KEY TAKEAWAYS

- This is a time of amazing scientific discoveries and breakthroughs.
- Traditional funding models are not sufficient for the current opportunity.
- Interest in impact investing is high, but health care impact investing lags behind.
- Innovative new funding models for drug development show tremendous promise.
- There are opportunities to build on and accelerate successful emerging funding models.
- Progress is a function of science, money, and leadership.
THE KRAFT PRECISION MEDICINE ACCELERATOR

aims to speed the development and delivery of therapies by improving the business processes that surround them. While oncology currently leads the way in precision medicine, therapies are also available and being developed to treat many other diseases.

The Kraft Accelerator’s work is centered on four workstreams: direct to patient, data and analytics, clinical trials, and investment/venture. For each workstream the philosophy is to engage the very best people, identify the best practices and ideas, and work collaboratively to accelerate development.

On February 28, 2019, the Kraft Accelerator convened a roundtable focused on accelerating precision medicine through investment. Participants included leading experts in impact investing and in developing and implementing new health care funding models. Participants represented both for-profit and nonprofit organizations and reflected a diversity of experiences, including experience focused narrowly on one disease and broad experience across multiple diseases and even across the entire health care system.

Some of the roundtable’s key themes are summarized below. A brief synopsis of each session follows.

**KEY THEMES**

- **This is a time of amazing scientific discoveries and breakthroughs.**
  As the cost of genomic sequencing has fallen dramatically and the “omics revolution” takes hold, deeper scientific understanding is occurring. This is leading to a higher success rate in drug development. The FDA is approving record numbers of new drugs and there is an explosion of immune therapy drugs. Going forward, scientific development will only accelerate.

- **Traditional funding models are not sufficient for the current opportunity.**
  While the traditional venture capital model has produced some drug discovery successes, it is not adequate to capitalize on the opportunities presented by precision medicine. This is largely because developing new therapies is incredibly expensive, costing hundreds of millions or even billions of dollars. The probability of success for any one drug candidate is low and development can take many years.

  To succeed in developing effective treatments and curing diseases requires an intense focus on a specific disease and requires scale, which provides the ability to take multiple “shots on goal” in developing treatments for a disease. However, because venture capital funds typically shy away from concentration risk, they lack the focus and scale that is necessary. Other models are necessary that leverage the expertise of venture capital while concentrating on specific diseases.
Interest in impact investing is high, but health care impact investing lags behind.

There is tremendous interest in and appetite for impact investing, especially among younger high net worth individuals. Increasingly, investors want to realize market rates of return while also making investments that have social impact.

Today the market for impact investment is $228 billion, yet only five percent of impact investments are currently going to health care. A primary reason for the lack of impact investing in health care has been a shortage of health care-focused impact investing products. Creating impact investment products focused on precision medicine opportunities has the potential to change this. Investors would be able to invest in opportunities with the potential for attractive returns and significant impact while developers of precision medicine treatments would have greater access to capital.

Innovative new funding models for drug development show tremendous promise.

In just the past few years several innovative investment models have emerged that have the potential to accelerate precision medicine. Examples include:

- A $476 million oncology fund has been created by multinational bank UBS to appeal to high net worth clients, who are investing $500,000 to $1 million dollars. VC firm MPM—which has expertise in oncology—is leveraging its domain expertise to invest these funds in private and public companies.

- The Dementia Discovery Fund, focused specifically on dementia and Alzheimer’s, has raised $350 million from seven leading pharma companies, the Gates Foundation, and AARP. A venture capital firm is managing and investing this fund. The involvement of so many organizations has created collaboration and camaraderie in a very challenging area. While a high failure rate is expected because this space is so difficult, thus far the success rate has exceeded expectations.

- The Juvenile Diabetes Research Foundation has engaged in venture philanthropy by launching the T1D Fund to catalyze investment in type 1 diabetes treatments. This fund has already raised $78 million, has invested in 12 companies, and is achieving its goal of catalyzing greater interest in this area from other investors and pharma companies.

- A former venture capitalist, Neil Kumar, has raised more than $500 million from investors such as KKR to invest in a portfolio of therapies for rare diseases.

- Deerfield management has a broadly focused $600 million health care innovation fund with a 15-year time horizon. This fund has at least 50 discovery projects at any time.

These examples illustrate success in raising significant funding from sophisticated investors for early-stage investments—largely targeted at specific diseases, including cancer, dementia, type 1 diabetes, and rare diseases. After these funds have been raised, investment decisions are being made by subject matter experts focused on specific areas. These funds are addressing the issues of focus and scale.
There are opportunities to build on and accelerate successful emerging funding models.

After being exposed to these emerging funding and investment models, roundtable participants identified opportunities to amplify them. Several of the ideas discussed are summarized on page 10. Three ideas garnering significant interest among participants for further follow-up were:

1. **Replication of the UBS/MPM model.** This model involves creation of a cancer-focused impact investing product. It provides UBS with an attractive impact investing product to offer to high net worth individuals and results in creation of a fund of almost $500 million focused on oncology, with investment decisions managed by a venture firm with oncology expertise. This model provides the scale ($500M) and the focus (oncology) necessary to succeed. Participants would like to see this model expanded so other banks and financial institutions offer disease-focused impact investing products to their clients.

2. **Expansion of successful venture philanthropy models.** The venture philanthropy successes of disease foundations like the Cystic Fibrosis Foundation and JDRF are models to learn from and emulate. These foundations raised significant funding and then put these funds to use in a very targeted way to stimulate investment in their disease. This use of venture philanthropy creates the scale and focus necessary to develop treatments and cures for diseases.

3. **A fund of funds.** Instead of all money going to one fund, focused on one disease, there can be multiple funds (perhaps five or 10) under one impact investing umbrella. Each individual fund would be laser focused on one particular disease, such as dementia or oncology. The umbrella fund of funds would bring scale in thinking about common topics such as data systems and getting data into machine learning. This idea provides both focus on individual diseases and scale in dealing with broad issues like data.

**Progress is a function of science, money, and leadership.**

The focus of this roundtable was on accelerating investment through new funding models, and multiple presenters and participants made clear that “money makes things happen.”

Yet, while money is essential, money alone will not accelerate precision medicine. What truly moves the needle is the combination of scientific discovery, lots of money, and focused, committed, visionary leadership. One participant summarized: it is about significant financial capital and outstanding human capital.

> “It’s the science, it’s the leadership, and it’s the money. If you can catalyze those three things, you can make a very large difference.”

Richard Hamermesh