

# VALUECHAIN

Insights from Technology Thought Leaders



## Interview with Terry McGuire

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**Terry McGuire**

Founding Partner of Polaris Partners

### What’s your backstory?

I’m from outside of Buffalo, New York, where my dad was a union machinist, a welder, and my mom owned a dance studio with her sister. In fact, my father’s brother married my mother’s sister, so sisters married brothers, and our families always lived next-door to each other. I have one brother and three cousins that are more like siblings to me, and we grew up in a working-class, suburban neighborhood. I had a wonderful childhood.

I attended public high school, played football, and was recruited by Hobart College to play as a lineman. As a five-nine, 180-pound lineman, I realized that football probably wasn’t my calling, and began to study physics and economics, which I had enjoyed in high school. I ended up winning a Watson Fellowship, which was established by the family of Tom Watson, the founder of IBM. It was a one-year grant for independent studies outside of the United States, and I studied storytelling in Ireland and learned Irish Gaelic.

### Did that experience influence your career path?

In fact, my time in Ireland provided an epiphany for why I ended up in venture capital. During the 1980s, the west coast of Ireland was a remote and somewhat isolated place, where the native people who left rarely came back. Gaelic is their native language, which is why I chose to live there. I realized that for this Irish culture to survive, some sort of revitalization was required. I then began to draw parallels with how businesses get started and succeed. I was intrigued by questions such as: How do you create enterprise? How do you create a livelihood? How do you achieve those goals in a culture that was in decline?

When I came back to America, I attended the Engineering School at Dartmouth, and from there, I was recruited to join a startup company founded by an MIT professor. It was a good company, but undercapitalized, and failed within its first three years. During that period, I was exposed to venture capitalists, and it was the first time I understood that you can sponsor many companies through venture capital.

That’s what prompted me to attend business school, and from the very first day there, I had decided I wanted to be a venture capitalist. It was a time when venture capital was still a very small community. From Harvard, I was lucky to be recruited to work at American Research Development, a legendary firm that had founded Digital Equipment Corp, and even today is considered one of the model examples of venture capital. During my tenure there, I had the great fortune of getting to know the principals at GTCR, who recruited me to join them in Chicago. That’s the long and winding road that led me to a career in the venture capital business.

### What do you look for in a prospective investment?

By definition, venture capital lives on a frontier. There wouldn’t be opportunity unless we were on a frontier, so the characteristics are different across the board, and there’s no simple formula for what makes a good investment. My partner, Jon Flint, has a line which I love, which is, “In order to appreciate great art, you’ve got to

see good art, mediocre art, and terrible art. Then if you see enough of it, you begin to appreciate what fine art really is." Venture investing is not based on a system, not simply on being very analytical. It's based largely on intuition.

My mentor, Stan Golder at GTCR, would say, "Use four parts of your body when you make an investment. Use your head, use your heart, use your gut, and use the seat of your pants. Three of those things have nothing to do with analytics. It's all about instinct."

There are founders who are charismatic, who can gather the resources, convince the market, recruit the talent. Of those, probably the most important thing is finding the talent, which can make a huge difference. If you look at a lot of the investments we've made, they've been based on the people, not just the technology. We're clearly looking for opportunities where there's a frontier, where there's not many players. There could be another player or two, but we probably won't jump into a space where there's another 10 players. We're looking for an evolution, for this thing, or this platform idea to affect meaningful change, so that we can take advantage of that change.

## Are there any investments you've passed on that you regret?

We did not pursue Facebook, along with many of the firms in Boston, partly because Mark Zuckerberg was pushing the edge of what was thought to be acceptable at that time. He was being super aggressive, and some firms, including our firm, decided he was being too aggressive. In retrospect, you might say, "Well, you should have followed the instinct that he had, to be aggressive." But you don't have to do every great deal, as long as every deal you do is great.

