VENTURE CAPITAL

New Enterprise Flies Higher

New Enterprise Associates surprised some by locking down $3.1 billion in new capital during a tight fundraising climate. General partner David Mott and partner Justin Klein share the firm's investment approach.

BY TOM SALEMI

- NEA locked down $2.8 billion for its largest venture fund, setting up the firm to invest approximately $1 billion over the next three to four years in life sciences and health care companies.
- In addition to the venture fund, the firm secured another $350 million for an Opportunity Fund to invest in growth-stage companies.
- With outside investors moving into later stages, NEA is finding opportunities to invest in early-stage biopharmaceutical and medical device companies.
- NEA remains committed to the incubator model used to identify promising technologies around which to build companies.

History isn't always kind to venture capital firms using the exuberance of an investment boom to maximize the size of a fund. The collapse of the tech-oriented venture firms in the late 1990s is legend, and the life sciences saw its own boomlet go bust as venture firms that once raised funds of $500 million or more five or six year ago now are satisfied with partnerships half the size.

So we're left to wonder what will happen whenever a firm climbs higher toward the sun. New Enterprise Associates earlier this year secured $3.1 billion in new capital, its largest pool of capital to date. Reports on the fundraising call it the largest venture capital fund ever raised, although the total included a $350 million Opportunity Fund. NEA 15's $2.8 billion total actually ranks second on a list of largest venture funds ever raised, ranking just below the $3 billion raised by Technology Crossover Ventures in 2007.

Whether it's one fund or two, NEA's partners will have considerable capital to commit. General partner David Mott, who heads the firm's health care practice, says the firm is well positioned to put the capital to work wisely, noting the $2.8 billion fund size is consistent with partnerships raised over the past 10 years. "We've been operating very successfully at that level now for 15 years," he says. "And we have had some terrific funds over that period of time, frankly, in much more difficult investing environments than we've seen over the last couple of years. So we feel really good about our ability to continue to successfully operate at the same scale that we've been at for quite a while."

In an interview with *START-UP*, Mott and NEA partner Justin Klein, MD, who invests in medical device companies, discussed how NEA plans to deploy the new fund in life sciences companies. The firm traditionally invests between 30% and 40% of its fund into health care, which includes biopharmaceuticals, medical devices, health care services, and health care IT.

Mott notes that's approximately $1 billion going into health care companies every three years.

START-UP: *The media loves to put fund totals up on the scoreboard to compare fund sizes. Another venture firm previously had raised a $3 billion fund, and NEA comes in at $3.1 billion. Do VCs look at that same scoreboard?*

David Mott: No. We don't look at that at all. It's not relevant. Honestly, we have been operating at this same fund size for a while and are staffed for the fund size. We usually have a pretty rigorous internal debate among the partners before we go out to raise the next fund about do we want the same size. Honestly, the debate is usually focused around whether or not we want to raise a smaller fund, not a bigger fund. We're not – notwithstanding our scale – we're not asset accumulators. We're return generators. And the debate we always have is would we have better multiples and better IRR if we had a smaller fund rather than a larger fund. Five or six years ago when venture was in a long-term IPO drought, we had some tough discussions about raising smaller funds. But I think now that the capital markets have been back open for a sustained period of time, and we're also seeing resurgence in M&A, at least on the health care side, we're quite comfortable generating liquidity at this scale. So this time around, there was frankly very little debate about size. And the idea was stay exactly as we have been. So we set a hard cap at $2.75 billion and got there rather quickly, and then the only thing we did that was a little innovative this time, and new for us, was we added this paired fund called the Opportunity Fund. We raised this fund because our limited partners remain interested in growth-stage opportunities in many of the sectors that we've already committed significant sums to. These are sectors that likely will produce really nice multiples and returns. But we would pass on putting additional capital, allowing other VCs, crossover or mezz firms to come into some of those companies.

So where does the Opportunity Fund fit in?

