

HealthTech Blueprint for the Future

Coalition for Innovation, supported by LG NOVA

Jami Diaz, Director Ecosystem Community & Startup Experience William Barkis, Head of Grand Challenges & Ecosystem Development Sokwoo Rhee., Executive Vice President, LG Electronics, Head, LG NOVA

Blueprint Chairs

Alex Fang, CleanTech Chair Sarah Ennis, AI Chair Alfred Poor, HealthTech Chair

Authors

John Barton, Victor L. Brown, H. Timothy Hsiao, John Hsu, Sylwana Kaźmierska, Ricardo Machado, Ann M. Marcus, Nicholas Matias, Qiana Martin, Alfred Poor, Refael Shamir, Mark Wesson

The views and opinions expressed in the chapters and case studies that follow are those of the authors and do not necessarily reflect the views or positions of any entities they represent.

Senior Editor, Alfred Poor

October 2025



Preamble

The Coalition for Innovation is an initiative hosted by LG NOVA that creates the opportunity for innovators, entrepreneurs, and business leaders across sectors to come together to collaborate on important topics in technology to drive impact. The end goal: together we can leverage our collective knowledge to advance important work that drives positive impact in our communities and the world. The simple vision is that we can be stronger together and increase our individual and collective impact on the world through collaboration.

This "Blueprint for the Future" document (henceforth: "Blueprint") defines a vision for the future through which technology innovation can improve the lives of people, their communities, and the planet. The goal is to lay out a vision and potentially provide the framework to start taking action in the areas of interest for the members of the Coalition. The chapters in this Blueprint are intended to be a "Big Tent" in which many diverse perspectives and interests and different approaches to impact can come together. Hence, the structure of the Blueprint is intended to be as inclusive as possible in which different chapters of the Blueprint focus on different topic areas, written by different authors with individual perspectives that may be less widely supported by the group.

Participation in the Coalition at large and authorship of the overall Blueprint document does not imply endorsement of the ideas of any specific chapter but rather acknowledges a contribution to the discussion and general engagement in the Coalition process that led to the publication of this Blueprint.

All contributors will be listed as "Authors" of the Blueprint in alphabetical order. The Co-Chairs for each Coalition will be listed as "Editors" also in alphabetical order. Authorship will include each individual author's name along with optional title and optional organization at the author's discretion.

Each chapter will list only the subset of participants that meaningfully contributed to that chapter. Authorship for chapters will be in rank order based on contribution: the first author(s) will have contributed the most, second author(s) second most, and so on. Equal contributions at each level will be listed as "Co-Authors"; if two or more authors contributed the most and contributed equally, they will be noted with an asterisk as "Co-First Authors". If two authors contributed second-most and equally, they will be listed as "Co-Second Authors" and so on.

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The Coalition is intended to be a community-driven activity and where possible governance will be by majority vote of each domain group. Specifically, each Coalition will decide which topics are included as chapters by majority vote of the group. The approach is intended to be inclusive so we will ask that topics be included unless they are considered by the majority to be significantly out of scope.

We intend for the document to reach a broad, international audience, including:

- People involved in the three technology domains: CleanTech, AI, and HealthTech
- Researchers from academic and private institutions
- Investors
- Students
- Policy creators at the corporate level and all levels of government



Chapter 6: Introduction to HealthTech Funding

Authors: H. Timothy Hsiao, PhD, John Hsu, MD

Funding uncertainty coupled with the difficulties of reimbursement, insurance often determines success or failure for healthtech startups and the innovations they represent. A great idea that does not generate revenue is simply only a great idea. Many parts go into generating income including regulatory affairs, customer fit, manufacturing potential, IΡ protection, billing/collections, insurance regulations, medical device coding, provider acceptance, and workflow adoption. All of these factors play an essential role in future success.

For healthtech startups that engage in research, their early-stage funding sources typically rely on one or more of the following:

- Self/friends/family
- Crowdfunding
- Incubator/In-kind support (e.g., overhead/space benefits)
- Government (non-dilutive funding)
- Philanthropy (non-dilutive)
- Angel investors
- Venture capitals (VC)
- Mezzanine financing
- Private equity (PE)
- Corporate venture capitals
- Strategic alliances/partnerships and joint ventures
- Revenue-based financing
- Debt financing and loans

Among those potential sources, government funding has been historically considered one of the more desirable options because of its scale of budget, consistency, stability, and non-dilutive nature. As we observed the rise of uncertainty since the beginning of 2025, it is anticipated that the scale and processing time in government research funding in general will continue to be impacted

negatively in the near future. However, in light of the current administration's pro-business sentiment, as well as the broadly bi-partisan support of the small business innovation research/small business technology transfer (SBIR/STTR) programs – branded as "America's Seed Fund" – it is plausible that small businesses can still leverage the government non-dilutive funding as one of the pillars of their fund-raising strategies.

On the other hand, increasing voices are calling the industry and philanthropy to step-up and fill in gaps of America's innovation funding landscape. For example, the CEO of Recursion Pharmaceuticals recently stated in February 2025 that "Publicly funded research built the biopharma industry. Now it needs our help" and a Harvard/Boston University team opined in March 2025 that "Philanthropy can help create a healthier biotech ecosystem".

One of the megatrends also provides hints on how the innovation funding landscape might shift. Through the "Great Wealth Transfer", an estimated \$84 trillion in assets is expected to be transferred from the Baby Boomers to younger generations (Millennials and Gen charitable/philanthropic organizations over the next two decades. In addition to their roles in philanthropy, wealthy Americans are also the key driving forces behind the retirement funds, angel investment, private equity, private lending, and in some cases, crowdfunding. With this trend in mind, it is possible that the innovation funding in America might become more "democratized" and more driven by asset owners' personal situations, convictions, and motivations.

As the domestic funding for the American innovation ecosystem might experience at least a temporary set-back in the near term, the competitions for VC/PE deals are anticipated to intensify and startup valuation to drop. As a logical next step for lower valuation, healthtech startup



equities in America might become more affordable by international investors, so foreign direct investments (FDIs) could become another source of funding on the rise. FDIs can be especially relevant for healthtech start-ups due to healthtech's typically shorter time-to-market (when compared to pharmaceuticals), which is typically favored by international investors as it allows for more nimble reallocation of assets when markets fluctuate.



Author (In order of contribution)

H. Timothy Hsiao, PhD, Managing Director, PRIMIS Ventures

H. Timothy Hsiao is passionate about developing deep tech-solutions to address public health needs. His current focuses are radiological, quantum, and digital/AI technologies.

John Hsu MD, Founder, CEO of iPill inc, CEO Quivivepharma

Dr. John Hsu practiced 32 years in anesthesia, chronic pain, and addiction medicine. He holds 8 granted patents in medical devices and drug development and was awarded a \$1.9 NIDA/NIH grant. Dr. Hsu founded: iPill inc. a biometric secure pill dispenser to improve remote medication adherence; Quivivepharma a drug development company for an opioid-respiratory stimulant combination pill to make opioids safe and abuse deterrent; Fentavive a drug development company for a Narcan-respiratory stimulant combination injectable to address Narcan dosing ambiguity and is in the early stages of working with the DOD/DARPA; NAOMI systems, a practice management software company.





For more information about the Coalition for Innovation, including how you can get involved, please visit <u>coalitionforinnovation.com</u>.

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