## Can the gap between life science innovation and regulatory approval be narrowed?

We're experiencing a rapid revolution in digital information, machine learning, etc., and there are ways to interrogate the data sets that are created, which enables biotechnology companies to make better and faster improvement in drugs. From a human perspective, that's a good thing because the sooner we can get a drug to sick people, the better off we are. At the same time, there's the FDA, which has a regulatory mandate, and wants to go at its own pace to be sure that we're doing our jobs correctly. So sometimes there's a mismatch in the timing of discovery and regulation.

To its credit, the FDA is aware of that mismatch, and they're trying as best they can to speed up the process of getting drugs approved. They realize new effective drugs are important for the patient population, but at the same time, they recognize that if they approve a drug that otherwise isn't safe or efficacious, they will hurt someone. Clearly, no one at the company or FDA wants to do that. Not to mention that they'll be called to task from someone on Capitol Hill. Regulatory scrutiny is always a little bit slower than the technology itself, but we're trying to implement digital technology to better understand the data sets and refine it, to make the job of the regulators easier so they can better understand the data.

## Can the same sense of urgency applied to the Covid vaccine be applied to cancer research?

Influenza, respiratory infections, and vaccines have been studied for years. Moderna and BioNTech applied the messenger RNA technology to vaccines, and that expedited the process. More

importantly, it's much easier to deal with something that's introduced into the body than with something that the body has self-generated. Cancer is generated by the body. You try to stop something, but you've got to be very specific about what you're stopping; otherwise, you'll kill living tissue that you want to maintain. Dealing with Covid was difficult, but not nearly as difficult as solving cancer. Having said that, what Moderna and BioNTech/Pfizer did during the pandemic was both amazing and heroic. FDA was a hero, too!

What was so exciting about what happened with Covid is how rapidly we all responded, including the private sector and the government. Dr. Fauci was there at the lead saying, "We need to do something," and we all circled around him. On the cancer side, there's a lot of great, new technology that is coming along. I think we're on the verge of an extraordinarily fruitful age for cancer treatments, based on the concept of getting the immune system to deal with cancer. We'll get there, but because there is not one form of cancer and not a large global population threat that's similar to Covid, it's difficult to rally the troops quite as quickly to find a solution.

## Should there be greater focus on cost-effective therapies for underserved populations?

ESG is an enormously important topic and something which we need to be more mindful of than ever before. There are clearly diseases that affect certain subpopulations, that might be viewed as disadvantaged. A good example is sickle cell anemia, which tends to be an African ancestry disease. There are companies that have worked on sickle cell, but the industry isn't selecting diseases simply because they're within under-represented groups. I know of no company trying to stay away

from underserved populations, rather it's more about looking into disease data. It's rare that we ever have a conversation about subpopulations, or demographically what they look like.

## Are you concerned about diversity within the venture capital profession?

This is one of the things that venture has not done a great job with, as it's tended to be a white man's domain. There are more women coming into the space, as well as more people of different ethnic backgrounds, but diversity is something the industry needs to be mindful of and work on. The best way to deal with the issue is not to simply point the finger elsewhere, but rather to look at ourselves and admit that it's our problem. Importantly, we need to do something about it. At Polaris, we now have more women in our ranks, and I think we cover nearly every major religion in the world.

There needs to be more women on boards of directors, but there's often a chicken-and-egg problem because companies look for board candidates with public company experience, so they end up only looking at men. Women don't get a shot at it as often as men, and we're working to change that. People with different backgrounds and experiences bring a much different orientation to a board. Being vigilant about ESG and changing the way the world thinks about governance is something that the industry needs to continue to focus on.

## Are we close to delivery of personalized medicine on a broad-scale basis?

I expect gene therapies to be more widely adopted over the next decade. We're still finding technologies and subpopulations

where there's a very specific fit. Whether it involves drugs or devices, one of the challenges is that healthcare has multiple players. It has providers, it has therapy developers, and it has payers that are different than providers as customers – whether that's a physician or the patients themselves – so that complexity makes it challenging. But where we're likely to see the breakthrough in gene therapies is within specific, well-organized populations that benefit, in subpopulations that are well represented and have a voice.