DM: The Opportunity Fund accomplishes three objectives. We created a tagalong vehicle where we can either initiate de novo investments in things that are more growth-like, maybe a little less, "Heads we win, tails we lose" risk stage than our core fund. We also have the ability to partner up with the core funds. So we will cross over from past NEA funds into the Opportunity Fund so that we write even bigger checks. Believe it or not, we were feeling like we couldn't write big enough checks in some of these companies because sometimes we'll see a growth round, particularly for our tech companies, where they might be seeking to raise $100 million or $150 million, and before the Opportunity Fund, we would have thought, "Well, OK, we'll take the $20 million in additional capital investment for our core fund." But then we were seeing some of these other folks march in and put more good money to work in companies we not only know better than anybody but that continue to have conviction in. So we added that Opportunity Fund for the select group of LPs that really wanted additional exposure to companies at that stage. And that's what took us over $3 billion with that Opportunity Fund, not any desire to raise a larger fund or to top anybody else that's out there.

Life sciences investing is increasingly expensive. How significant an advantage is investing such a large fund?

DM: Scale is a huge advantage in health care. And that's really important. It's part of the reason I went to NEA about seven years ago. As a long-term biopharma investor, we need to make significant capital investments and to have patience in order to do important things in drug development and devices where the regulatory regimes and clinical trial requirements have come to mirror biopharma. We need to able to operate at a scale where we can really put north of $50 million in equity per company. And being at a firm that has a 35- to 40-year history of investing in the space is also a huge advantage because it means that we can be patient for the winners and let them really grow and get to those key value inflection points.

I think a lot of the smaller venture funds have more difficulty maximizing the value and the success of many of their investments because they're either dependent upon getting liquidity from a prior fund in order to raise the next fund, or they get to the point where they really can't risk any more capital in one investment. And we really never run into either of those issues.

DAVID MOTT

"We need to able to operate at a scale where we can really put north of $50 million in equity per company."

Does might make right? With a lot of capital to put behind a good idea, can you overcome a company's shortcomings or disappointments?

DM: If you are disciplined, a large fund can really help. For example, we might invest in a great company with a great product that then suffers a significant setback. If you're at a firm with a $300 million to $400 million fund, and you've already invested $15 or $20 million you may look at the company and say, "Gee, I still believe, but I'd have to be able to put another $15, $20, or $40 million to work, and I'd have to be able to see through another three to five years to make it happen and really create significant value." Often they can't do it. We can do that. The flip side of it is we have to be disciplined. We can't just feed something that doesn't warrant being fed. We'll get into trouble. Our returns say that we're pretty

Exhibit 1

NEA's Past Funds

YEAR	FUND	SIZE ($M)	RANK
2015	15	$3.1 (includes $350M for side growth equity fund)	2
2012	14	$2.6	3
2009	13	$2.48	9
2006	12	$2.53	6
2003	11	$1.11	-
2000	10	$2.32	10

Note: Position on list of largest venture funds ever raised.
SOURCE: Published reports from multiple sources (ranking by Dow Jones *VentureSource*)

good at maintaining that discipline. But that is something that we as partners all try to say to each other when we fall in love with our investments. And we're pretty good about that, sitting around the partners' table giving each other a dose of honesty when a company may not warrant additional investment.

Is finding the right investment more or less difficult when you're investing from a fund your size?

DM: It's both because the problem in a smaller scale is you're looking for things that fit both in your time frame and your capital exposure. And I think that under-optimizes value creation in health care. For us, we can do some of those relatively quick hits, and we get excited about them. But ultimately we also have to find important companies and important medical innovation that's going to change health care in order to return our fund. So we do need both. We'll sometimes do relatively small Series As and Bs and put only $10 or $20 million in total capital to work across the life of a relationship with a company. And if we generate a nice health care return, 5x or 7x on that, that's really nice. But ultimately to really return our fund, we also need a few companies in each fund where we have a lot of conviction and we're prepared to put $50 million, $60 million, or $70 million to work and where we can see 5X, 7X, or 10x returns. Maybe over a somewhat longer time frame, but we do need a few of those as well. So we're looking for both.

