

Careers

Getting Started In Start-Ups

The Committee for Professional Opportunities for Women (CPOW) hosted a panel at the 56th Annual Meeting in San Diego in February called *Getting Started in Start-Ups*. Panelists with a broad range of experiences in start-up companies shared their insights in starting start-ups: *Gina Devasahayam*, GenetikSignal, is transitioning from academia to starting a company based on her research discoveries; *Chris Mathes*, Sophion Bioscience, Inc., has worked in both scientific and business development ends of start-up companies; and *Steve Smith*, Fluxion Biosciences, has worked at four different start-up companies and initiated two start-up ventures of his own. The panelists also took questions from the audience. Below are some highlights from this session.

Academia or Industry?

If you're not sure whether an academic or an industry career is right for you, do some soul-searching to discover what you want to do. It's a misconception within academia that industry is limiting; there is actually freedom in industry. At present only 10% of PhDs become professors, making industry a good career option. Keep your CV and resume current, showing how your academic studies are related, applied, or translational, beyond basic science. Develop your presentation so that it tells a story. After your PhD, consider consulting for a company developing a product you use. Find these companies at the next meeting you attend and talk to them. Get to know the company and the employees. By working with them you'll get your foot in the door, and the start-up will get your expertise at a manageable cost. If you can't get a paying job, volunteer instead. Be persistent and show initiative in other ways.

Another way of getting experience is to do a postdoctoral fellowship at a company. In recent years the number of industry related postdoctoral

fellowships are fewer due to restructuring of many companies. The industry postdoctoral fellowship (two-three years) is typically shorter than an academic postdoctoral fellowship. Whatever you do, don't act like a failed academic who had to resort to a career in industry as Plan B. This attitude will not ingratiate you to prospective industry employers.

Just because you choose a career in industry doesn't mean you'll have to disassociate yourself from academia. Collaboration between academia and industry can be essential not only to advancing your research but to garnering support for

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your start-up. Partner with universities and get on the same team—they will advocate for you if something is in it for them. Publishing is still an important part of an industry career, and often is a result of

collaborations between colleagues in industry and academia. If you are getting a postdoctoral fellowship at a company you can negotiate when and what you would be able to publish before you accept the position. On your own, you'll publish mainly in industry journals rather than academic ones, so be careful not to publish early things you might want to patent later.

Once you choose an industry career, it can be hard to jump back to an academic career. It comes down to leaving your comfort zone and timing it right. Give yourself a two-year window in which to allow yourself to go back to academia. Beyond two years this transition becomes significantly more difficult.

Getting Started

A great way to learn the ropes of a start-up company is to work for one. You'll get experience and the chance to develop a strong interest in a technology that you like. Choose a company that shares your outlook and get that basic experience in how to make a business function. There may be more

industry jobs in your area than you might think. Look around to find out what's available where you live. Or, think about where you want to live, what works for you, and go there. If you want a job in pharmaceuticals, for example, it helps to be near a hub. Other companies want to make incubators too, so do some research and see what you can find. Some cities are more attractive as they are more active in helping start-ups and have more incubators available for start-ups. If you are working at a university and beginning a start-up company you have to be careful to demarcate the % of time that you will devote to your company and to the university.

This will avoid any future potential conflicts of interest. Having entrepreneurial mentors is a great resource to share ideas and get suggestions.

If you're interested in offering a service instead of a product, make sure there's a market for the service you're offering. Though this option boasts low overhead costs and a generous income, it's competitive. Use Google to scope out your competition, and then get out there and lock people into your service. Keep your cost sustainable, though; don't undervalue your service. In the best-case scenario, people are coming to you for the service already.

Funding and Fundraising

As with any career, starting your own business comes with challenges—funding and fundraising most prevalent among them. This sets the risk level higher than that of an academic career. Finding start-up funds is especially difficult, as venture capitalists aren't willing to invest at the high-risk discovery stage. If you can avoid phase I clinical trials and use a molecule that is already FDA approved, you've got a head-start. Above all, you must make sure you're stable enough to withstand the ups and downs of the risk. Having a secondary source of income is contingent upon the level of risk you can handle. Even if you never turn a profit but have a constant flow of funding, this is a good business plan.

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In the beginning, get grant funding from the federal and state governments, who will support innovation to create jobs. Use resources like those found at Startup America Partnership (www.s.co). Some of these opportunities aren't exactly funding, but can help you make connections with potential funding sources. Attending specialized conferences dedicated to funding and commercialization of new companies is worthwhile. Entrepreneurship programs like the INNoVATE™ program at Johns Hopkins University Carey Business School (http://carey.jhu.edu/our_programs/Innovate) can help you

hone the tools you need to get started. You can also buy in this expertise by selling shares: hire a CEO whose job it is to get venture capitalist funding for your company. However, this assistance will come at the expense of how much of your

company the CEO will own. When it comes to legal aspects of starting your company, don't think twice about outsourcing those to lawyers. The investment is well worth it. Some pro bono legal services are available to start-ups in certain cities. Another aspect that should not be neglected is financial accounting for the start-up which can also be outsourced.

Although many start-ups never get a final product finished, if you have a product then hiring a business manager to help market and sell the product effectively is usually beneficial.

The Bottom Line

Your personality is your greatest asset in starting a company, more crucial even than a flair for business. You need to be personable and able to work with all kinds of people. Always be friendly with people you meet along the way. Search LinkedIn for contacts, network, and take steps toward starting your business no matter where you are in the process. Above all, enjoy your work.

—*Merritt Maduke and Aldrin Gomes*
CPOW members