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At a time when the industry is struggling with innovation, it might do well to learn a lesson from a few great innovators.

Passion, Innovation, and Loss

It's almost inevitable that when people speak of pharmaceutical innovation that someone doesn't ask how pharmaceutical companies can become more like Apple. It's a question that sprung up again with the death last month of Steve Jobs, Apple's iconic founder and innovator-in-chief. What was it about Jobs and the company he founded that nurtured so much innovation and creativity, and can it really be brought into pharmaceutical innovation?

Jobs outlined his personal trajectory in a tale of passion and loss in his 2005 commencement address at Stanford University. His path to Apple started when he dropped out of Reed College in order to be free to take any course that interested him rather than follow a prescribed curriculum leading to a specific major. This in turn led him to a calligraphy course that, he says, informed his ethic of blending aesthetics and technology to create Apple products. But as with many great relationships, what started out with so much generative promise ended in heartbreak—Jobs's specifically, when at the age of 30 he was asked to leave the company he'd founded.

"I'd been rejected," he said, "but I was still in love." That first loss, painful as it may have been also relieved Jobs of the "heaviness of being successful," and replaced it "with the lightness of being a beginner again." Jobs the beginner embarked on yet another creative period that resulted in the formation of Next and Pixar, which ironically, brought him back to Apple and it to him for yet another creative period that yielded iPods, iPhones, and iPads and revolutionized both the computer and the communication industries.

The other great focusing event in Jobs's life, as we all now know, was the imminence of his death from pancreatic cancer. In the face of death said Jobs, "we are already naked," and because of which, he admonished Stanford's class of 2005 not to be "trapped by dogma, which is living with the results of other people's thinking." Rather, Jobs urged the graduates to follow their individual passions.

Jobs died the same week the winners of the 2011 Nobel Prizes were announced, and among those winners was Ralph Steinman, a Rockefeller University professor, who elucidated the biology of dendritic cells. Steinman died the same week as Jobs, just days before the Nobel announcement was made. But in an interview on National Public Radio on Oct. 3, 2011, Adam Steinman, the Nobelist's son talked about his father's passion for his work, and his desire to "instill a sense of excitement and discovery in the next generation."

Reading these stories, one might suggest, as Jobs did in his Stanford address, that it's the threat of loss that should make one insist on following their passions to discovery. But I keep thinking of one my professor's observation that children are the true scholars, because they want to learn everything and are unfettered by dogma. Jobs and Steinman and other great innovators are the ones that, in spite of prevailing dogma, never lose their childlike passion for learning and exploring. So the pharmaceutical industry may be misguided in looking for ways to inspire innovative thinking in its scientists. The real secret might be in not wringing it out of them. ♦