CONNECT FOUNDERS AWARD

The substance of Atkinson's remarks on receiving the award (November 29, 2017).

Tech transfer has been on my mind for a long time. It started in 1956 when I joined the faculty at Stanford University. One of my valued friends and mentors was Fred Terman who was provost of the university. He played an indispensable role in transforming Stanford into a great research university and along the way invented Silicon Valley. He is commonly known as the "Father of Silicon Valley" and the accolade is richly deserved. A few years ago, Stanford press published a biography titled "Fred Terman at Stanford: Building a Discipline, a University, and Silicon Valley" and I had the privilege of writing the forward to the book.

As a Stanford faculty member, a colleague and I started a company called "Computer Curriculum Corporation" based on our university research. The initial capital was 500 thousand dollars, a personal loan from Mr. Hewlett and Mr. Packard, both former students of Terman. So I had the opportunity to observe Fred Terman up close as he created and molded Silicon Valley. And I had personal experience with a startup company in those early days of Silicon Valley.

In the 1970s, I served as director of the National Science Foundation. By that time, Germany and Japan had recovered from the devastation of the war years and unexpectedly their companies were giving American companies stiff competition, particularly in technology. American science was flourishing, but scientific discoveries were not being translated into applications. What was the problem? To answer this question, NSF established a special task force on tech transfer. Several policies were identified and enacted by the congress into legislation. But the key to solving the problem was the Bayh-Dole Act of 1980. The Act dealt with intellectual property that arose from federally funded research projects carried out at universities and non-profit institutions. Before Bayh-Dole, intellectual property belonged to the

federal government; after Bayh-Dole, it was vested with the institution receiving the federal grant. Bayh-Dole opened the floodgates for universities to commercialize inventions and created the world of tech transfer we know today.

I arrived at UCSD in 1980. It was the perfect time and perfect place to apply some of the lessons learned at Stanford and NSF. The list of UCSD people involved in tech transfer is too long to recall here but I would be remiss if I did not mention the principal leaders: Mary Walshok, Wayne Kennedy, Bob Dynes and Bob Sullivan. Clearly, the establishment of CONNECT was an essential step and its great success was due to Bill Otterson, its first director. He was devoted to the cause, understood the issues, and had a talent for making things work.

Once I became president of the UC System I continued to focus on tech transfer, but now for all ten campuses of the university. Every campus was required to have a tech transfer office and incentives were provided for faculty to license intellectual property when appropriate. Of special note are the Gray Davis Institutes for Science and Innovation that were established in 2002 to couple UC research with the private sector. Over the years, the four institutes have worked with over two thousand companies and have fostered several hundred startups.