## Are industry leaders reassessing their approach to supply chain management?

A lot of people were caught flat-footed because they trusted a supply relationship with some international organization only to find out that it wasn't reliable, and some of that was related to the pandemic. Some of it had to do with geopolitics. The movement to bring more things home makes a lot of sense. I know my portfolio companies are now a bit more biased for finding local and U.S. or North American solutions. We certainly view our Canadian and Mexican partners as good friends, but I think we're bringing things home.

## What are the most inspiring life sciences trends during your career?

When I started in venture capital, there was dogma. We didn't invest in certain industries. For example, we didn't do diagnostics because you couldn't make money in it. We didn't do cancer or therapies for the central nervous system (CNS) because those problems were too hard to solve. But over the last 30 years, exciting things have happened in the cancer space. There are hundreds of clinical trials now with different cancer drugs, and I think the same thing is

starting to happen in the CNS space as well. Those are exciting trends.

The other trend that we have been excited by is structural. Thirty years ago, at a typical university, there was a separation of church and state; the notion of performing academic research and then translating that into a commercial concept was frowned upon. Your academic peers would say, "You're either fish or fowl, and if you want to be fowl, then don't fish in our stream." More recently, we've seen well-respected academics become entrepreneurs, including Bob Langer and Phil Sharp at MIT, George Church, Tim Springer and George Whitesides at Harvard, and Tillman Gerengross at Dartmouth. The reconfiguration of the national research budget has made it acceptable to perform basic research and then ultimately translate it into important drugs.

I'm very hopeful that this trend will continue to expand, and that places like MIT, Harvard, and Dartmouth will celebrate their entrepreneurs, and won't hide them anymore. Universities need to expand their definition of success beyond academic citations and include the number of lives that are touched by technologies created within the university. For example, Moderna came out of Harvard and MIT and those universities are proud of the Moderna vaccines and the billions of lives that have benefited from it, and not just the basic mRNA research.

## Are you investing in psychedelic therapies?

We've looked at a few companies, and would invest if we saw something that we liked. We know that some drugs, like psychedelics, work because we can see the body react to them. The question is can they be repurposed for a better/safer use. For example, many have heard the horror stories of pregnant women taking Thalidomide in the 1950s. Decades later,

Celgene noted that the drug was powerful in treating cancer. So they repurposed it for that population and disease. It worked.

Similarly, there are psychedelic drugs that have bad reputations but can otherwise be put to work under certain conditions and for the right population of patients. If we try to be open and honest about applications, we should consider where those drugs are best used and how they can help people. If they can help people, we shouldn't avoid them, but we'd also apply a very high standard because we know they could be abused as well.

## Do you believe a child born in 2023 could live 150 years?

When Lewis Duncan was the Dean at the Engineering School of Dartmouth, he lectured on life expectancy, and looking at the historical trend line he saw that life expectancy was accelerating. Based on those numbers, it's clear that we are quickly approaching a point where longevity is going to increase dramatically. If you dig into those numbers, you realize that the trend is driven by prevention, by new treatments, and by tissue replacement. Currently, finding someone who is 110 years old is no longer extraordinary. With the new technologies that are coming along, adding another 40 or so years to the lifespan of a century is absolutely possible. It is possible that the first person to live to 150 years is alive today.

## What's your biggest mistake as a company founder, and what did you learn from it?

Companies are about customer and patient needs, about markets, about financial resources, about technology or proprietary assets, and about returns and shareholders. But ultimately companies are ALL about people. People and teams are the secret

and powerful ingredients that make things happen. The mistakes I've made in the past—without naming any names—were about the people who we brought into our portfolio companies. Sometimes, even strong people lack the skills to succeed. However, many are often really good people that turn out to be a bad fit for the company. That doesn't mean they were bad people, or lacking integrity, or were not very smart. They were just bad fits. The mistake probably wasn't as much bringing them in, but taking too long to move them out. When you make a hiring mistake and act quickly, you may be regretful that it happened, but not nearly as regretful as if the problem is allowed to continue for three, four, or five years, hoping that it will get better...only to realize that it won't ever get better.

