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Can You Go Home Again?

Going from academia to business – and back again – is no easy feat. The exceptions not only prove the rule, but also that it can be done.

By Karen Pallarito

In 1988, biochemist Israel Charo got swept into the vortex of the biotech world when he took a promising target for blocking platelet aggregation and helped launch the company Cor Therapeutics. In short order, he was overseeing Phase I trials of Integrilin, an intravenous therapy for patients with acute coronary syndrome. The drug, a GPIIb-IIIa antagonist, went against the odds for biotech success and made it to market in 1998. In 2002, Millennium Pharmaceuticals acquired Cor Therapeutics. Last year, sales of Integrilin hit $315 million, according to Schering-Plough, which now markets the drug in the United States.

In 1991, the year that Cor went public, Charo, a former investigator in the platelet and thrombosis group of The J. David Gladstone Institutes at the University of California, San Francisco, had a change of heart. "I was not prepared to end my career as a basic scientist," he says. "And because Cor was a small company, [it] could not afford to have a big effort in basic science." So he approached Robert Mahley, Gladstone's president, with the idea of returning to the institute to start new investigations into the origins of atherosclerosis. "He was very enthusiastic," Charo recalls. Shortly after, he was back. He returned to his former assistant professorship to start a new research program focusing on cytokines, and at a salary that was a bit higher than what he made before leaving. (Charo declined to talk about how he fared financially at Cor Therapeutics.)

The whole experience helped him reaffirm his first love: basic science. "I personally find it more exciting to be working in areas which are, maybe, one or two steps removed from a clinical application," he says.

But Charo is likely the exception. Leaving the academic life to risk it all in biotech and then return to academia is not a feat that faculty scientists perform very often, or with great ease. Academic scientists are notoriously independent; industrial scientists often work in teams. Academia nurtures basic science; industry values discoveries that can be brought to market. "The two environments are very different, and the motivation for being in one environment versus the other is also very different," notes Maureen Kerber, president of the Kerber Group, a Kirkland, Wash.-based recruiter for the biotech industry.

During the biotech boom of the 1990s, startups were awash in cash and willing to take a chance on academic talent; academics able to adapt to industry's demands were able to carve out well-paying careers. But, "it was generally perceived that going to industry was a one-way ticket," observes Molly B. Schmid, a professor at the Keck Graduate Institute in Claremont, Calif., which trains scientists to enter the biotech industry. Still, some of them did come back to successful academic careers, she adds. Although it's difficult to quantify the movement of scientists from academia to industry and back, observers say it is relatively rare.

Bridging The Gulf

David Siderovski is another success story. He chose a postdoc as head of the quantitative biology laboratory at the Amgen Research Institute in Toronto, a basic research outpost of Amgen. But after three years, he missed the academic life. Heading back meant taking a pay cut and losing generous fringe benefits, "but my academic freedom has been worth much more than money," he says. From his experience, he counsels students and postdocs in his department to not assume they can move easily between the two camps, "especially not from industry back to academia." In industry, he says, the focus is on securing intellectual property and protecting trade secrets, not publishing papers. "Without being able to point to Medline and say, 'Here's what I've been doing recently,'" it can be difficult to get back to an academic position, he says.

The distance between the two worlds has only increased, says Cliff Mintz, a bioscience education consultant who has worked in both industry and academia worlds. In recent years, for example, industry has invested heavily in the latest research tools. "In 2006, the way in which research is done is so foreign to anybody in academia that industry has no need for anybody coming out of academia today," he asserts.

But Jean Brenchley, a professor of microbiology and biotechnology at Pennsylvania State University, still sees opportunity for postdocs. Brenchley, who switched from academia to industry and back again in the 1980s, encourages graduate students to ask important questions and use the best tools they can to answer those questions. "If they've learned to think and apply those skills, then I think they can make the transition," she counters.

In Brenchley's case, she left Purdue University, where she was studying the production of amino acids by microorganisms, in the early 1980s. The biotechnology revolution was in its early stages, and top-notch academic scientists were suddenly being recruited away. "I started getting these phone calls from various biotechnology companies wanting me to come and visit them, and I kept saying, 'No, I don't have time.' And the students in my lab were the ones who said, 'Wait a minute, you should look at these things to see if you should tell us to go there.'" That's when Brenchley became enchanted. "It was a whole new thing," she says. She ended up at Genex (since acquired by Enzon Pharmaceuticals). As an executive in a small company, she learned to do it all. "I've often said three years in a small biotechnology company was equivalent to the learning experience of 20 years in a major company." But ultimately, she got an offer she couldn't refuse when the president of Penn State recruited her to start a biotech institute. She, like Israel Charo, was happy to come full circle. ■

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Keeping Doors Open

If you make the transition from academia to industry:

» **Don't burn your bridges. Not coincidentally, many scientists who leave industry to return to academia end up at their former academic institutions. You should maintain those relationships, just in case.**

» **Don't let your name drop out of sight. If you're working in industry and not publishing very much, you need to take initiative to remain visible and productive to your academic colleagues. Participate in medical society meetings. Edit an academic journal.**