

# Good News for Entrepreneurs

## Navigating Today's Biotech Venture Capital Market

by James A. Datin

Venture capital funds were flush with cash seven years ago and enjoying a period of exuberance. Every investment was a good investment, all exit windows were open, and the only direction was up. VC firms boasted \$95 billion of capital in 2000, and the biggest challenge was putting the money to work quickly enough (1). Due diligence was considered to be a thing of the past. Who needed to waste time analyzing business plans when all that had to be done was to close the investment, then take the target company public and reap the rewards?

Just three years later, the picture of the venture capital industry was very different. Burned by the dot-com bubble collapse, investors shied away from fundraising efforts. They staked their claims in only the most seasoned and experienced "brand name" funds. Capital decreased to \$9 billion, down 90% from the 2000 peak (1). The exit windows were closed as initial public offerings (IPOs) slowed to a trickle, and strategic buyers remained gun-shy about new merger and acquisitions (M&A) activity. They were content to digest earlier acquisitions and adopt a wait-and-see attitude. And the industry completed one of the most dramatic boom-to-bust cycles in its history.

Today, the VC industry has recovered. Business is good, and the industry is healthy. It has \$67 billion of capital ready for deployment, and new capital is generally available. Yet the investment landscape is quite different from what it was during those bubble years. A process is in place to determine where capital should be placed and how



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it should be used. For example, Safeguard Scientifics will evaluate more than 900 potential deals this year. As a result, it needs guidelines in place to review and deploy capital efficiently and effectively.

In the past four years, health care has provided the greatest return on investment along with balanced risk. Health care has drawn increasing attention over that period, and it is now one of the hottest investment sectors as VCs seek to branch out, balance their portfolios, and mitigate investment risks. As baby boomers age, new research is developing around genomics, proteomics, and other cutting-edge technologies, and new service models are being created. So support for health care innovations from providers, payers, and producers are expected to steadily increase.

From 2000 to 2003, while investments in information technology companies dropped dramatically, capital commitments to biopharmaceutical companies took much less of a hit, drawing just shy of

\$12 billion in 2000–2002. As the market recovered, biotech experienced a 34% increase to nearly \$16 billion in 2003–2006 (2). And it continues to grow faster each year: In the first quarter of 2007 alone, biotechnology saw \$1.5 billion in 102 deals, surpassing the software investments that traditionally receive the largest amount of capital. Life sciences, including both biotechnology and medical devices, accounted for 36% of the quarter's investment dollars — a record high for the industry (3).

For a scientist with a good business idea and a sound strategic plan, capital is available today for new business formation, expansion plans, and technology commercialization. Entrepreneurs should be aware of past and current VC trends to have the best chance at receiving fund support.

### GEOGRAPHIC CONSIDERATIONS

California is currently the hottest market for VC investing. Of every dollar that went into venture capital in 2005, \$0.44 was invested in California, \$0.35 of that specifically in the San Francisco Bay area (2) — a staggering statistic. California is the number-one market for medical devices and biotechnology and the number-two market for specialty pharmaceuticals. Always a hotbed of innovation, the California coast is also considered by many to be the birthplace of the biotech industry. The first biotech company, Genentech, was founded in South San Francisco over 30 years ago. The northern California biotech community was cultivated by alumni from

Genentech's early success story and local academic resources such as Stanford, Berkeley, and CalTech.

New England follows with 13% of VC dollars funding the region's companies in 2005. Biopharmaceuticals accounted for the second-largest portion of New England investment dollars that year, with nearly \$583 million (2). The concentration of investment activity in these two regions increases competition among VC firms for deals in these areas — and likewise increase the valuation of potential portfolio companies there. Thus, many VC firms are now turning to underserved markets where competition is less intense and valuations are more reasonable.

The middle-Atlantic region, for example, is the headquarters of some of the largest pharmaceutical companies in the world — Pfizer, Johnson & Johnson, and Merck — and home to the American branches of GSK and Novartis. They generate tens of thousands of biotech patents each year and attract billions of dollars in National Institute of Health (NIH) investments.

Traditionally, the mid-Atlantic region has been largely overlooked by the nation's venture capital community, but that's beginning to change. Biotechnology entrepreneurs and VCs are turning to the Mid-Atlantic to set up shop and seek out the most promising companies for investment. Today, nearly \$800 million of investment capital is in the Mid-Atlantic region, but investments are pouring in from outside the region too (4). Many firms have established themselves in the region to focus primarily on investments there.

