OFFERMANN, Jessie (Jacobs). October 1, 1890–July 7, 1954.

McPherson College (BA 1914), University of Kansas (MA 1916), University of Illinois (PhD 1919).

Jessie Marie Jacobs was born in Wilmington, Delaware, the daughter of Annie Amelia (Wright) (1868–1930) and William C. Jacobs (1860–1942). Her mother was born in Pennsylvania; her father, a carriage maker, cabinet maker, and house carpenter, was born in Wisconsin. She had two sisters, Ella (b. 1888) and Sara (b. 1893). Her family moved to Kansas soon after Jessie Jacobs was born and was living in McPherson in central Kansas by 1900. She graduated from McPherson High School in 1907.

In 1910 both Jessie Jacobs and her older sister, Ella, were public school teachers. She was also a high school teacher in Kansas during the year 1911–12 and attended summer school, at least in the summer of 1913, before completing her undergraduate work at McPherson College in 1914. She was both a collegiate and a Bible student in 1913–14 and was one of thirteen in her senior class at McPherson, a private church-related college in her home town. She taught in high school in Kansas for a year after her graduation before going to the University of Kansas on a fellowship in 1915–16, one of the first two awarded to students in mathematics by the graduate school. Her master's thesis was supervised by Charles Hamilton Ashton, and was one of six master's degrees in mathematics awarded by Kansas in 1916.

The committee on fellowships at Kansas awarded her a fellowship for the year 1916–17, but she was released to accept a graduate assistantship at the University of Illinois for that year. She remained at Illinois as a fellowship holder from 1917 until she completed her dissertation in 1919 as a student of Arthur B. Coble. Her first minor subject was physical chemistry and her second minor subject was mathematical physics.

Jacobs was associate professor of mathematics and physics at Rockford College in Illinois the year after she received her doctorate. In 1920 she moved to a position as instructor in pure mathematics at the University of Texas. While in Austin she met Hermann Joseph Muller (1890–1967), a new associate professor of biology. Born and raised in New York City, he received his PhD from Columbia University in 1915, was at Rice Institute in Houston 1915–18, and was back at Columbia 1918–20. Elof Axel Carlson, in his biography of H. J. Muller, wrote that Jessie Jacobs helped Muller in 1921–22 "to work out a formula which could be used to choose the proper number of flies required to establish the validity of low frequencies of mutations or crossovers" (p. 131). Jacobs and Muller were married June 11, 1923, and she remained an instructor through the academic year 1923–24. Early in his career, Muller spoke on the need for the emancipation of women.

Their son, David Eugene Muller, was born November 2, 1924, in Austin. According to Carlson, "the mathematics department terminated her appointment because her colleagues felt that a mother could not give full attention to classroom duties and remain a good mother. For Jessie it meant a permanent loss of her career as a teacher..." (pp. 133–34). Carlson also reported that during the spring of 1925 the Mullers were looking to leave the University of Texas. However, they remained in Austin for the next several years, except for occasional summers away. In 1925 Jessie Jacobs-Muller collaborated with her husband and received acknowledgement in one of his papers and joint authorship of another.

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Jessie Muller's mother died in the summer of 1930, and that fall the Mullers moved into a new rented house in Austin. Their son started private school because he was still too young to enter public school. At this time Hermann Muller was continuing his pioneering work on the effects of radium radiation on the genetics of fruit flies, and, according to a 1997 account by David Muller, Jessie Muller was helping her husband in the laboratory in addition to taking care of their son and the house. H. J. Muller mentions her work of 1931 in a 1954 paper. Also in 1931, Muller was elected to the National Academy of Sciences. He was awarded a Nobel Prize in 1946 for work done during this period and spoke on that work in his 1958 Gibbs lecture to the AMS.

During the early 1930s H. J. Muller's political views became more public and tensions in his marriage increased. He was involved with the National Student League, an off-campus group with communist supporters and socialist ideals, and in an August 1932 speech to the Third International Congress of Eugenics he criticized the American eugenics movement for racism and prejudice against the lower classes. Just after this speech he left the United States to spend a year separated from his wife and son as a Guggenheim fellow in Berlin. In July 1933 his family joined him in Berlin, and two months later they all moved to a friendlier political climate in Leningrad, where Muller had moved as senior geneticist at the Institute of Genetics of the Academy of Sciences of the USSR. Muller's son indicated in 1997 that plans for a divorce started about that time. In July 1934 Jessie and David returned to Austin. When the Academy and its offices and laboratories moved to Moscow late in 1934, H. J. Muller moved there as well.

