Once upon a time, Bungtown Road—the well-trodden route that passes through the Cold Spring Harbor Laboratory campus—was traveled only in the summer, when researchers ventured to Long Island’s north shore to collaborate with colleagues around the world and learn new techniques in the budding world of biology.

It was at this vibrant summer scientific sanctuary on the Harbor that Max Delbrück delved into life sciences. Max, though young—only 34-years-old in 1941, when he first came to CSHL—was already an accomplished physicist. He would ultimately become the leader of a generation of scientists who would establish the field of molecular biology. On September 4, 2006, Max would have turned 100 years old. The Laboratory marked the occasion by celebrating the life and legacy of this singular individual, who led the study of molecular biology in its nascent years and helped create a home for this new science at CSHL. “Max had a significant impact on modern biology as the new science of molecular
biology emerged, applying principles from physics and chemistry,” said Laboratory President Bruce Stillman. “His contribution to shaping biology in the last half of the 20th century and the culture of research at Cold Spring Harbor cannot be overstated.”

Max, as he was simply called by all who knew him—colleagues, students, even his own children—never held a formal post here. But he, probably more than any other person, shaped the culture and scientific direction of the Laboratory during these formative years. Even today, CSHL's unique personality—which combines the highest standards of excellence in science with a familial atmosphere and rich community spirit—can be attributed in a large part to Max Delbrück.

Although famous for his rigorous approach to research and his no-nonsense assessments of sloppy thinking, Max was also known to be the life of any and every party at the Lab, and often the host. He organized community theater productions on the front porch of Jones Laboratory, encouraged (and instigated) practical jokes among researchers, and invented creative traditions to celebrate holidays. At a memorial service in 1981, commemorating Max's life, his protégé, CSHL Chancellor Jim Watson, acknowledged, “Most of the personality that I then, and still now, find so wonderfully unique about Cold Spring Harbor was given to it by Max.”

Max's claim to biological fame was establishing the “Phage Group” at Cold Spring Harbor with Salvador Luria and Alfred Hershey. This legendary triumvirate was the first group of researchers to employ quantitative, controlled experiments and mathematical predictions to study genes and mutations. Their discoveries, using tiny phage (short for “bacteriophage,” viruses that attacks bacteria), were crucial to understanding the physical nature of the gene and laid the groundwork for modern biology. They shared the 1969 Nobel Prize for their work.

The Delbrück Centennial celebration was held during the Lab's annual Phage Meeting (“Molecular Genetics of Bacteria and Phages”), an outgrowth of the famed Phage Course that Max established at CSHL in 1945, which trained dozens of scientists in the techniques he pioneered.

On August 26 and 27, Max's colleagues, friends, and family members traveled from around the world to gather at Cold Spring Harbor to commemorate Max's life and work. Masterfully planned by David Stewart, CSHL's Executive Director of Meetings and Courses, the occasion began with a symposium of stories recounted by many of Max's apostles. The shared reminiscences served to create a verbal portrait of the man whose spirit became palpable in Grace Auditorium that afternoon. Mila Pollock, CSHL's Director of Libraries and Archives, chaired the session, and began it with the voice of Max himself singing about the occasion of his projected 100th birthday celebration (see excerpt, following page). Friends and family members were then invited to recount their memories.

Formal remarks were made by several scientists including Ernst Peter Fischer, Max's former student and biographer; Matt Meselson, who conducted experiments which helped show how DNA replicates; Max's longtime collaborator, Gunther Stent; and phage veteran, Waclaw Szybalski, who marked his 57th visit to CSHL for the Phage Meeting.

Jim Watson also remembered Max warmly, remarking that it was Max who helped shape the ideals that drove him to scientific
success. “He was effectively my father,” Jim explained. He shared some advice Max provided him as a 21-year-old freshly minted Ph.D. scientist on his way to England, where he would soon help make the monumental discovery of the structure of DNA. “Just aim for greatness, and stay away from anything trivial,” Max told Jim in 1949. “If you fail, you can come home.”

On the event’s second day, active researchers came together for a symposium on current research related to topics that had interested Max. This series included a talk by one of Max’s four children, Tobias Delbrück, on his own research in neuromorphic engineering, and concluded with a review of the burgeoning area of Systems Biology by Lee Hood, a longtime colleague of Max’s at Caltech, where he had worked for most of his career...that is, in the fall through spring, when he was not summering at Cold Spring Harbor.

The Centennial Celebration included an outstanding exhibition on Max’s life and work, created by the CSHL Archives, which will travel to several other institutions around the world. The Archives also conducted a series of video interviews with visitors, specifically focusing on Max’s impact on science, which will soon be made available online.

His name may not be as familiar as Albert Einstein or Charles Darwin, but Max Delbrück was a scientific giant who changed the world through his research and his leadership in 20th century biology. In an essay commemorating Max’s 60th birthday, his collaborator Salvador Luria wrote: “Seldom has a group been so richly rewarded as have we, the molecular biologists whom the physicist Max Delbrück, more than anyone else, guided to the exploration of the deep mysteries of life.” So, too, has CSHL been enriched by its association with Max.

At the Centennial Celebration, Max was, once again, the life of the party, if only in spirit. And despite the institution’s growth and its now year-round function, his spirit—youthful, enthusiastic, inquisitive, persistent—will continue to live on at Cold Spring Harbor Laboratory. Kiryn Haslinger