HUMPHREYS, M. Gweneth. October 22, 1911–October 6, 2006.

UNIVERSITY OF BRITISH COLUMBIA (BA 1932), SMITH COLLEGE (MA 1933), UNIVERSITY OF CHICAGO (PHD 1935).

Mabel Gweneth Humphreys was born in South Vancouver, British Columbia, the only child of Mabel Jane (Thomas) (1885–1963) and Richard Humphreys (1880–1969). Her mother was born in London, England, and was a dressmaker, florist, and housewife. Her father was born in Pwllheli in Northwest Wales and was a machinist. They were married in 1910. Her secondary education was in North Vancouver, British Columbia. She attended North Vancouver High School 1925–28, the University of British Columbia 1928–32, Smith College 1932–33, and the University of Chicago 1933–35.

Humphreys held scholarships all four years she was an undergraduate at the University of British Columbia before graduating with honors in mathematics and earning the Governor General's Gold Medal in 1932. In 1981 she described how she came to study and live in the United States. "When I graduated in '32 the appropriation for the university had been cut so much that they stopped giving graduate work in mathematics that year. I was supposed to have an assistantship but it 'melted away.' So, [Professor F. S. Nolan] helped me apply for scholarships, fellowships in the United States and in Canada. And I received one at Smith College, a fellowship, and went there for my master's degree" (Smithsonian meeting tapes). At Smith she studied with Professors Neal McCoy, Susan Rambo, and Ruth G. Wood before receiving her master's degree in 1933. She also reported that Nolan and another of the mathematics professors at the University of British Columbia had gotten their doctorates at the University of Chicago. Therefore, after receiving her master's degree, Humphreys applied to Chicago where she was awarded a fellowship that she held for the next two years. She earned her PhD in 1935, having written her dissertation in number theory as a student of L. E. Dickson. Each year that she was at Chicago, she gave a talk at the department's Junior Mathematics Club.

After receiving her PhD, Humphreys remained in the United States and became a naturalized citizen in 1941. In 1981 she recalled her first attempts to find a job.

I had hoped that the University of Chicago would hear about a job for me, but only one came through, and the male candidate who got his thesis at the same time got that job. In the meantime, I had registered at a teacher's agency in downtown Chicago, and many cards came in for the sum of something like \$900, and you taught all the mathematics in the four years, and you were dean of women, or all of mathematics and coach some sport. I said to myself I wasn't going to do this; I was going to stick around in Chicago and wait tables somewhere and study more mathematics. After awhile a card came through from Kansas, a woman's college, and they needed a woman with a PhD in either mathematics or physics to teach both. This was a substitute position, which was vacant because Sr. Helen Sullivan . . . was ill. I took that and taught there for that one year. I was very busy I must say, but it was a great apprenticeship. I enjoyed it very much. (Smithsonian meeting tapes)

Thus, her first position was instructor of mathematics and physics, 1935–36, at Mt. St. Scholastica College in Atchison, Kansas. Emma Olson was acting head of

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the department the previous year and Sister M. Helen Sullivan became head in 1935. In 1936 Humphreys became an instructor at H. Sophie Newcomb Memorial College in New Orleans, Louisiana, where Nola Anderson (Haynes) was department chairman. In 1941, with Marie Weiss as chairman, Humphreys was promoted to assistant professor. In the summers of 1944 and 1946, she was assistant professor at Barnard College and Tulane University, respectively.

In 1949 Humphreys left Newcomb to become associate professor at Randolph-Macon Woman's College (now Randolph College) in Lynchburg, Virginia, where she was to remain for the rest of her career. That same year Gillie Larew, who had been chairman since 1936, became dean of the college. At the end of Humphreys' first year at Randolph-Macon she was named Larew Professor and head of the department. She remained as head until 1979. In 1973 she was also named Dana Professor; she retired in 1980 as the Gillie A. Larew and Charles A. Dana Professor Emeritus. During her tenure at Randolph-Macon, she was on sabbatical leave and holder of a faculty fellowship from the Fund for the Advancement of Education in the academic year 1955–56, during which she studied at the University of British Columbia and examined undergraduate programs at several colleges and universities during short visits. She was a National Science Foundation faculty fellow 1962–63 while on sabbatical as a visiting professor at the University of British Columbia.

For most summers from 1959 to 1970 Humphreys taught in NSF summer institutes for high school teachers held at Randolph-Macon. From 1965 to 1969 she worked for the Educational Testing Service; she was on a committee to construct a new institutional mathematics test 1965–67 and served as a consultant for the mathematics undergraduate record examination 1967–69. In 1975 she was a consultant for the American Council on Education on credit for mathematics courses given by nonacademic organizations.

