explosion of minicomputers in the 1970s and microcomputers in the 1980s fueled the attention to DNA sequence information, because computational methods were obviously the only way to analyze the deluge of DNA sequence information produced by sequencing techniques[6-9]. The technologies were thus present, but it took the spark of an idea of using them as part of a large organized effort to ignite the fire, out of which rose the human genome project.

Robert Sinsheimer, then chancellor of the University of California, Santa Cruz, thought about sequencing the human genome as the core of a fund-raising opportunity in late 1984. He and others convened a group of eminent scientists to discuss the idea in May 1985[10]. This workshop planted the idea, although it did not succeed in attracting money for a genome research institute on the campus of UCSC. Without knowing about the Santa Cruz workshop, Renato Dulbecco of the Salk Institute conceived of sequencing the genome as a tool to understand the genetic origins of cancer. Dulbecco, a Nobel-Prize winning molecular biologist, laid out his ideas on Columbus Day, 1985, and subsequently in other public lectures and in a commentary for *Science* magazine[11; 12]. The commentary, published in March 1986, was the first widely public exposure of the idea, and gave impetus to the idea's third independent origin, already gathering steam.

Charles DeLisi, who did not initially know about either the Santa Cruz workshop or Dulbecco's public lectures, conceived of a concerted effort to sequence the human genome under the aegis of the Department of Energy (DOE). DeLisi had worked on mathematical biology at the National Cancer Institute, the largest component of the National Institutes of Health. How to interpret DNA sequences was one of the problems he had studied, working with the T-10 group at Los Alamos National Laboratory in New Mexico (a group of mathematicians and others interested in applying mathematics and computational techniques to biological questions). In 1985, DeLisi took the reins of DOE's Office of Health and Environmental Research, the program that supported most biology in the Department. The origins of DOE's biology program traced to