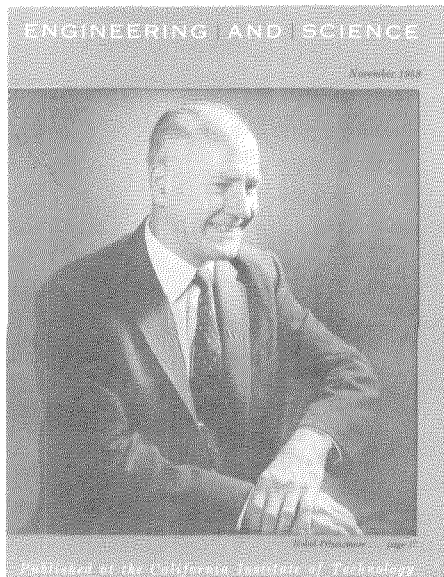


Obituaries



George Beadle 1903–1989

George W. Beadle, who was chairman of Caltech's Division of Biology from 1946 to 1961, died June 9 in Pomona at the age of 85. He was the fifth Caltech faculty member to win the Nobel Prize.

Beadle earned his BS (1926) and MS (1927) degrees from the University of Nebraska, and finished his PhD in 1931 at Cornell. A National Research Council fellowship first brought him to Caltech that year, and he stayed on as a research fellow and instructor until 1936. After a year as assistant professor of genetics at Harvard, he spent 10 years as professor of biology at Stanford before returning to Caltech as professor of biology to succeed Thomas Hunt Morgan as division chairman. He brought a natural enthusiasm and enormous energy to the division, which he

built into one of the best in the country. In 1961 he left Caltech to become the seventh president of the University of Chicago, a position he held until 1968. He continued to teach biology and conduct research as professor emeritus at Chicago until 1975.

In 1958 Beadle was awarded the Nobel Prize in physiology or medicine, which he shared with Edward L. Tatum and Joshua Lederberg. The Beadle-Tatum discovery in 1941 that genes control the synthesis of vitamins, amino acids, and purines and pyrimidines in the living cell gave science its first clue about how genes work. Their discovery, made by subjecting the red bread mold *Neurospora* to x-rays and ultraviolet light to produce mutations, first suggested that each of the biochemical reactions of a cell is governed by a particular gene, which led to the idea that each gene controls the production of a particular enzyme.

Beadle also worked with the other organisms that are major tools of theoretical genetics—*Drosophila*, which he studied under Thomas Hunt Morgan, and maize, in which he maintained a life-long interest from his college days. He was known for cultivating a field of corn wherever he lived—from his backyard in Pasadena to the somewhat less rural South Side of Chicago.

Among his numerous other awards are 36 honorary degrees. Beadle was co-author (with his Caltech colleague, Alfred H. Sturtevant) of the 1939 standard work, *An Introduction to Genetics*, and also wrote *Genetics and Modern Biology* in 1963. He and his wife, Muriel, wrote *The Language of Life* in 1966. He had been a member of the Caltech board of trustees since 1969.

Obituaries

continued



Mabel Beckman 1900–1989

Mabel Beckman died June 1 at the age of 88. With her husband, Arnold O. Beckman, chairman emeritus of Caltech's board of trustees, Mrs. Beckman was one of Caltech's most generous long-time friends. Landmarks of the Beckmans' support cover a substantial portion of the campus—Beckman Auditorium, the Mabel and Arnold Beckman Laboratories of Behavioral Biology, the Arnold and Mabel Beckman Laboratory of Chemical Synthesis, and the new Beckman Institute, to be dedicated in the fall.

Mrs. Beckman seemed always to be at her husband's side through their 64 years of marriage, from his years as a Caltech graduate student, then a faculty member; through the founding of Beckman Instruments 53 years ago (Mrs. Beckman traveled by train calling on chemical supply houses all over the country to market the first pH meter); and their later years together as philanthropists particularly interested in supporting scientific research and education.

They met at Thanksgiving 1918, when Arnold Beckman, then a member of the Marine Corps stationed at the

Brooklyn Navy Yard, had just missed being shipped to Vladivostock. Then came a second stroke of luck. Having been ordered to consume a Thanksgiving dinner that the Red Cross was providing for wounded marines (he wasn't wounded and had already eaten), Beckman met Mabel Meinzer of Brooklyn, who was helping serve the food. In describing their meeting, Beckman often expressed wonder at how pure chance determines the course of one's life.

They were married in 1925, and the next year Mabel Beckman came West with her husband in a Model T Ford to begin a relationship with Caltech that was to last 63 years. They lived for many years in Altadena, and when they later moved to Corona del Mar, they maintained close ties to the campus.

To honor Mrs. Beckman, the Mabel Beckman Prize was established by the Institute in 1986 to be presented to a junior or senior woman at Caltech who "has achieved academic excellence and demonstrated outstanding leadership skills, a commitment to personal excellence, good character, and a strong interest in the Caltech community." The prize this year was awarded to Julie Ann Sheridan, who graduated with honors in electrical engineering.

A campus memorial service for Mabel Beckman was held July 10—fittingly in Beckman Auditorium.

Francis Buffington 1916–1989

Professor of Materials Science, Emeritus, Francis S. Buffington, died April 23 at his home in La Canada-Flintridge. He was 72.

Buffington earned his SB degree (1938) and ScD (1951) from MIT. He was appointed assistant professor of mechanical engineering at Caltech in 1951 and associate professor in 1956. In 1963 he became associate professor of materials science and professor in 1983; he retired as professor emeritus in 1985. Buffington's research concerned the diffusion of solids and phase transformation in solids.

Generous with the time he devoted to Caltech, he served on numerous faculty committees, including the graduate committee, the membership and bylaws committee, the faculty board, and the curriculum committee, of which he was chairman in 1980-81. He was also associate dean of graduate studies, and took on several student-advisory roles in the Division of Engineering and Applied Sciences. As option representative, Buffington knew all students individually and could recall instantly the details of their academic lives.