

Delbrück: Conscience, Goad, and Sage

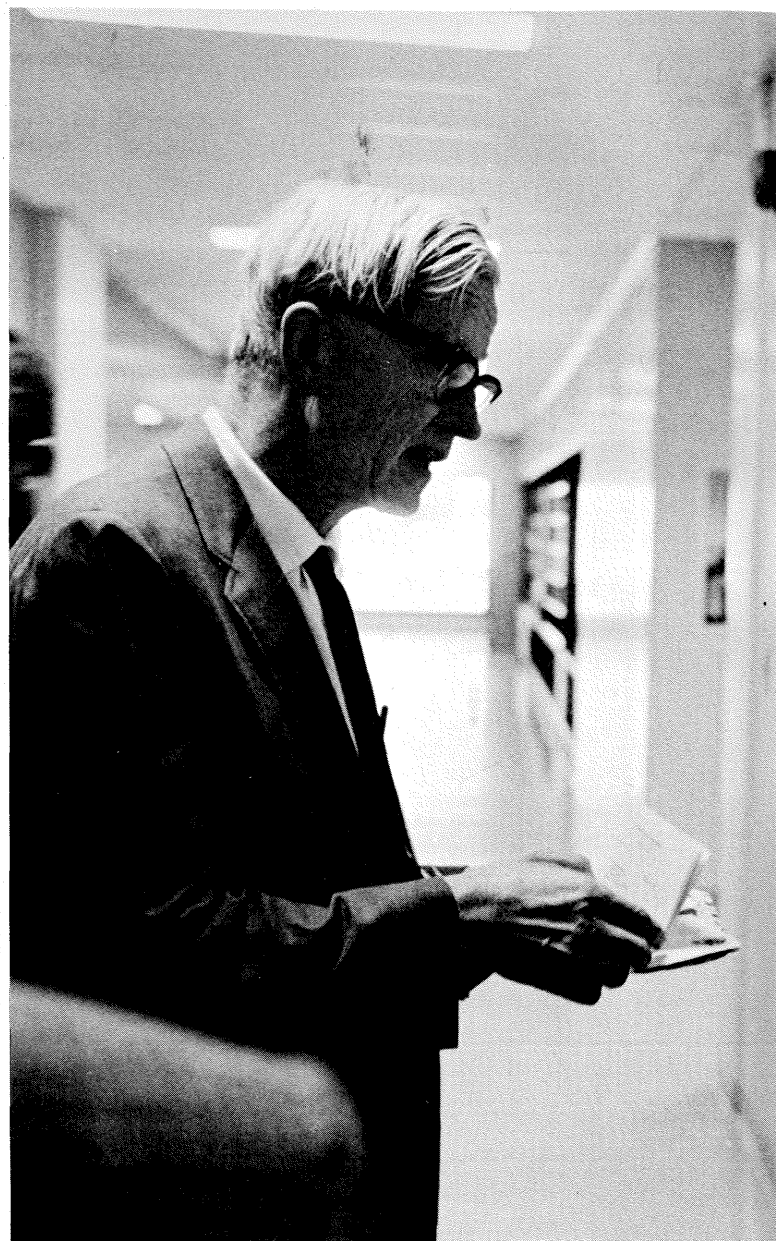
While looking for a paradox he never discovered, he helped found molecular biology and inspired hundreds of colleagues to emulate his own high standards of scholarship

For 30 years the question “What will Max think of it?” has guided biologists as they home in on the secrets in the DNA molecule. Max Delbrück’s presence at Caltech for most of that time has been instrumental in maintaining the Institute’s prominence in biology, which began when Thomas Hunt Morgan came to Pasadena in 1928. Now Delbrück, like Morgan, has won the Nobel Prize in medicine and physiology, along with his long-time friends and collaborators Alfred Hershey of the Carnegie Institution and Salvador Luria of MIT.

The award recognizes Delbrück’s research in the years 1937 to about 1952. There is a fairly direct line from his and Emory Ellis’s early work on the growth of viruses, through his and Luria’s early work on viral genetics, to Hershey’s prime evidence that DNA carries genetic instructions, to Watson’s and Crick’s climactic discovery of the double helix structure of DNA in 1953. But perhaps even more, the prize honors Delbrück’s unifying influence on the developments in the new field of molecular biology in that period.

Delbrück was leader of the informal Phage Group of scientists, a group born one summer at the Carnegie Institution’s genetics research laboratory at Cold Spring Harbor, New York, and meeting at Caltech during each

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In 1969—Two Nobel Prizes



Biologist Max Delbruck and physicist Murray Gell-Mann become the Institute's twelfth and thirteenth winners

Gell-Mann: Order Out of Chaos

His three major contributions have given hope that man may someday understand what matter is really made of

"What is really at the bottom of everything?"

"Quarks."

"Quarks?"

"Quarks."

Aside from scientific insight, a capacity for hard work, and a touch of genius, the quality that seems to set Nobel Prizewinners apart from their peers is the courage to walk to the beat of a different drum—the daring to challenge accepted concepts in order to find their own answers to the mysteries of the universe.

Murray Gell-Mann, professor of theoretical physics at Caltech, had this special quality almost from the day he entered Yale at the age of 15 and chose physics, by a narrow margin over archaeology, as his pursuit in life. Gell-Mann, 40, has been in the running for the Nobel Prize since 1953 when he published the first of his contributions to particle physics at the age of 24.

In welcoming Gell-Mann to the faculty as an associate professor of physics in 1955, Caltech president Lee DuBridge said, "Dr. Gell-Mann is one of those exceptional

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