## What are the characteristics of an effective public or private company board?

Again, it's always about people. I've been on 60-plus corporate boards throughout my career, including almost 20 public company boards. I've seen boards that have been highly effective and some that have been totally dysfunctional. Oftentimes people look at boards as simply filling in slots of experience. For example, a biotech company needs a board with a regulatory person, a medical person, a technology person, etc.

It's well-reasoned that companies build such matrices to fill in the functional gaps. But I think the cohesiveness of a board is more important than a diverse set of skills. I'd rather have a board that may not have all the required skill sets, but that's an effective problem-solving unit. I feel strongly that it's NOT the board's job to run the company. The board's only job is to ensure that the company is well run.

## How does a board ensure that a company is well run?

The question a board should ask after every

board meeting is, "Do we have the right person running the company?" If they don't, then a conversation is required with the leader about their role and how they might adjust accordingly. Good partners are candid partners. They're all about truths, not about flattery. My best partner is my wife, and she's the most candid person in my life. When I'm screwing up, I want someone to pull me aside and say, "I don't understand what you just did. It just doesn't make any sense."

I've seen very candid boards, where everyone including the CEO knows they are offering their best advice. I've even seen great CEOs who say, "I'm the wrong person for this time in this company." It's a difficult thing to do, but they want the organization to be successful. The best boards are cohesive, family-like organizations that are never dishonest with each other.

## Based on market conditions, do you foresee a reduction in deal values and lower fund investor interest?

Yes, I do. Companies are being priced lower. This is the fifth economic cycle over the course of my career, and it is not, by any stretch, the worst of those five cycles. This is just a normal course. Downturns often lead to a resetting of the standards. Because investment capital is hard to find and expensive, teams become more frugal with their resources. I've got a saying, "Darwin was an optimist—when an organization is under Darwinian pressures, greater focus and resourcefulness often lead to good things." We're seeing the best companies react accordingly. They get their burn rate down, appreciate that capital's not free, and manage their capital much more effectively. This may mean reducing their teams accordingly, but staying on task and really focusing on the fundamentals of their business. So I'm optimistic.

## Many market analysts are forecasting a recession in 2023. What's your opinion?

Ask anyone at your local coffee shop, and they'll give an answer that's as good as mine.

## Which of your many industry awards and recognitions are most meaningful to you?

I'm proud of them all, and particularly the ones that reflect on my personality and my support for the underserved. For example, The Funded recognized me as the most loved venture capitalist because I view investments as long-term partnerships, not just transactions. The people who supported me there were basically saying that I was a good partner to them, and that's important to me. There was also an award called "Guys Who Get It," that recognizes men who support women and entrepreneurship. And I'm proud of that one as well.

## Any advice for a young professional starting a venture capital or private equity career?

Reflecting on my own career path, I believe mentorship was important. I had the opportunity and good luck to work with great venture capitalists including Jon Flint, Stan Golder, Bruce Rauner, Carl Thoma, Bryan Cressey, Bill Egan, Jean Deleage, and Craig Burr. They taught me so much. You need to find mentors that are patient, and who have been through the worst before. Learn from them and be patient, in turn, because it takes time to grow and succeed.

## Has there been a source of inspiration or motivation during your lifetime?

I continue to be inspired by the example set by my parents. We came from a working-class background, but it was always about love and doing the right thing, and about treating people the way you want to be treated. My parents taught me that people matter, and the importance of listening, and being there when people need you. My mom, who owned a dancing school, also gave me my first exposure to being an entrepreneur.

I am most inspired by my wife, Carolyn. Through her intelligence, candor, support and goodwill she provides me with new energy and insights every day. To quote Robert Frost, "And that has made all the difference."

## Are you also a good dancer because of your mother's profession?

We had to dance as kids, but I would never think of myself as a good dancer. But years later, I was in Ireland and watching some people step dancing and was suddenly picked out of the audience to join them. I later asked, "Why did you pick me to dance?" My dance partner told me, "Well, you were tapping your foot and I knew at least you had rhythm." So somewhere out there on the internet, there's a film of me dancing at an Irish party. My daughter subsequently went on to Irish tap dancing, and she did a lot of that. So there definitely has been dancing around my house.