"As firms shied away from taking any regulatory risk whatsoever, they naturally shifted to later-stage deals. With more investor dollars chasing those post-approval-stage companies, we have intentionally looked to go earlier."

JUSTIN KLEIN, MD

Justin, does the deal get frothier when NEA becomes involved because you have so much capital to invest?

Justin Klein: Well, we can avoid that when there's an alignment between management's vision and how NEA likes to build companies. If management really wants to build a significant franchise in any one of our subsectors, our ability to be their financial partner and position their company with capital that allows them to reach further than others might becomes a huge competitive advantage for us. What we're really looking for are those opportunities where management sees the world in the way that we do. We identify the same kind of opportunity and we share an ambition to build and reach a little further. So we don't usually run into a challenge of people thinking we're willing to pay more for deals just because we need to get more money to work. Instead, we intentionally target those deals where our ability to provide capital to that business and to be a committed partner for the long run makes us the best potential partner for that team. If we do that, some of the other considerations around valuation and terms become a little more secondary.

So it's a willingness to walk away from a deal.

DM: We call it Dynamic Asset Allocation. This is one of the ways that we don't fall victim to term creep or price creep or frankly chase hot markets. We just don't have firm commitments to any subsector within each of our funds. This way, when prices go up or terms run away from us, we just back off. We can do this because we're also in software. We're in China. We're also in electronics and hardware.

In today's market, for example, we're increasingly seeing more traditionally public markets-oriented investors, or mezzanine investors coming in and getting competitive on deals that would historically be more of Series B kind of venture investment. These investors aren't as accustomed to the company building process, and their involvement is driving up prices in some subsectors. Rather than us then competing and escalating that competition – whether it's on price or on terms or on the amount of capital going in – we just pack up our bags and go. This enables us to do a little more early stage in the recent quarters, than we were doing two years ago in the cycle, doing some company formations and Series As. We've been doing a little more in Europe than we did before because there's less capital available and less competition. In short, the capital we have combined with our expertise in multiple sectors, geographies, and stages actually makes us a little less prone to let that stuff get away from us.

Where is the competition coming from for those mid-stage deals that you're avoiding? Is it overseas money? Or is it just the IPO market and the impact that has on late-stage pricing?

DM: A lot of it is generalist mutual fund dollars, hedge fund dollars that when health care is less in favor, a lot of those dollars get allocated to other sub-subsectors. Now that we have had a strong appetite for IPOs and strong aftermarket performance in the public market across several of our subsectors, more capital is being allocated toward health care. A few years ago, firms like Fidelity or Janus or T. Rowe or hedge funds like Rock Springs or Deerfield might have had a few hundred million dollars dedicated to health care. Now they're directing a few billion-dollar pools of capital. And they're really not interested in or in a position to do Series As and company formations in the vast majority of cases. So what they're doing is they're just easing their way with that additional capital into things that they think might be relatively

close to accessing the public market and with a relatively mature management team and well-defined product development path ahead of them. So we typically see that larger amount of more generalist-oriented money coming into the Series Bs and the Series Cs of companies that might be perceived in a positive cycle as being 12 months plus or minus six months away from an IPO.

JK: Those investors are really seeking IRR as opposed to cash-on-cash returns from longer-term opportunities. So when those mutual funds, hedge funds, crossovers are making investments with the intentions that Dave described, that will drive valuations up in those later stages because they're willing to pay up a bit more to access that higher IRR opportunity for the benefit of their relative performance. And to Dave's point, we'll look at those opportunities as well, but typically not be interested in competing for them unless we see a much more significant company-building opportunity for that company, where the same kinds of returns are possible for us at the later stage.

Well your objectives are very different.

DM: They know if they wait for the IPO, they're going to have trouble putting a lot of money to work because it's competitive to get allocations on IPOs for the better deals. And they might get a 10% allocation on an IPO, probably. Where if they came into the prior Series B or C, they may have the ability to double the amount of money they've got working in an individual company. And if they think they can see a 20% to 50% bump on the stock price immediately after the IPO, that's a real competitive advantage for them. For us, that's not what drives us. We're traditional venture capital investors that are looking to generate venture returns that are in the 3x plus sort of range. So we're not looking at it thinking, "Gee, can I get a 30% pop by coming into this pre-IPO mezzanine round?" We're saying, "Do I believe that I can help this company become a much larger company and return three, four, or five times our money to our investors over time?"

