choosing institutions with care and staying involved long enough to see what a well-directed collaboration can produce. Below is a snapshot of the portfolio that has taken shape.

# Life Sciences

*From a founding commitment to a global ecosystem of science, education, and health.*

PHP's story from 2021 to 2025 is not one of linear growth. It is one of compounding conviction. Each investment opened the door to the next. Each partnership revealed possibilities that did not exist before it was formed.

 <p>The University of Texas at Austin Dell Medical School</p>	<p><b>University of Texas, Austin</b> <i>Dell Medical School and Oden Institute</i></p> <ul style="list-style-type: none"> <li>• \$10M commitment: JCOC united three UT Austin disciplines for the first time</li> <li>• Machine Learning lab established; first patent on imaging-based tumor tracking published</li> <li>• First postdoctoral fellow appointed; Center for Computational Medicine launched by 2024</li> <li>• External grants began following PHP's lead, validating the collaboration</li> </ul>
 <p>STANFORD BIO-X</p>	<p><b>Stanford University, Bio-X</b> <i>Stanford, California</i></p> <ul style="list-style-type: none"> <li>• Generative AI applied to synthetic cell biology, frontier research with profound implications</li> <li>• Perspective article by PHP-connected researchers under review at Cell</li> <li>• \$1.5M MITI first-in-human trial initiated October 2025: PHP's research reaches a patient</li> <li>• \$0.5M for BPAN research and \$300k for spatial cell research</li> </ul>
 <p>INDIAN INSTITUTE OF SCIENCE भारतीय विज्ञान संस्थान</p>	<p><b>Indian Institute of Science, PHCCO</b> <i>Bengaluru, India</i></p> <ul style="list-style-type: none"> <li>• Established November 2023 with \$1M: predictive models of cancer progression and relapse</li> <li>• 18+ publications in leading journals; 2,500+ scientists networked globally</li> <li>• Designed as a training ground: every research project is also a mentorship opportunity</li> </ul>
 <p>भारतीय प्रौद्योगिकी संस्थान पटना INDIAN INSTITUTE OF TECHNOLOGY PATNA</p>	<p><b>IIT Patna</b> <i>Bihar, India</i></p> <ul style="list-style-type: none"> <li>• March 2024 workshop significantly expanded PHCCO's global scientific network</li> <li>• Catalyst for new inter-institutional collaborations across India and internationally</li> </ul>

## Education and Health Access

### The Harker School

*San Jose, California*

- Installed Illumina NextSeq 1000: the only 10,000-gene sequencer at any US high school
- Students conduct independent genomics research, presented at national competitions
- Teacher training in bioinformatics ensures the research culture sustains across years



### Foundation for Excellence (FFE)

*California*

- 32 scholars; \$101k disbursed; 72% from rural backgrounds
- Mentorship connections and career webinars delivered alongside financial support

### Heart to Heart Foundation

*California*

- 30 pediatric heart surgeries funded; 5 rural medical students supported



### OSAAT (One School at a Time)

*Bihar, India*

- Smart classrooms and infrastructure upgrades; 700+ students and teachers reached

### Aspire Institute

*Cambridge, Massachusetts*

- AI-integrated global leadership program; 71,000+ alumni across 190+ countries





# Three Stories of Impact

Data points describe outcomes. These stories explain how those outcomes happened.

## UT Austin: The \$10M Bet That Built an Ecosystem

*What happens when a philanthropic commitment is structured not as a grant, but as a catalyst?*



The University of Texas at Austin  
Dell Medical School

When PHP committed \$10 million to UT Austin in 2021, the goal was not to fund existing research. It was to create conditions for research that could not yet exist, by connecting disciplines that had never been formally linked. The

JCOC brought together the Dell Medical School, the Oden Institute, and Computer Science under one collaboration.

Within two years: a machine learning lab was operational, the first patent on imaging-based tumor tracking was published, and PHP's first postdoctoral fellow was in the lab. By 2024, external funders had followed. The Center for Computational Medicine launched that year is the most visible outcome. UT Austin is now one of the country's leading centers for AI-driven cancer research. That positioning did not exist before PHP's commitment.