## Any insights into your personal life, family, or hobbies?

I married a woman who was one of my closest friends in college, and we've been married 40 years. We have three kids, who are all married with children, and we have seven grandkids. They're the ones who give me the most joy. I like to snowboard when I can, although I'm not getting out as much as I once did.

I work in a field that's rapidly changing and full of ideas, in a profession where I get to hang out with people like Bob Langer from MIT, Tim Springer at Harvard, Tillman Gerngross at Dartmouth, and Nobel Laureate Phil Sharp. I'm either spending time with my wife, my grandkids and other people who I love, or I'm spending time with people who are changing the world. So what's not to like about that?

## Are there plans for retirement at some point?

The beauty of venture capital is that you can slow down without leaving the field. I'm currently on 13 boards, and I shouldn't be on that many boards. I should probably be on eight boards. My partners haven't kicked me out yet, so I'll just keep on going till they carry me out.

# Terry McGuire Biography

As a founding partner of Polaris Partners, Terry brings over 35 years of successful early stage investing experience in medical and information technology companies.

Prior to starting Polaris in 1996, Terry was a partner at Burr, Egan, Deleage & Co. investing in early stage medical and information technology companies. Terry began his career in venture capital at Golder, Thoma and Cressey in Chicago.

As a venture capitalist, Terry has invested in more than 80 companies. He also co-founded three companies: Inspire Pharmaceuticals (public and sold to Merck), AIR (sold to Alkermes), and MicroCHIPS (sold to Dare). Companies Terry has supported have touched more than 60 million patients and directly saved over 400,000 lives. These companies have raised over \$7 billion in equity and corporate capital. As a group, they have achieved a combined peak enterprise value of over \$70 billion.

In 2015, Terry was listed as one of Scientific American's Worldview 100, visionaries who continue to reshape biotechnology and the world. In 2014, Terry was chosen to receive the Irish America Healthcare & Life Sciences 50 Award. In 2013, Terry was listed as one of Forbes' Top Life Sciences Investors, and he received The Boston Irish Business Award. In 2011 and 2014, Terry was listed in Forbes' Midas 100 List of Top Tech Investors. He is also a recipient of the Massachusetts Society for Medical Research Award, and the Albert Einstein Award for Outstanding Achievement in the Life Sciences, awarded by Harvard and the City of Jerusalem. He was awarded honorary doctorate degrees from Ohio Wesleyan University and Canisius College for his work in translational science.

In 2009, Terry helped create the Global Venture Capital Congress (GVCC), a gathering of venture capital leadership from around the world. For the past 13 years Terry has chaired the congress. The GVCC has worked to create cooperation among venture capital associations in areas as diverse as public policy, research and strategic topics including diversity and inclusion, taxation, and the global image of venture capital and private equity.

Terry was formerly chairman of the National Venture Capital Association (NVCA). During his tenure as NVCA chairman, Terry testified before Congress for Dodd-Frank Wall Street Reform and Consumer Protection Act. In 2020, the NVCA presented Terry with The Outstanding Service Award, which recognizes the exceptional service of an NVCA director or member who has committed an extraordinary amount of time, resources, and dedication to association efforts that in turn benefits the entire venture community.

Terry was formerly chairman of the board of the Thayer School of Engineering, Dartmouth College. He sits on the boards of The Arthur Rock Center for Entrepreneurship at Harvard Business School (HBS) and The Healthcare Initiative Advisory Board (HBS). He also sits on The Brigham Research Institute's Scientific Advisory Board. Terry also serves on a number of public and private boards of directors, including Adimab, Alector, Invivyd, Jnana, Seer and Tectonic. He previously served on the boards of Cubist, Ironwood, Akamai, Acceleron, Kallyope and DeCode, among others.

Terry holds an MBA from Harvard Business School, an MS in engineering from The Thayer School at Dartmouth College, and a BS in physics and economics from Hobart College.