

Entrepreneurship

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▼ The habits of successful bioentrepreneurs

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An analysis of the behaviors that have best served life science entrepreneurs.

The biotechnology community has always looked to its role models for guidance. The industry is populated with so-called serial entrepreneurs who have not just been successful once, but have repeated their success in subsequent company formations. What is it that makes some individuals succeed? Is it an innate skill or a behavior that can be learned? This article, based on our observations of the industry over the past two decades and more recent discussions with company executives and investors, outlines the habits you might want to acquire and those you need to avoid.

Habit formation

Habits are repeated activities or behaviors that are performed almost unconsciously. Whether good or bad, habits are often unnoticed by those that have them. There are two kinds of habits relevant to bioentrepreneurs. First, there are innate qualities, behaviors inherited or learned so deeply and so early in life that it is rather hard either to unlearn them later or to acquire them. In our discussions with entrepreneurs, many mentioned optimism, persistence, enthusiasm, self-confidence and intelligence as desirable entrepreneurial habits. Although such qualities undeniably form part of the minimal characteristic set one expects in most entrepreneurial individuals, they are arguably difficult to change. Equally, there is an immutable list of innate bad habits—sloth, lack of focus, conceit and impatience—that one would not expect to find frequently among those building biotechnology enterprises.

The second class of habits, however, is of greater interest—those habits that can be acquired as needed and then worked at and honed (see [Table 1](#)). These habits are worth worrying about because they can be managed, controlled or changed if necessary.

Table 1: Habits to kick

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|--|
| • Ignoring advice |
| • Being insular |
| • Following trends |
| • Not delegating |
| • Staying on too long |
| • Working too hard and not balancing your life |
| • Making promises that you can't deliver on |

Nonselected traits

Natural selection operates strongly within the narrow niche of the bioentrepreneurial world. Many bad characteristics emerge, but because of the stringency of selection in biotechnology, either the habits or the individuals who persist in them are eliminated from the pool. What seem to be bad habits are just repeated occurrences of the same adverse traits in many individuals.

Although entrepreneurs need to be driven and have vision, biotechnology simply does not work through the romantic aegis of the maverick iconoclast or the steadfast genius quietly perfecting the realization of his ideas. Deficiencies in leadership or team membership are the chief bugbears of

senior executives and investors. These include ignoring advice, insularity and inability to delegate or to relinquish leadership when your company faces issues beyond your competence (see [Table 2](#)).

Table 2: Best behaviors

• Recognizing the limits of your knowledge and competence
• Raising money opportunistically
• Hiring good people and then looking after them
• Communicating honestly
• Experimenting and acting decisively
• Shifting to industrial mode and executing the business plan effectively
• Reassessing habits frequently

Reflecting the views of at least half the entrepreneurs and investors we spoke to, Helmut Schuesler, managing partner at Munich-based investment group Techno Venture Management (TVM), is irked by those who "appear completely receptive to advice from investors or board members but who then go off and do precisely just what they originally planned." Norman C. Selby, CEO of TransForm Pharmaceuticals (Lexington, MA), cited arrogance and insularity as major deficiencies that would keep a CEO from listening to or seeking advice from members of the management or board, or from external thought leaders. Additionally, these qualities might lead him or her to ignore or misunderstand the marketplace. Ego mania is a destructive trait, says Ken Carter, CEO of Avalon Pharmaceuticals (Germantown, MD). "Thinking that you are smarter than everybody else only means that you aren't. Thinking that your idea and way of doing things is always the best and should be adjusted only in the most dire circumstance is the kiss of death for any company sooner or later." There is a balance to be struck, however. Those who simply follow biotechnology fashions or who slavishly appease their advisers or the market are not providing the right leadership. Tim Harris of Structural GenomiX (San Diego, CA) wants bioentrepreneurs to avoid "being seduced by the market" into changing company strategy.

A frequent compensating mechanism when entrepreneurs are facing difficult situations is to throw more hours at the problem at hand. This is not a desirable way of working and rapidly becomes unfeasible as the complexity of a company and its problems increase, says Gunnar Brink, CEO of nanobiotech company Nanotype (Graefelfing, Germany). He draws a warning from Boxer, the horse in George Orwell's parody of communism, *Animal Farm*. Boxer's only response to difficulty is to repeat the mantra, "I shall work harder." Eventually, of course, he is sold for glue. "Love your work and always work hard," says Brink, "but simply working harder is a bad habit...entrepreneurs need to create environments that allow them to reassess and refocus."

Know your world

The single major challenge for bioentrepreneurs is understanding precisely what is going on in the overlapping worlds of science, technology, business, finance and law. The bioentrepreneur's vision of his or her company needs to fit into that context. Mark Bodmer, CEO of Lorantis (Cambridge, UK) neatly summarizes the task. "The essence of entrepreneurship is a psycho-oxymoron—the combination of invincible optimism with steely objectivity. The incompatibility between these two requirements is called stress!"

