

CAREER DEVELOPMENT : ARTICLES

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Opportunities: Master of Disaster

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 United States
 22 February 2008

When I started my first company, I thought I was prepared for the ups and downs of the start-up life. I was single, had a great (and cheap) apartment, and had supportive friends and family cheering me on.

But only 9 months into the adventure, I encountered the first (of what would be many) disasters: We ran out of money. I was 3 weeks away from getting married, my fiancée had moved to California--jobless--to join me, and the investment market had collapsed in the wake of the telecoms meltdown.

We survived (barely) and went on to build a profitable company. Today, I look back on that moment of disaster and realize that it was absolutely pivotal to the success of our company. Fact is, we *needed* to run out of cash in order to learn what was *really* necessary to make our venture succeed. It forced me into a full-frontal assault on potential customers and sponsors and led us to land a major contract with the U.S. Army later that year. Although we suffered from poor cash flow for two more years, we had turned the corner. From then on, we executed our business plan with determination and focus. Our near-death experience forced us to develop the discipline that has allowed us to survive ever since.

When I tell the graduate students and postdocs who attend my career-development workshops that running out of money was one of the best things that happened to my company, I get some confused looks. Graduate school comes with its ups and downs, but disasters of that magnitude are rare and unwelcome. One of the aspects of a scientific career that I suspect ATTRACTS many people is the idea that, if you're bright and work hard, you can follow a safe and predictable career path all the way to retirement. An advanced degree in a technical field--that's a safe career choice, right?

No. Detours and setbacks--even disasters--are inevitable parts of the life of a start-up and a scientific career. How you deal with them when they come, and the attitude you adopt during a catastrophe, to a large extent determines how much damage--and, eventually, how much upside--the event creates.



CONGRATULATIONS! YOU'VE BEEN DENIED TENURE

My friend Tim is a good example of this. Tim was a very successful graduate student in chemistry and landed a plum postdoc at a research institute on the West Coast. A member of a productive research group, Tim pumped out a number of excellent papers during his 3-year postdoc, one of which was seminal. When he was offered a tenure-track position at a prestigious liberal arts college in New England, he thought his dream of a scientific career had finally come true.

Tim did very well as a college chemistry professor. He got good marks on his teaching evaluations and started a productive laboratory. During summers, he returned to the institute in California and continued to churn out publications. By the time he came up for tenure, he had nearly as many first-author publications as the rest of the chemistry department

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So when he opened the letter from the dean that told him that he had been denied tenure, he was certain there had been a mistake. He was sure his tenure package had been switched with that of some hapless assistant faculty member. After receiving confirmation from his department chair, Tim was devastated--and furious. There was no way to interpret this event as anything but a complete disaster for him and his career.

Tim started to draft a rebuttal to the dean of the faculty, but he stopped after having a long conversation with one of his colleagues at the institute where he spent his summers. Tim realized that he had a strong network of professional colleagues who thought highly of him and his work. He had something close to a standing offer from the institute where he spent his summers, and the weather in California was a lot better than what he was used to.

Tim relocated to the West Coast. After a 6-month temporary assignment, he landed a permanent staff position at the institute. His career, and his life, took off like a rocket. He married his girlfriend of several years (who herself was forced out of a college teaching job when her contract was not renewed) and today is recognized as one of the intellectual leaders of his field.

"If I hadn't been denied tenure," Tim reflects, "I would have never focused as much on my research, I would have never relocated to California, and my girlfriend and I probably wouldn't have stayed together."

THE MYTH OF LINEAR SUCCESS

There's a misguided belief, shared by many, that a successful career is stable, predictable, and free of setbacks. One moves in a steady progression from grad student to postdoc (to postdoc, to postdoc ...) to an assistant professorship, tenure, full-professorship, emeritus—or so the story goes.

In reality, nearly all scientists encounter setbacks, singularities that disturb the local time-career continuum. Psychologists and career counselors have found that people's ability to cope with and adapt to setbacks when they occur is a major predictor of overall happiness and professional success.

Poetry break:

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One Art, Elizabeth Bishop

There is a similar myth about successful business ventures. It's often assumed that a company that has grown to be a huge success did so because of flawless execution of a brilliant, forward-think business plan. Interviews with now-successful company founders reinforce this idea; they are eager to advertise the brilliant moves and their inevitable success. It is rare to hear a successful entrepreneur admit to the blunders and setbacks that imperil almost every venture at some point in its history.

So if it's true that setbacks and near-disasters occur in so many successful ventures, does that mean you should seek out setbacks and near-disasters? Of course not. Setbacks are NEVER pleasant. But some people fear failure so intensely that they never move outside of their comfort zone--and that may be an even bigger mistake than seeking out disaster. When even a small setback comes their way, such people often are totally devastated and unable to discern and pursue the shiny lining beyond the dark clouds.

You cannot know whether a setback, when it comes, will be a short-lived perturbation or a seismic shift in your professional future. But there are a few things you can do to reduce the emotional trauma of such events and increase the odds that a setback can be turned to your advantage. First, keep your eyes and ears open. Many setbacks are preceded by warning signs. Second, maintain a strong professional network. One mentor of mine said his definition of "mental health" was the feeling that you have options. Finally, keep a good attitude. The anger and frustration you feel when a setback arrives is natural. But dwelling on the injustice of the setback tends to keep you focused on the past and can prevent you from recognizing the new opportunities your revised situation offers.

Peter Fiske is a Ph.D. scientist and co-founder of RAPT Industries, a technology company in Fremont, California. He is the author of [Put Your Science to Work](#) and co-author, with Dr. Geoff Davis, of a blog (at phds.org) on science policy, economics, and educational initiatives that affect science employment. Fiske lives with his wife and two daughters in Oakland, California, and is a frequent lecturer on the subject of career development for scientists.

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DOI:
10.1126/science.caredit.a0800027

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