Justin, are you seeing the same froth or interest in late-stage device deals, medtech deals?

JK: We've seen a lot of investors in medical devices shift to later stages over the last five or six years largely because of the burden that FDA regulatory review put on the entire sector. As firms shied away from taking any regulatory risk whatsoever, they naturally shifted to later-stage deals. With more investor dollars chasing those post-approval-stage companies, we have intentionally looked to go earlier. We still think a lot about regulatory risk, and at the same time I think our capital base and our strategy makes us comfortable taking pivotal-stage clinical trial risk, for example. So a number of the investments that I've made in the medical device sector over the last four or five years have actually targeted that stage with a lot less competition from other venture funds that are unwilling to look at investments there. And yet we're attractively positioned in a number of these companies that are executing on what we perceive to be lower-risk pivotal trials, with relatively straightforward regulatory requirements so we may see an exit in these companies within the three- to five-year time line.

David, you said you had two partners looking at public market opportunities, and NEA has committed to several PIPEs this year. How busy do you anticipate being in that space?

DM: Our public practice is actually pretty counter-cyclical. So we haven't been doing the high-priced momentum plays, which is a lot of the other type of public investing I've been seeing going on lately. They're often deals that we've been working up and companies that we've been tracking for a long time. There's a deal out of Europe called Cortendo [**Cortendo AB**] that our partner Jake Nunn did recently, that he'd been tracking for quite a while, and we've done two rounds of investing in that now, probably both falling in this calendar year. These are sort of off-the-beaten-path value opportunities where the way we invest in the public markets is by trying to take advantage of the fact that we're driven by different things. We're looking for fundamental product development milestones, and we have a relatively long-term time horizon. A lot of the public investors that are chasing prices up or down are focused on something that might drive the stock in the next months to quarters, and we think that often creates some pretty significant mismatches. So the way we're investing in public companies is much more similar to the way we're investing in private companies. And that often creates some real opportunities for us.

Cortendo actually staged two PIPES?

Yes, share prices doubled between the two financings. That's a good example of our strategy. It was an undercapitalized, relatively unknown, not followed by any US research firms. But it had some products that we thought were pretty interesting, and it had a management team that we thought really warranted backing. So we went in early with a syndicate and did an initial financing. And then we did that, announced it, and a lot of people took note and said, "Huh, look at that." And the stock appreciated smartly, and then they went out and did more of a momentum deal more recently with a new group of investors, and of course we also participated in that. But that's sort of classic for the kind of thing that we'll do in the public investing.

You both talked about looking at earlier-stage investments. What does early look like? We'll start with biopharmaceuticals first. You did the Series A in AdaptImmune. Of course that went public the next year. I'm guessing that's not a typical biopharma Series A deal. But what does early stage look like in terms of maybe what areas are interesting to you, but also what's the stage of the technology that you're investing in? How far along is it developed?

DM: Well, I would say AdaptImmune is not a typical early deal, not just because it went public six months after we closed the Series A, but also because that company had been operating for quite a while and was relatively mature. They already had 40 to 50 employees; they had eight years of progress on the core science; they had been funded by some non-traditional investors, more high net worth British individual investors. So it really wasn't that early stage. Most of the early-stage investing we do is really traditional early-stage venture capital. We just did a deal with Polaris in a company called XTuit [**XTuit Pharmaceuticals Inc.**], which is very early technology coming out of Harvard