Bioentrepreneurs must be able to identify the difficult questions, according to David Oxlade, CEO of Xenova (Slough, UK), or at least be able to identify who can ask those questions. That spirit of inquiry allied with a keen skepticism, says Oxlade, is key to locating the weaknesses in an approach and therefore the remedies that are needed. And useful information comes from many quarters, says Avalon's Ken Carter. "Seek out and listen to advice from experienced and successful entrepreneurs. Listen and learn from your employees. Listen and learn from your competitors; and be flexible enough to incorporate what you learn." When was the last time your company asked its employees for their ideas?

It is important not to lose sight of the fact that the exciting, fast-paced, complex and unpredictable business you are supposed to be running is still at base just a business and, as such, must conform to basic business rules. Thus, Solexa's (Cambridge, UK) CEO Nick McCooke will not be relaxing after attaining intermediate technical or funding goals, even though these goals are critical while his company is still at an early stage of developing its technology. "Don't think you've achieved anything until you're cash positive, and make sure that happens as soon as possible," he says. "It's biotechnology, but we still need to apply conventional business analysis and thinking to stay in the real world."

Finance

Perhaps borne of current straitened circumstances, the good habit stressed most often by bioentrepreneurs is raising money. "Raise money when it is available, not when you need it," says Elmar Maier, CEO of GPC Biotech (Martinsried, Germany), one of Germany's success stories. "Take the money when the money is there," Tim Harris, CEO of Structural Genomix, says bluntly, "and take more than you think is enough." Structural Genomix raised \$77 million in 2000 just two years after its

foundation when its burn rate was under \$5 million a year. Avalon Pharmaceuticals similarly raised \$70 million in its B round in 2001, two years on from its foundation. Co-founder and CEO Ken Carter reckons that one of the major contributors to biotechnology mortality has been the tendency of both novice and experienced entrepreneurs to insist on unrealistic corporate valuations and product pricing. "This one bad habit has killed more good companies than any other," he estimates. "When entrepreneurs cannot accept the reality of the market for their idea, patent, company or services, they end up with nothing. Whether it's start-up companies seeking capital or later-stage companies trying to make deals, it's better to have a small piece of a big pie than a big piece of nothing."

It is not enough simply to be opportunistic in fund-raising, however. Tim Harris recommends working only "with the very highest quality investors," those with a track record of success and integrity. "These guys will be board members and an experienced board is a must," he explains. Kate Bingham, general partner at Schroder Ventures Life Sciences (London), adds a useful tip that should form part of the due diligence companies perform on their potential investors: "If possible, select investors that have recently raised a large fund. This means that they will have money left from that fund for follow-on activity." If you receive a tranche late in a fund's lifetime, she says, the unpalatable alternative is that the investors will be under pressure raising their own funds and focusing more intently on earlier internal rates of return.

Spend wisely

The necessary corollary of raising sufficient money is that it should be spent wisely. "Watch the cash, laddie!" is how Tom Shepherd of CXR Biosciences (Dundee, UK) puts it. Companies can become complacent, he says, raising large sums of money, becoming comfortable with a given burn rate but somehow forgetting that they have no income. "Even the words 'burn rate' show a lack of respect for cash," says Shepherd. "Who in their right mind would burn cash? We invest cash." Ed Stuart, chief business officer of U3 Pharma (Martinsried, Germany) agrees with Shepherd: "Investing outside your *raison d'être*—that is, in infrastructure, elaborate administrative facilities, structures, flagpoles, the fish tank in the lobby—does not enhance your IRR [internal rate of return]." But Shepherd even recommends shunning unnecessary spending at the core of the company. "Do not build a state-of-the-art laboratory: companies succeed or fail on their technology, business model and execution; they do not fail because they have a cramped old building." Nanotype's Brink believes that the rush to hire people can also be a substantial drain on cash resources. "Many investors want to see the complete team in place when a company launches. However, hiring specialist managers or executives whose competences you cannot fully employ can ruin motivation and cost a lot of money."

In the same vein, Lloyd Segal, CEO of Caprion Pharmaceuticals (Montreal, QC, Canada), urges companies to shift to "industrial mode" as soon as reasonably feasible. "Hesitant bioscience companies can run through all their cash 'optimizing' when a pharmaceutical player with the same data would have shifted to production months or even years sooner," he says. "It's important to know when to stop developing and start operating." Investors seem to see things the same way. Schroder's Kate Bingham reckons that companies need to strike a balance between getting sufficient preclinical information to know that a compound may work in humans, but not so much that the development process is slowed down. "It is important to find the right balance between quick-and-dirty and gold-plated to give a trial the best chance of success," she says. Or as Mark Bodmer of Lorantis puts it, "Put off until tomorrow what you do not have to do today."

People

One of the principal levers for success is a company's culture. This is true of the largest multinationals down to the youngest start-ups. A company's culture is the set of values and core beliefs that mold its decision patterns and guide its actions. In multinationals, culture change is difficult because it is likely to be deeply embedded into the company's structures. In start-ups, there is more flexibility to create and maintain desirable cultural qualities. Typically, such cultural change will be triggered by the chief executive, although it is achieved from the bottom up.