## The Harker School: Not a Machine. A Research Culture.

*What does it mean to change what a student believes she is capable of?*



HARKER.

Before PHP's partnership with The Harker School, no US high school had a 10,000-gene sequencer. Installing the Illumina NextSeq 1000 required a new HVAC system, specialized refrigeration, and custom electrical upgrades. PHP and Harker were not installing a demonstration model. They were building a working research laboratory.

What happened next is the story that matters. Students used the equipment. They chose their own projects, supervised by teachers trained in bioinformatics as part of the initiative. Projects were presented at the Harker Research Symposium and entered into national competitions. The teacher training program ensures this is not a one-generation investment. This is what it looks like to invest in culture, not in events.

*What does it take to build a world-class research center from a standing start?*



PHCCO was established at IISc Bengaluru in November 2023 with \$1 million. In under two years: 10+ publications in leading journals, international recognition at conferences, and a global network of 2,300+ scientists, built almost entirely through the quality of the science produced.

PHCCO was deliberately structured to train scientists, not just to employ them. Its research focus, predictive models of cancer progression, metastasis, and relapse, was chosen for its direct relevance to the cancer burden faced by Indian patients. PHP's investment here is a proof of concept the foundation intends to replicate across India.

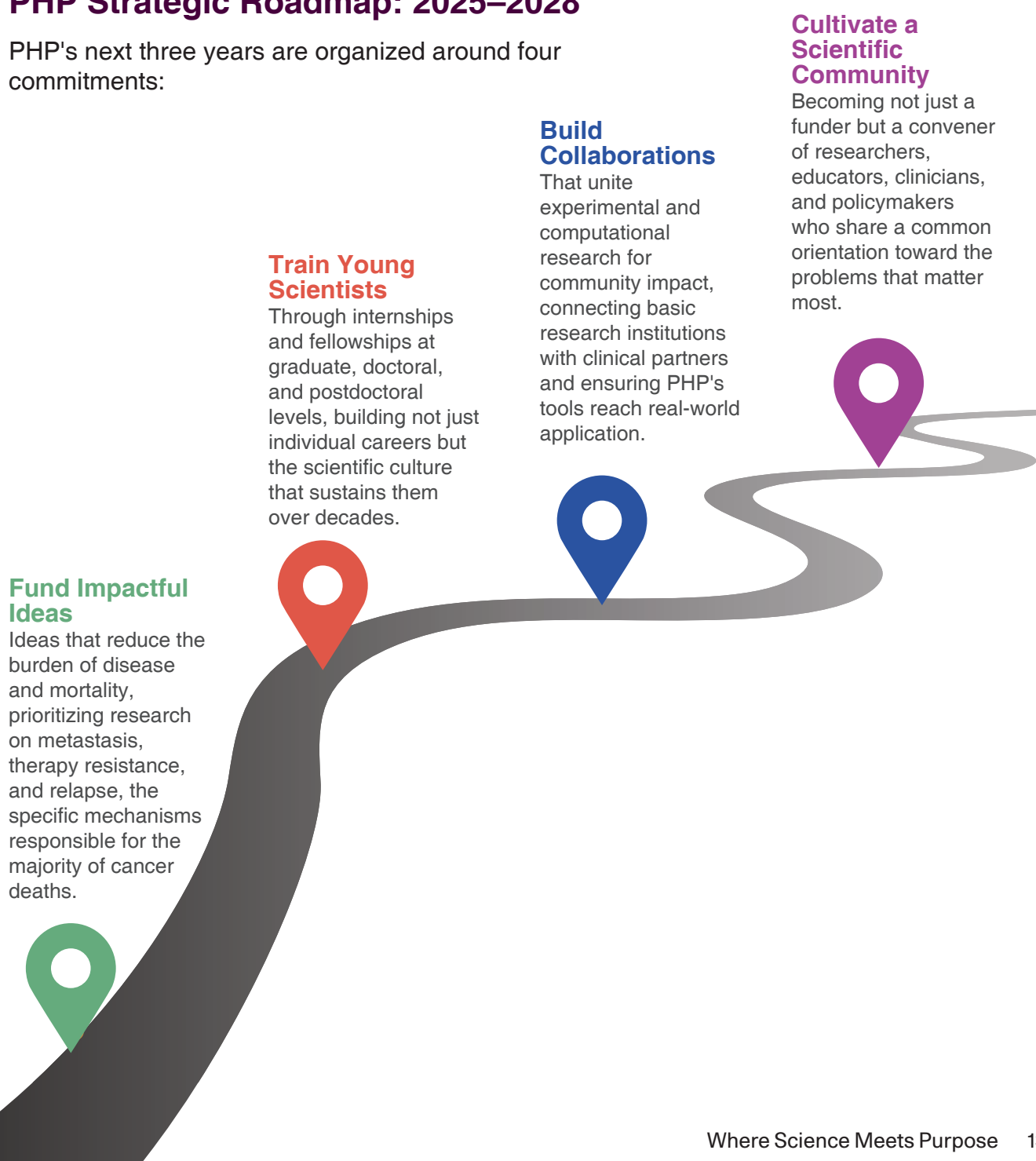
# The Road Ahead

*What PHP will do next, and why the next five years matter more than the first.*

Five years in, PHP stands at an inflection point. The early investments are compounding. The partnerships have reached scale. A philanthropic model that was once a bold experiment is now a demonstrated approach. The question is no longer whether it works. The question is: how far can it reach?

## PHP Strategic Roadmap: 2025–2028

PHP's next three years are organized around four commitments:



## Strategic Trajectory: Five Focus Areas

### FA 1 | CANCER AND LIFE SCIENCES

#### Modeling and Pipelines

Expand metastasis modeling; advance pipelines targeting microbiome therapies and neurodegeneration.

#### India-Based Expansion

Launch dedicated grants in India to support localized life science breakthroughs for Indian patients.