Humphreys was active in the MAA at both the sectional and national levels. She was vice-chairman of the Maryland-District of Columbia-Virginia Section of the MAA 1952–53 and 1957–58. At the national level, she served on the Committee on Mathematical Personnel and Education in the mid-1950s, on the Board of Governors 1962–65 as Governor of her section, and on the Committee on the Undergraduate Program in Mathematics (CUPM) 1965–67. She was on the CUPM ad hoc committee to prepare a report identifying qualifications for a college teacher of mathematics; the committee prepared a report published by CUPM in 1967. Humphreys was also on the CUPM Panel on Mathematics in Two-Year Colleges 1966–67 and on the Joint Interim Central Coordinating Committee on Films and Television in the early 1960s. She was an MAA consultant and visiting lecturer 1973–75.

From the 1950s through the 1970s Humphreys gave many presentations across Virginia and the rest of the country. In the 1960s she often spoke at conferences about the CUPM recommendations for the mathematics curriculum, while in the 1970s she spoke at schools about mathematics in music and art. She produced two sets of lecture notes. One, "Linear algebra and analysis," was joint with H. F. Davis and comprised notes for a course given at the University of British Columbia in 1956–57; another, "Linear algebra and geometry," appeared in many versions, the latest in 1974.

Humphreys served as vice president of the local chapter of AAUP 1959 and 1974–75 and as president 1959–60 and 1973–74. She was treasurer of the local chapter

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of Sigma Xi 1960–61 and 1966–68, secretary 1968–70, vice president 1970–72, and president 1972–74.

In 1981 Humphreys listed her hobbies as gardening and reading. She was active in the Natural Bridge Appalachian Trail Club and served as a member of the council in 1954, 1955, 1970, and 1971. She continued to live in Lynchburg after her retirement in 1980 and died at home in 2006, shortly before her ninety-fifth birthday. Her obituary indicates that she was "survived by her friends and other retirees from Randolph Macon Woman's College." Her estate included a bequest of \$24,000 to the MAA.

At Humphreys' memorial service a tribute by her former student Carol Wood was read. Wood noted that "the words 'supportive' and 'empowering' were not current in the 60s but they apply to Gwen's demeanor towards her students, however undeserving and naive we were. Several of us have gone on to careers involving substantial mathematics, and owe a debt to her" (Benkart 2010, 14). Wood, a former president of the Association for Women in Mathematics, later proposed that AWM establish a mentoring award in Humphrey's honor, and this was done in 2010. The M. Gweneth Humphreys Award was funded by former students and colleagues from Randolph-Macon to "recognize an undergraduate mathematics teacher ... who has had a significant impact on one or more female students through mentoring" (Benkart 2010, 13).

**Organizational affiliations:** AMS, MAA, SIAM, NCTM, Canadian Math. Soc., AAAS, AAUP, AAUW, Sigma Xi.

## Thesis and dissertation:

**1933** A solution of the matrix equation P(X) = A. MA thesis, Smith College.

1935 On the Waring problem with polynomial summands. PhD dissertation, University of Chicago, directed by Leonard Eugene Dickson. Private edition, distributed by the University of Chicago Libraries, reprinted from *Duke Math. J.* 1:361–75.

## **Publications:**

1935 On the Waring problem with polynomial summands. Duke Math. J. 1:361–75. Published version of PhD dissertation. Reviews: JFM 61.0153.01 (F. Behrend); Zbl 013.10306 (E. M. Wright). Presented by title as "The representation of integers as sums of values of quartic polynomials" to the AMS, Lincoln, NE, 30 Nov 1934; abstract: Bull. Amer. Math. Soc. 40:793 #310.

1972 Computers: new building blocks in education. Alumnae Bull. Randolph-Macon Woman's College. (Winter).

1979 with D. L. Bernstein, A. F. O'Neill, and M. Rees. Women mathematicians before 1950. *AWM Newsletter* 9 (4): 9–18. Transcription of a panel discussion sponsored by the AWM, Providence, RI, 9 Aug 1978, ed. P. Kenschaft.

## Abstract not listed above:

1936 On the Waring problem. Amer. Math. Monthly 43:453 #5. Presented to the MAA, Topeka, KS, 14 Mar 1936.

## Presentation not listed above:

How to keep mathematically alive while teaching. Presented to a meeting of the NCTM, Richmond, VA, 1975.

References to: AmMSc 6-8, 9P-11P; AmMWSc 12P-13P, 14-24; WhoAm 38-46; WhoAmW 1, 3-8; WhoMedi.

"Dr. Mabel Gweneth Humphreys." (Obituary) Lynchburg News & Advance, 6–8 Oct 2006. "MAA Receives \$24,000 Bequest from the Estate of M. Gweneth Humphreys." MAA Focus 29, no. 4 (2009): 35.

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Benkart, Georgia. "A New AWM Prize: The M. Gweneth Humphreys Award." AWM Newsletter 40 (Jan–Feb 2010): 13–14.

**Other sources:** PhD dissertation vita 1935; Owens questionnaire 1937; Smithsonian questionnaire 1981; Smithsonian meeting tapes 1981.

Last modified: December 17, 2010.