One of the most cited good habits was the hiring and retention of high-quality individuals with diverse skills at all levels within the company, although executives emphasized that the rate of hiring needs to be measured. "People are your biggest asset. Even if you have the best idea, product or patent in history, to create and derive monetary value from it, you must hire and work with other people. The stronger the people, the better the chances of success," says Avalon's Carter. This view is echoed by Nanotype's Brink who adds that a CEO should not let his or her own ego get in the way of the hiring process: "Always surround yourself with people that are better than you and have different skills from you." Indeed, it is a common message that CEOs need to ensure that they attract a real diversity of styles and skills in their management team and board.

Execute

Even if a company's driving individuals have been smart enough to ensure its funding and ability to attract the right people, they must get in the habit of seeing the job through. "In my experience," says Norman Selby of TransForm, "what eventually differentiates the performance of biotech and pharmaceutical companies is not the quality of their strategy (at a high

level, many companies have the same strategy), but the quality of their execution. The need to act at the coal face is paramount to a continued commercial existence." Dirk H. Ehlers, CFO of screening and chemistry company Evotec OAI (Hamburg, Germany), says, "Focus your thoughts on customers early on, and love business development as much as science."

Think Nike—just do it," says Ed Stuart of U3 Pharma. "If you need something, go get it. When I was starting U3, I negotiated on my cell phone with a person who controlled hundreds of millions of Euros while I was in a supermarket buying toilet paper. Why? Because we needed both kinds of paper, just for different reasons."

Communication and presentation

Many people identified honest communication as a key habit to work at. Caprion's Segal put the imperative clearly: "Communicate, all the time, to everyone. To the external constituencies...and the internal constituencies, including your team, your employees and your shareholders. Have you ever heard of a CEO who was criticized for keeping everyone way too informed?"

Even within a relatively small organization, it is possible for a member of senior management to lose contact with his or her staff. The reality of the disconnection was brought home to one CEO when, after a relatively rare visit by the CEO to the laboratory, a senior colleague reported the following exchange between two junior researchers: "Who is that bloke?" "It's the CEO." "What does he do?" "He goes away a lot, but when he comes back he brings us money."

To establish and reinforce a sense of corporate purpose, Jonathan M. Rothberg, CEO, president and chairman of genomics company CuraGen (New Haven, CT), says that bioscience company leaders cannot afford to be remote. He recommends that CEOs "leave their computer at home" and advises, "When at work, manage by walking around and understanding what people are doing and what problems you face."

The most effective use of public relations and investor relations advisors is not as a mouthpiece, but as ears. External agencies want your business, but you should establish at the outset that they will be failing in their duties if they do not reflect back to you what the outside world thinks of your announcements and your company.

Qualities that are a must-have in the early days of a start-up can slow a company's growth if the CEO does not adapt. John Hamm, an entrepreneurial guru and venture partner at Redpoint Ventures (Menlo Park, CA), has identified four management tendencies that work for small company, but become Achilles' heels when those same executives try to run larger organizations¹.

First, Hamm warns that misplaced loyalty to members of a founding team may become a liability as an organization becomes more complex. Second, task orientation, which is critical in driving toward an early milestone, such as an investment or licensing event, can be seen as excessive attention to detail and may cause a large organization to lose sight of its long-term goals. Third, single-mindedness, though important in visionary planning toward introducing a revolutionary idea or product, may limit a company's potential as it grows. Finally, Hamm noted that although working in isolation is fine for the entrepreneurial scientist, it is disastrous for a leader whose expanding organization increasingly relies on many other people.

Toni Schuh, CEO of San Diego-based Sequenom reckons that in many cases the good and bad habits of bioentrepreneurs are "closely related, if not the same...the traits that make you successful will kill you," he says. Vision, for instance, is an essential quality in a CEO because he or she needs to project to investors, colleagues and collaborators alike a clear image of something that has yet to be built. "Vision is a core value for the benefit of the company when it is translated into a clear and concise long-term strategy," he says. But he argues that vision can be a bad habit if it blinds you to the need to implement essential changes in strategy. Schuh sees the opportunism of the bioentrepreneur as another double-edged sword. Early on in a company's life, nimbleness can bring in funding, generate business and capture rare talent, but the same "butterfly" traits can bring about an undesirable impulsiveness in the larger organization.

Rehabilitation

One solution, according to John Brown, CEO of vaccine producer Acambis (Cambridge, UK), is to recognize the need to review and re-assess your business habits and those of the company. "The most important attribute is not to have habits," he says. "Be as flexible as possible."

There is an alternative, of course. The doggedness of human nature, and the fact that biotechnology businesses cannot wait for their executives to learn more appropriate habits, means that it is often easier and quicker to replace the individuals running a company rather than to wait for them to change their habits.

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