[**Harvard University**] and MIT [**Massachusetts Institute of Technology**], very much preclinical, still validating mechanisms and trying to identify lead compound candidates. [Partner] Ali Behbahani has been doing some really early-stage company formation work on next-generation CAR T technologies. There's a company that hasn't even had a name for a while, but he's been working with a couple of co-investors now for probably 15 to 18 months, and the company is just sort of taking form now. One of our other partners, Ed Mathers, worked on a microbiome Series A deal with the Atlas team over the last year or so that we originally funded as an experiment with Atlas. So we put in a very small amount of capital. Maybe it was a million dollars into an initial seed round, an experimental round with them. And then brought it forward, matured the technology, recruited the team, and then did a Series A, which we participated in heavily. So those are more of our typical early investments – where we're even doing seeds, and one of the other things we do quite often is, particularly with repeat entrepreneurs that have made money for us in the past, we'll give them what we call "walking around money" when they're looking for the next project. So they can come in and just work out of our offices. We'll fund some research and travel and legal money to help them evaluate new projects and technology until they're ready to start a company. And while they haven't necessarily made a commitment to us, and we haven't made one to them, by working together it increases the chances that they pick something that we're also excited about, and we fund it, and we do that a lot with our early-stage deals.

What do the early-stage medtech opportunities look like?

JK: I think that we tend to follow a lot of the same recipes that Dave just described on the biopharma front. In medtech in particular, we've looked at and actually invested in a number of incubators over time, the most recent of which was our Foundry Ireland incubator, **FIRE1**, alongside of Covidien-Medtronic [**Covidien PLC/Medtronic PLC**] and Lightstone. So very much in the mode of our traditional company creation and investment practice. The other investment we just closed on, part of our new fund, is Intact Vascular [**Intact Vascular Inc.**], which was a Series B investment. And Intact is positioned to begin its IDE trial in its first indication for its *TACK* endovascular solution for peripheral artery disease. That was a large round [$38.9 million], and we expect we'll fully fund that clinical trial as well as additional expansion indications. So we're willing to invest as early as the Series A and B and often at the company-creation stage, but always with an eye toward long-term value creation and setting companies up for success.

Justin, are incubators still going strong in medtech? As part of that question, obviously Josh Makower has joined you as part of NEA as general partner. You've been working with him for many years with ExploraMed. Did that transition from an incubator, ExploraMed, to a VC speak at all to the state of incubation, or just more of a personal move for Josh, and a professional addition for NEA?

JK: I think it's more the latter in Josh's case. But I would say that we have really enjoyed and appreciate the opportunity to work with incubating companies because we can be involved in the sort of strategic plan development for each newco opportunity they create. I would say that over the last 10 years there's definitely been a shift in the types of projects that our incubators have pursued, and we've spun out and funded. Some of our companies like CVRx [**CVRx Inc.**], for example, Moximed [**Moximed Inc.**], NeoTract [**NeoTract Inc.**] have embarked on really significant, paradigm changing, and highly novel technology opportunities that open up new markets. Like the rest of the field, those had run into some regulatory delays that we are very conscientious about managing around. Now we have successfully funded those companies through some of those challenges, and they've made very impressive progress in later stages of development clinically and commercially.

So we feel good about the model and at the same time, I'd say the kinds of projects that we're looking at now are intentionally focused on mitigating regulatory risk more aggressively. So for example, in the ExploraMed family of companies, there has been an evolution toward consumer-oriented health technologies that may have no or very little FDA regulatory review, and yet still find opportunities to have a dramatic impact on health outcomes – frequently for consumers who are embracing these technologies directly. Sometimes with physician guidance, sometimes not necessarily at all. We still think that there are big outcomes ahead for companies in that space, and we'll be selective about pursuing those.

What impacts do shifts like that have on more traditional medtech companies?

JK: We've seen fewer opportunities for companies like a CVRx or a NeuroPace [**NeuroPace Inc.**] that are taking on completely novel device technology hurdles, clinical development challenges, and then PMA regulatory review paths. Because of this, fewer investors are looking early and I'm expecting over the next three, four years there will be a dearth of companies available for financing in mid and later stages of development. Therefore, the new companies that are emerging from this cycle will be extremely well positioned in the future because there's been a lot of selective pressure on the field to only fund the things that are really the best ideas. So I'm actually quite bullish about the future of early-stage companies operating today.