Back in Austin, in the depths of the Great Depression, Jessie Muller obtained a job with the Works Progress Administration for sixty-five dollars a month. The marriage was dissolved in Moscow on January 5, 1935. Jessie Muller obtained a letter from the embassy, so that she could proceed to obtain a Texas divorce in the summer of 1935.

Carlos Alberto Offermann, born in Argentina on May 6, 1904, had come to the University of Texas in December 1930 to work in Muller's laboratory and joined Muller in Leningrad the year Jessie and David Muller were there. Offermann visited Austin during the period October 1935 to January 1936, and it was apparently at this time that he and Jessie Muller were married in Georgetown, Texas. Carlos Offermann then returned to his position in Muller's laboratory in Moscow, where he remained until December 1937. A Texas judge refused to permit Jessie Offermann to take her son out of Texas as long as his father was in the Soviet Union, so she was unable to join her new husband in Moscow.

Jessie Offermann and her son remained in Austin, where she became supervisor of a WPA group that was writing a history of Travis County, and, as her son reported, "when they discovered that she could write well her salary went up to over 100 dollars." She also made money by renting a room in their small apartment and by tutoring university students in mathematics. Carlos Offermann returned to Austin in 1938 after visiting with his family in Argentina for a few months.

With the rise of Stalinism, H. J. Muller left the Soviet Union for a position in Edinburgh, and David Muller was permitted to leave Texas. In fall 1938 the Offermanns moved to Chicago, where Carlos Offermann, with his wife's help, worked intensely to complete the experimental work for a PhD at the University of Chicago. However, during the year 1939–40 she was diagnosed as having tuberculosis. In the

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summer of 1940 they moved to southern California, where they hoped she could rest and recover and where perhaps he could finish his dissertation. In 1940–41 they lived in Altadena and the following year bought a house in Monrovia, both in the San Gabriel Valley in Los Angeles County.

Jessie Offermann lived in the house until 1942, when her health deteriorated and she entered a sanitarium in Monrovia. Later she moved to the Olive View sanitarium in the San Fernando Valley. By 1946 she had moved to the City of Hope in Duarte, California, closer to Monrovia. Jessie Offermann died there in 1954 at age sixty-three after being in the City of Hope Medical Center for seven weeks. Her death occurred a day after surgery was performed to provide some relief from the tuberculosis. Her body was cremated. Carlos Offermann died in October 1983.

David Muller, Jessie Offermann's son who earned a PhD in physics from the California Institute of Technology in 1951, wrote in 1997, "There is no doubt that my interest in, and satisfaction with, mathematics began with my mother who spent many hours talking to me about mathematics and teaching me many things while I was still very young. During my 40 years at Illinois in the mathematics department I have had over a dozen Ph.D. students of my own who may be thought of as her mathematical grandchildren."

Organizational affiliations: AMS, MAA, AAAS.

## Thesis and dissertation:

1916 [Jacobs, J. M.] The Riemann surface for the function  $w^2 = z^3 + 3tz + 2$ . MA thesis, University of Kansas, directed by Charles Hamilton Ashton.

1919 [Jacobs, J. M.] The trilinear binary form as a cubic surface. PhD dissertation, University of Illinois, directed by Arthur Byron Coble. Typescript.

## **Publications:**

1925 [Jacobs-Muller, J. M.] With H. J. Muller. The standard errors of chromosome distances and coincidence. *Genetics* 10:509–24.

1931 [Jacobs, J. M.] Reaching the individual in mathematics instruction. Sch. Sci. Math. 31:575–85.

References to: AmMSc 3-6.

Other sources: PhD dissertation vita 1919; private communications with David Muller 1997; conversations with Chandra Muller, granddaughter; communication with McPherson College Archives; Price, History of the Department of Mathematics of the University of Kansas; Elof Axel Carlson, Genes, Radiation, and Society: The Life and Work of H. J. Muller, (Ithaca, NY: Cornell University Press, 1981); US Census 1900, 1910, 1920, 1930 KS, 1930 TX; California death certificate.

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