Seeing the dramatic growth in biotech, many US regions are providing incentives to attract new investment and companies. VC investors are looking to them for financial incentives such as tax breaks or subsidized office and laboratory space. Some regions that have been particularly aggressive include southern California; the Potomac region, which encompasses Maryland, Washington, DC, and northern Virginia; Washington state; Texas; and Pennsylvania (5).

## SOWING THE INVESTMENT SEED

Trends in venture capital and pharmaceutical markets play an integral role when VC firms and companies select partners. Here's one example: Safeguard Scientifics and Laureate Pharma, which partnered in 2004. Laureate is a major player in the large-molecule therapeutics space. Interest in large protein molecules has exploded because protein drug products can be better adapted to personalized medicine and curing individual patients — rather than simply treating symptoms.

Founded in 1999, Laureate is a contract manufacturing organization (CMO) that helps companies bring their protein products from development through production and into the clinical and commercial marketplace. The company's production facility is compliant with current good manufacturing practices (CGMPs). In 2004, Laureate had about 60 employees. The company was looking for a partner to help grow its business and manage its operations, one that had life sciences experience. Laureate also wanted to build a new pilot facility. But building a plant from the ground up would cost \$70–100 million and take two to four years.

Laureate researched several investment firms. It discovered Safeguard Scientifics and was interested because of its proven track record in helping life sciences companies grow and become profitable. Laureate wanted to partner with Safeguard; meanwhile, Safeguard wanted to capitalize on the large protein molecule trend. Safeguard examined Laureate's business, operations, and financial models. Laureate's data showed that it was a viable, growing business, and Safeguard agreed to take a major stake in the company.

**The Partnership's Results:** Safeguard helped Laureate build a 4,000-ft<sup>2</sup> pilot facility inside its main building in Princeton, NJ. Commissioned and formally opened in March 2007, the facility develops, produces, and purifies early phase preclinical proteins. It houses equipment similar to the company's main manufacturing facility, all on a smaller scale. Three of Safeguard's employees are on Laureate's board of directors, through which they advise Laureate's business development. Safeguard also provides Laureate with managerial and project development support. For example, Safeguard works with contractors to supervise building plans for the pilot facility. It also provides legal support from its law group. And Safeguard helped Laureate increase its staffing to 100 employees. The company expects to add 10 more by the end of 2007.

Laureate is now reaping several benefits from its partnership with Safeguard. Additional staffing allows the company to provide more services to its clients. The pilot facility helps identify challenges before formal manufacturing begins. It also helps the company speed its development process from the laboratory into the manufacturing facility by several months. That helps clients accelerate their time to clinical trial and market. Laureate is now on track to double its business this year, proving that the right management and financial partner — and capitalization on market trends — can help companies grow and achieve their business goals

## HEDGE FUND APPEAL

The number of VC firms has declined every year since 2000, when there were 2,800 of them nationwide. In 2005, there were 1,400 firms, a 50% total decrease from the peak (1). This was driven by consolidation, funds getting out of the market, and fund closures. Meanwhile, hedge funds are on the rise, although they were virtually unheard of just 10 years ago outside a small cadre of sophisticated investors. More than 10,000 hedge funds are operating today (6). In fact, they are some of the most active and visible players in the 21<sup>st</sup>-century investment community so far.

Hedge funds are attractive to investors because they are more "liquid." They invest in public

companies, and investors can exit a fund at predetermined intervals during the course of a year. VC funds, on the other hand, aren't as liquid. The typical target period for return of capital to investors is seven to 10 years. Investors who withdraw sooner can face penalties as high as 50%.

Because of hedge funds' liquidity concerns, they do not invest in privately held biotech companies. However, they are frequent providers of capital for publicly traded ones and are active investors in private investment in public equity (PIPE) transactions and convertible debt offerings.

## DUE DILIGENCE ON THE RISE

VC firms historically cast large nets, spreading their investments across a

wide portfolio of companies. Of every 10 investments, they bet two would be grand slams, three would generate acceptable returns, and five would go out of business. It was believed that the companies that “made it” would generate a significant enough return to make a fund an overall success. Today, however, the “wide-net” theory is giving way to more concentrated portfolios. VCs are performing deep due diligence and putting more money into smaller, more focused groups of companies. The new idea is to put a solid stake in the ground to develop expertise or focus in an area and really get to know that space.

That, in turn, places an emphasis on due diligence. Entrepreneurs can expect VC investors to spend a great deal of time focusing on fundamentals, learning their business, and thoroughly reviewing companies’ business plans before signing investment contracts. Companies need to provide clearly identified target markets, detailed game plans for attacking those markets, explicit financial forecasts, and sensible valuation expectations. They also must survey their competitive landscapes, provide rational explanations for why they can win, and put together product development “road-maps” with reasonable milestones and cohesive plans for meeting them.