David, what incubator opportunities have you pursued in biopharma?

DM: We set up an accelerator up in Cambridge called Cydan [**Cydan Development Inc.**]. We staffed it with a team of experienced rare disease drug hunters. They've spent the last two years looking for drugable opportunities in the rare and orphan disease space. To do this, we've given them a prearranged pool of capital. There are no assets tied to the deal so they go out and find the best assets available, not anything that they've previously sold to us. Then they de-risk them inside Cydan for a period of up to two years with a couple of million dollars. Then if we like what comes out of that, we have a prebaked syndicate sitting around the Cydan board table that then funds them as Series A spinouts from Cydan. We've done a bunch of early-stage company formations through Cydan, and then coming out of that, because we've seen so much early in that space, we're doing other non-Cydan-related company formation work. We're forming a rare disease company that we've been working on for six or seven months actually coming out of Europe, out of France, that we're work-

ing on with a couple of other venture groups, that we probably wouldn't have done if we hadn't learned so much about that space through the Cydan exercise.

Let's talk about corporate investing for a moment. David, you led Medimmune Ventures before joining NEA, so you know the corporate world. Did you see this evolution in corporate investors coming? Did you know that they'd be playing a larger role? Did you anticipate they'd play a larger role in innovation? Or is the move to the early stages surprising?

DM: It's not at all surprising. We absolutely saw it coming. Don't forget, I actually started Medimmune Ventures back in 2002. We made it official in 2004. It started out as an opportunity to inject innovation into our research labs that were increasingly becoming sort of mid-cap or large-cap pharma-like. I wanted to keep us close to the cutting edge of innovation. And I also wanted the opportunity to put each of my [senior vice presidents] on at least one of those boards for them to see how small company risk-taking works, and how the governance environment works versus the management environment. We also saw a macro trend, one that we're probably in the middle of right now. The expiration of Big Pharma patents combined with the lack of success they had had in scaling up research was going to lead to a major retrenchment in earlier-stage in-house innovation in Big Pharma. And there certainly are corollaries in the medical device world that Justin can comment on. And that's very much played out. So even for the Big Pharmas that have maintained their dollar spend in R&D, there's been a huge shift from early stage to late stage because they're trying to keep funding the things that might come to market and affect their ability to pay their dividends and maintain their growth rates in the near term. They're getting out of the innovation business, which has made them increasingly dependent on the venture capital community for their future innovation and growth. And so what they're trying to do is to partner with us more by becoming co-investors and collaborators, and look over our shoulder to coach us on what they want us to bring them next, and to have a first early look at what we're developing so that they can access it, because they're increasingly cognizant of the fact that they're not developing it internally.

Justin, have you seen the same development on the device side?

JK: Yes. I think as you know, on the device side, we've seen similar trends as in the pharma space. Public companies of that scale are increasingly EPS-focused. And that's really what drives their stock prices. The trend over recent years has been first a sort of product consolidation through mergers and driving an opportunity to leverage SG&A with larger and larger product portfolios. We've seen a scale-back in R&D across the board in the medical device space with less and less internally generated innovation. And now, just like in pharma, we've seen a number of cases where tax arbitrage is the newest way in which EPS growth is being driven. So across each of those strategies, whether it's generating new products internally or consolidation in the commercial channel, there is an increasing premium for innovative products that can really reinvigorate top-line growth. I think that as the large companies have scaled back their internal R&D, they're starting to become more aggressive on venture investing, sponsoring early-stage companies with equity investments and with structured deals – and whether it's the venture group like Johnson & Johnson Development Corp. or what Covidien formally institutionalized, or what Abbott [**Abbott Laboratories Inc.**] has done with some creative things in Abbott Ventures – I think we're going to continue to see that kind of activity expand. NEA has been very comfortable investing alongside strategic investors at all stages in the medtech space for several years. We've probably invested in close to 20 companies with strategic investors, who have committed hundreds of millions of dollars to NEA-backed medtech companies. It's a helpful partnership, I think, on both sides. And we expect that that will continue. **SU**

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COMMENTS?
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