

Obituary

Robert A. Swanson (1947–99)

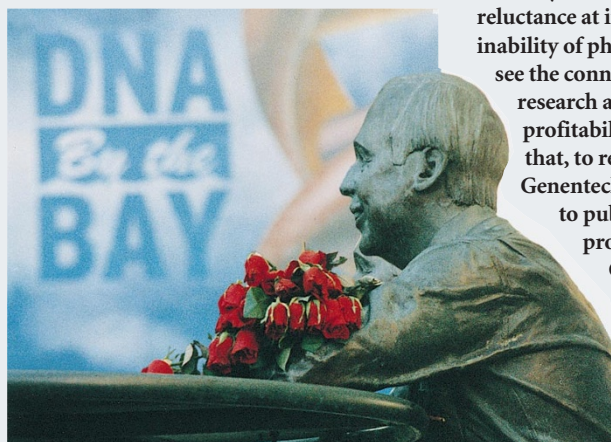
On 6 December, the founder of Genentech, Robert Swanson, succumbed to brain cancer. He was only 52, and with his death the world has lost one of its visionaries — a man who is widely considered to be the father of the biotechnology industry, and who a year ago was included as one of the few living people on a list of the millennium's most influential individuals.

Swanson grew up in Florida and was educated at the Massachusetts Institute of Technology, obtaining degrees in chemistry and business in 1970. He started his professional career as a venture capitalist with Citicorp in New York, then in 1973 moved west to San Francisco and began a lifelong fascination with molecular biology. He was in the right place at the right time, as the pioneering gene-cloning experiments of Herbert Boyer, Stanley Cohen and colleagues were being carried out only minutes from his office.

In 1976, he arranged a fateful meeting with Boyer — a meeting now commemorated by a life-sized statue of the two men in the Genentech research complex (Swanson's is shown in the picture here). After several hours and a few beers, they agreed to team up to create Genentech, the world's first biotechnology company. The upshot was an industry that is now worth more than \$100 billion and is responsible for around 80 approved drugs that benefit millions of people.

Although Boyer laid the scientific foundation for the company and set its early research direction, he remained at the University of California, San Francisco (UCSF). So it was the 28-year-old Swanson who ran Genentech. Initially, this meant raising enough money to fund proof-of-principle projects at UCSF and the City of Hope Medical Center. In 1977 these groups demonstrated that bacteria could be coaxed into making the human protein somatostatin. Swanson then set his sights on human insulin, a previously unavailable pharmaceutical, and rented space in a warehouse to build Genentech's labs.

This transition, from a 'paper' corporation that supported research in academic labs to a real company, was a critical juncture for Genentech. Swanson now had to convince young postdocs to forgo the standard academic career path and to join his quest to create medicines through the power of a new technology. He succeeded because he was able to generate his own conviction and excitement in others, as we know only too well — we



Venture capitalist and the Pied Piper of biotechnology

were two of his earliest recruits. Remember that at the time genetic technology had limited funding, and even leading molecular biologists thought it was neither commercially nor intellectually viable.

Swanson was a businessman, but he never gave up hope in the science or the scientists during the early days. It was Swanson who was smart enough to hire the best people and give them an environment that allowed them to make a difference. Swanson also reminded us why we were doing it — for the patients — and he challenged employees with the ultimate personal motivation, "Would you put this drug into your own child's body?"

And it was Swanson who made all that hard work a lot of fun. He led the celebration as each milestone passed, including the early successes with drugs such as insulin, growth hormone, interferon and factor VIII to name a few. In 1987, when the US Food and Drug Administration approved Activase (tissue plasminogen activator) for the treatment of heart attacks, the festivities included, with permission from nearby San Francisco International Airport, a huge firework display that caused a temporary disruption of air traffic.

Swanson and Boyer started a company, but they also nurtured a unique culture at Genentech — one that departed radically from the standard in the pharmaceutical industry. First, there was very little hierarchy, a structure that encouraged employees to take risks and that paid huge dividends in scientific thinking and productivity. Second, there was the need to

attract the best postdocs and scientists from academia.

Twenty years ago it was considered heresy for top academic scientists to join industry. Swanson and Boyer attacked the reluctance at its source, which was the inability of pharmaceutical companies to see the connection between basic research and ultimate commercial profitability. Boyer had made it clear that, to recruit top scientific talent, Genentech would have to allow them to publish their discoveries, and promptly. This policy gave Genentech a recruiting advantage and forced many other companies to establish a similar approach. Part of Swanson's legacy is the number of seminal

publications in biology produced by scientists employed by industry.

Genentech was again an innovator in 1980 when it became the first biotech company to sell stock to the public. This was quite an education, for many of us had no idea what it meant to 'go public'. Employees were told that the stock might be floated at \$20 per share. The deal was finally priced at \$35 per share and the first shares traded at \$88. Swanson and Genentech had created business history long before the word 'Internet' had become common currency. Furthermore, we molecular biologists now understood that it was possible not only to create life-saving drugs, but also to be well compensated for our work. We felt we had the best jobs in the world.

Swanson was chief executive officer of Genentech until 1990, then served as chairman until his retirement in 1996. That year he joined the board of Tularik, a private biotech company specializing in gene regulation, as chairman. He also returned to his roots by starting his own venture-capital firm, and continued to enjoy helping young scientists and businessmen turn their ideas into start-up companies. However, Bob's family remained his top priority. He is survived by his wife, Judy, and daughters Katie, 16, and Erica, 11.

Bob Swanson was dedicated to generating drugs that would save lives. In following that aim, he also made people believe, like him, that the seemingly impossible was indeed possible. It is that spirit which will live on.

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