Corey Goodman

Meet the man behind Pfizer's recent decision to bet its entire R&D effort on the biotech model.

Two years ago Pfizer, the world's largest drug maker, and biotech industry veteran Corey Goodman found themselves at a crossroads. The long-time Stanford University and University of California-Berkeley academic and entrepreneur had just overseen the sale of Renovis—a company he cofounded in 2000 while a professor of neuroscience at Stanford—to Evotec, of Hamburg, Germany.

At the same time, Pfizer was lagging behind its competitors, seemingly waiting in the wings as other big pharma were staking claims in the biologics field through numerous acquisitions. When Pfizer finally decided to invest, it did so heavily and with a twist of biotech culture. The New York-based pharma would model its fledgling protein therapeutics program on the entrepreneurial biotech model, creating small groups to spearhead new drug candidates with a minimum of bureaucracy.

It was a dramatic corporate experiment, one that Pfizer CEO Jeffrey Kindler believed Goodman could pull off. "Kindler said, 'why don't you see if you can help change the way we do research in big pharma?' It was an incredibly seductive offer. I was 56, and I'm getting older, so [I thought] 'why not spend a couple of years to see if I could make a difference?'" Goodman recalls. Though he had misgivings, the magnitude of the challenge also piqued his interest. "That's the sort of thing that gets me going. I did it in my academic career. People said 'you can't do a genetic screen for brain wiring and axon guidance', but we did it," Goodman says.

Goodman's title is president of Pfizer's Biotherapeutics and Bioinnovation Center (BBC), which was officially launched in December 2007. BBC works with Pfizer Global Research & Development, but remains independent. Each of its four small units negotiates and enters individual collaborations with academic, biotech and venture capital partners.

Two BBC units are located in the San Francisco Bay area and San Diego; a third, dedicated to RNA interference, is in Cambridge, Massachusetts. The fourth, a Regenerative Medicine unit announced last November, located in Cambridge, UK, and Cambridge, Massachusetts, will focus on regenerative medicine using stem cell treatments to prevent disability, repair organ failure and treat degenerative diseases.

The two California centers were formerly stand-alone biotechs. The San Francisco Bay unit, focused on monoclonal antibodies, comprises largely former employees of the biotech Rinat, which Pfizer acquired in 2006. The core of the San Diego unit, dedicated to peptide-based therapeutics, is made up of former employees of CovX, acquired in 2007, and is headed by CovX's former CEO, Rodney Lappe. "We're letting them keep their identity and culture," stresses Goodman.

The BBC units are structured much like a biotech, designed to be nimble with no more than 150 scientists and headed by a chief scientific officer. Each will develop drug candidates to the early clinical stage and then hand them off to corresponding small business units that have a specific separate focus, such as oncology, primary care, specialty care, emerging markets or established products. The business units then guide drug candidates through late-stage clinical trials and also manage post-marketing phase 4 trials.

"These innovation centers are really like Genentech in a way—a hybrid between academia and industry, bringing the scientific rigor and innovation of academia to apply it to translational projects that can help people and generate valuable products for companies," says Richard Scheller, who was an academic colleague of Goodman's at Stanford and is now Genentech's chief scientific officer.

So far, the experiment seems to be working. Though the BBC is barely a year old, the early returns have convinced Pfizer to adapt the model for its general R&D program. "There were internal milestones and we met all of them, and I think it pointed to this being a much more efficient model for how to do research and move things into the clinic," says Goodman.

In fact, Pfizer has already deepened its commitment, announcing last October that it will break Pfizer's large R&D research sites into smaller units. "We had talked about it early on and hoped that within two or three years, the model would spread to other units of [Pfizer's R&D program]. [Now] they're making a major organizational change," says Goodman.

Pfizer isn't alone in its new approach. GlaxoSmithKline, of Brentford, UK, and Roche, of Basel, are undergoing similar experiments. Goodman praises the moves. "We all realize that the pharmaceutical industry is in real trouble. We need new models, more efficient and entrepreneurial ways of doing research. There are a number of different but related experiments that are going on and I think they're all pointed in the right direction. We can evaluate them over the next few years."

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If Goodman's gamble works, Pfizer could reap big dividends. Although global biologics sales are growing at 13% a year and may reach 25% of the therapeutics market, in the biotherapeutics arena, Pfizer lags behind other large pharmaceutical companies. "It's not even in the top 20 in terms of sales—[my goal] is to make it a top-tier player," he says, adding that he believes that biologics will eventually comprise as much as 25% of Pfizer's pipeline.

Ultimately, the success of Pfizer's biotech experiment will depend on the company's long-term commitment, Scheller predicts. "It needs to be in this for the long haul.... If indeed Pfizer has the staying power to stick with this model, I suspect it will pay off for them."

Goodman dreams of a legacy that stretches beyond Pfizer, capping his success in academia and stretching out to the biotech industry as a whole. "I hope [BBC] will have an impact on other companies—the ultimate legacy will be to make the pharmaceutical (discovery) model more sustainable."

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