

## AN AUDIENCE WITH...

## John Lechleiter

John Lechleiter started working at Eli Lilly in a research laboratory, as an organic chemist, in 1979. Over the next three decades, he climbed the management ladder all the way to the top, becoming Chief Executive Officer (CEO) of the large pharmaceutical company in 2008. In December, after 37 years at Lilly, Lechleiter retired. He spoke with **Asher Mullard** about his career path, the prospects for chemists with their eyes on the executive suite and his high-risk, high-reward bets on Alzheimer disease drug development.

**Q** *Did you expect to head down the management path when you started at Lilly?*

Absolutely not [he laughs]. My ambition was to do bench chemistry. I really liked it, and was pretty good at it. Later, I had an opportunity to move into a managerial role. I thought that the departure from the lab was probably a one-way ticket, so I thought a lot about it. But I eventually decided to make that change. And here I am today.

**Q** *Did your background in chemistry affect how you ran the company?*

I've always made it clear that I'm not Lilly's Chief Scientific Officer. At the same time, the fact that I'm conversant with chemistry and knowledgeable about ancillary fields has provided me with a level of assurance when I have to make decisions about Lilly's scientific priorities. And, over my 37 years here, I've developed a sense of what the R&D division at Lilly can do.

On a deeper level, one thing that synthetic organic chemists learn to do is retrosynthetic analyses, working backwards to break a molecule down into its component pieces so that they can come up with synthetic schemes to build the molecule back up. And that sort of thinking has been useful for me. A lot of the time, my approach to new problems has been to figure out the component elements of a problem.

**Q** *Only one other of the top 15 pharmaceutical companies has a trained chemist as CEO. Is this pathway still open for chemists?*

Absolutely, I believe it is. At Lilly, we've historically promoted from within. Nowhere in my journey between the lab and CEO did anyone say that I was disqualified because I didn't have an MBA or a background in finance. We promote

here based on performance and potential. I think that there are lots of opportunities for scientists and physicians to advance and to lead companies.

Also, there are probably a greater proportion of CEOs in the biotech space who have technical backgrounds. It's not a huge leap for me that some of those same people could run a big pharmaceutical company.

Background is not so critically important, as long as industry leaders have a sufficient understanding and respect for science and the perspective that scientists and clinicians bring. CEOs have to embrace that science can be a trying, challenging and unpredictable process.

**Q** *Has this perspective fed your advocacy for continued R&D investment?*

My willingness to invest in R&D stems more from my belief that this is really the only way that we can effectively create value. There are other models that companies have tried, and I think we've seen in recent years that there are no short cuts. Drug development is a risky business, and it requires a persistent thoughtful investment in R&D. You can't just throw money at it, but you need to take advantage of opportunity when you see it. And on occasion that means being willing to make big bets on things that fall into the high-risk, high-reward category.

**Q** *Your bet on solanezumab in Alzheimer disease falls into this category, and ended badly with the recent failure of EXPEDITION 3 (see News story). Do you regret this bet?*

The solanezumab data are pretty fresh, so it would be premature to make a lot of conclusions.

But I will say that unfortunately this is part of what you sign up for in this industry. You use your best knowledge and judgement, you get input from experts inside and outside

the company, and then you try to do the right experiment. We are often surprised and disappointed, but that's the nature of progress.

I'll also say that the decision to start EXPEDITION 3 was not a difficult decision for us. It was not a decision we entered into lightly, but it was not a difficult decision. We saw clear evidence of a slow down in cognitive decline in previous trials. And we knew that not all of the patients enrolled into those trials actually had Alzheimer disease. EXPEDITION 3 was our very best shot at trying to establish the efficacy of this molecule's ability to disrupt the amyloid cascade. The results are negative, so we've got to go back and try to understand what that means.

**Q** *Aside from the often discussed concerns about patent cliffs, R&D productivity and drug pricing, what new challenges do you see looming ahead for the industry?*

I'm not sure there are new problems, per se. But think there is an exacerbation of existing challenges.

The political-social environment is going to become an even more prominent consideration. This is driven by the demographics of our ageing society. About two-thirds of the medicines we use in our life, we use after the age of 65. This challenge will manifest itself in different ways around the world. But for health care in general we are going to have to figure out how to pay for these drugs. There are going to be even greater demands to prove the value of our products, and we are going to see more value-based agreements develop around the use of our products.

To counter that doom and gloom, I don't think there has ever been a more exciting time to be in this business. Emerging scientific knowledge and the sheer pace at which new knowledge is being developed, coupled with new research tools, augurs well for the continued vitality and success of this industry.



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