### FA 2 | TRANSLATIONAL RESEARCH

#### 5+ New Partnerships

Build at least five new strategic collaborations bridging laboratory research and real-world clinical application.

#### Institutional Strengthening

Focused support for Tier 2 and Tier 3 research institutions currently underserved by major philanthropy.

### FA 3 | EXPERIMENTAL-COMPUTATIONAL SYNERGY

#### Open-Source Toolkits

Launch accessible digital toolkits making PHP's computational biology tools available to researchers globally.

#### Virtual Cell Modeling

Advance virtual cell model development; foster AI-biology interdisciplinary fellowships.

### FA 4 | NEW FRONTIERS IN HEALTHCARE

#### 100+ Pediatric Surgeries

Fund and support over 100 essential surgeries for children who would not otherwise have access to care.

#### Rural Infrastructure

Invest in health infrastructure to serve marginalized rural populations in India.

### FA 5 | EDUCATION AND MENTORSHIP

#### 100+ Scholars Reached

Scale fellowships and internships to support a community of over 100 scholars across PHP's partner institutions.

#### School-Based Genomics

Expand the Harker School model to additional institutions across the US and India.



CLOSING

# Science as an Act of Purpose

There is a particular kind of patience that serious scientific philanthropy requires. Not the patience of waiting. The patience of building.

PHP has practiced that patience for five years. It has funded research that was too early for industry and too interdisciplinary for conventional academic funding. It has built institutions where they did not exist, invested in people far from the peak of their careers, and stayed in through the uncertainty inseparable from frontier science.

The \$1.5 million MITI first-in-human clinical trial, initiated at Stanford in October 2025, is the clearest possible statement of what this model produces when given time to work. Research that began as a computational idea, supported by philanthropic conviction, reaching a human patient.

The next five years will be defined by scale. New partnerships, new scholars, and new clinical trials that carry the science PHP has helped build into the lives of the patients it was always meant to serve.

The foundation has been laid. The work continues.

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PHP does not measure its success in cheques written. It measures it in partnerships built and nurtured, diseases better understood, classrooms transformed and communities served.





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United States of America and Bharat | The Journey | Since 2021