Similarly, VC firms are hiring executives and managers with operational experience in the areas in which they plan to invest. This helps them become experts in their fields, more integrated with companies’ management, and have a greater understanding of companies’ operations. These efforts help VC firms better help companies grow and overcome hurdles as they strive for liquidity.

### **LATER-STAGE FOCUS**

In general, biotech companies are not profitable. They thrive on the expectation that over five, 10, or 20 years they’ll develop a product, take it to market, and finally reap revenue. The focus of investors today is on later-stage companies. Biotech businesses that have viable products in their pipelines — or even some revenue-

generating product — can command a significant premium during capital-raising efforts. The shift toward later-stage companies is evidenced by the fact that from 2000 to 2005, VC funding grew to represent more than half of all biotech investments (2).

The shift is precisely attributable to the issue mentioned earlier: that VC firms are generally making fewer and larger investments. This places a premium on finding companies that will be successful. Later-stage investments present a lower risk that a VC will make the wrong investment. This is because the science aspect of an investment — the hardest piece of the puzzle to complete successfully — has already been tackled. Only the execution risk remains: marketing, manufacturing and distribution, financial management, and so on. And those are areas where VCs feel comfortable taking a more active role if a business starts to slide.

### **HOT MARKETS**

Investors cannot assume that an IPO will provide an exit strategy. Over 90% of VC exits from companies came from strategic mergers and acquisitions (7). One of the hottest segments of biotechnology today is large-molecule protein drug development for treating diseases such as cancer and immune deficiencies. Over 50% of recent biotech transactions involved large-molecule companies.

Five years ago, that was just 2% because the focus at the time was on small molecules. Now that market is tapped out. Large molecules can be used to develop personalized medicine and actually cure diseases instead of just treat their symptoms.

Recombinant proteins and antibodies have demonstrated therapeutic benefits, and a few large-molecule drugs have achieved blockbuster status. Drugs such as Enbrel, Rituxan, Herceptin, Erbitux, and Avastin have brought hope to patients suffering from a range of diseases. Clinically, the overall success rate of large-molecule drugs is higher than that of small-molecule medicine mainly because large molecules are usually more targeted to specific diseases.

Another reason that large molecules are drawing attention from investors is that companies developing them can potentially provide quicker and better exit strategies. At a time when large pharmaceutical companies, which traditionally work on small molecules, are desperately looking for ways to increase their productivity and fatten their pipelines, it’s logical for “big pharma” to maximize on large-molecule discovery and development capabilities.

Many VC firms are also focusing on molecular diagnostics. Five years ago, these investors didn’t want to touch the molecular diagnostic space because they believed there was no money to be made. Now the molecular diagnostics space is expected to skyrocket over the next two years. With more targeted and personalized medicines in development, this segment is playing an increasingly important role in health care because it can identify appropriate patient populations to maximize efficacy and minimize side effects. Insurance companies are also welcoming new tools to screen patients and prevent the issuance of unnecessary and costly prescriptions.

One example in the diagnostics field is Genomic Health, Inc. This California company has developed and commercialized a revolutionary molecular-based cancer screening method that predicts the likelihood of breast cancer recurrence and the benefits of chemotherapy for early stage breast-cancer patients.

Specialty pharmaceutical, medical device, and “cosmeceutical” companies are also expected to take off in the coming three to five years. People are living longer, so they will need more health care. Wealth is increasing in developing nations, where people are able afford more advanced treatments. Meanwhile, Western-style medical care is expanding globally, which heightens health standards and the need for sophisticated technology and equipment even in developing nations.

Turning to the numbers, medical devices has proven its rank. In 2006, the sector earned a record total of \$2.6 billion in investments — a rapid increase over its \$1.8 billion earnings

in 2003. Even better, medical device investments skyrocketed to \$1 billion during the second quarter of 2007 alone, the highest total on record and 58% above the second quarter of 2006. Health care companies overall have already set records in 2007, receiving \$2.9 billion of investments in the first quarter of 2007 and \$2.4 billion during the second quarter. That sets the pace for the sector to draw more capital in 2007 than in any other year since 2000 (8).

## OUTLOOK

The VC market has changed greatly since 2000's bubble. Although the number of firms is decreasing, those that remain are expanding their geographic focus and using due

diligence to find legitimate, growing companies in which to invest. They're also increasingly funding companies that are in later stages of product development and those that focus on large molecules, molecular diagnostics, specialty pharmaceuticals, and medical devices. Companies that fit within this outlook are on VC firms' radar today and have a greater chance of receiving funding.

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