Obituaries

ELEANOR M. SEARLE 1926 - 1999

Medieval historian Eleanor Searle, the first woman appointed to a named professorship at Caltech, died April 6. She was 72.

She had been named the Edie and Lew Wasserman Professor of History in 1988, after joining the faculty as professor of history in 1979. Searle grew up in Chicago, where she attended the Latin Girls' School. Her undergraduate years were spent at Radcliffe College, from which she graduated magna cum laude in 1948. Initially interested in the law at a time when women were not routinely admitted to law school, Searle changed direction and headed for the Middle Ages. Although denied law school, she did become the first woman to study at the Pontifical Institute of Mediaeval Studies in Toronto, where she received her LMS (Licentia Mediaevorum Studiorum) degree, magna cum laude, in 1961 and her DMS (Doctor Mediaevorum Studiorum) in 1972.

During a visit to Pasadena in 1959, where her astronomer husband, Leonard, was doing research at Caltech, Searle discovered the Huntington Library and its Battle Abbey papers. Her research



on his superb collection of medieval records from 1066 (the abbey was built on the site of the Battle of Hastings) to 1538 was the basis for three of her books. She had remained a senior research associate at the Huntington ever since.

Searle also taught at Caltech as a lecturer in 1962–63. After five years at the Australian National University in Canberra, the Searles returned to Southern California, where Leonard joined the staff of the Mt. Wilson and Palomar Observatories (he was named director of the Carnegie Observatories in 1989). Eleanor was appointed associate professor of history at UCLA in 1969 and promoted to professor in 1972.

In her scholarly work, she had a remarkable range of interests, said Scott Waugh, professor of history and dean of social sciences at UCLAfrom old Normandy to 15thcentury England, from kinship to monasticism. "But her real interest, the thread that ran through all her work," said Waugh, "was power and how power was exercised, both in the small context of Battle Abbey and the larger context of England as a whole. She was interested in the bases of power: inheritance and land, and family and kinship. But always in the background of her work were the questions: Who profited? What institutions benefited?"

An interest in women's property rights led to her most recent book, Predatory Kinship: The Creation of Norman Power 840-1066, which was published in 1988. She was, said her colleague Philip Hoffman, professor of history and social science, "one of the best medieval historians in the world. Her books are very well known among medieval scholars,' and her last one accessible and enjoyable to nonspecialists as well.

Searle was a fellow of the Medieval Academy of America, and served as its president in 1985-86. She was also a Fellow of the Royal Historical Society and of the Society of Antiquaries of London, and was honorary vice president of the Battle and District Historical Society. At Caltech she was vice chair of the faculty in 1985 and executive officer for the humanities from 1989 to 1992. She retired with emeritus status in 1993.

Peter Fay, professor of history, emeritus, described her as "a splendid teacher," whose courses always drew significant numbers of students. Fay, who had known Searle in the early '60s, remembers her as "possibly the best lecturer that I'd ever heard anywhere then—just remarkable." Waugh, who knew Searle first when he was an undergraduate at UCLA and then as a colleague, portrayed her as "full of curiosity, energy, and enthusiasm, which she transmitted to her students. Her students would get swept up in whatever she was engaged in."

Friends remember her as a voracious reader, a devoted traveler, lively, charming, with great wit and "fantastic spirit." She was "a very gracious, witty, accomplished woman, and a supportive colleague," said Annette Smith, professor of literature, emeritus.

In 1989 Searle led a group of The Associates on a trip to Normandy (and then across the English Channel to replay the Battle of Hastings), which earned her splendid reviews. "She knew a great deal about Norman history and was fun to be with," recalled J. Howard Marshall III '57, PhD '65. Carl Larson '52 remembered her "contagious enthusiasm and sense of humor, which made it fun for all of us."

A memorial service for Eleanor Searle will be held on November 4. \Box



DONALD E. HUDSON

1916 - 1999

Carl Larson presents the flag of the Norman dukes to Eleanor Searle during The Associates' trip to Normandy in September 1989.



Donald Hudson, professor of mechanical engineering and applied mechanics, emeritus, died April 25 at the age of 83. A pioneer in the field of earthquake engineering, Hudson developed or codeveloped a number of instruments used in the study and analysis of seismic motions for designing quakeresistant buildings, bridges, and dams.

Hudson was almost a native Pasadenan. Born in Michigan, he moved here at the age of eight, attended Pasadena schools, graduated from Pasadena High School, and attended Pasadena City College. In 1936 he transferred to Caltech, where he earned his BS in 1938 and began his long career at the Institute. After finishing his PhD in 1942, he joined the faculty as assistant professor in 1943. He was named full professor in 1955 and served on the faculty until he retired with emeritus status in 1981. Then he traveled down the freeway to the University of Southern California, where he chaired the School of Civil Engineering and held the Fred Champion Professorship in Civil Engineering until retiring a second time in 1985.

Other professional activities

outside Caltech included a stay at the University of Roorkee in India in 1958-59, where he set up the postgraduate program in earthquake engineering, still one of the best in the world; and a tour of Central and South America with UNESCO to improve earthquake safety. During World War II, he worked on aircraft torpedoes for the Navy.

His research over the years included dynamic measurements in the field of vibrations and experimental stress analysis, general analysis in structural dynamics and vibrations, and analytical and experimental methods in earthquake engineering and engineering seismology. He was instrumental in developing the first multi-unit building vibration generator with precise frequency controls. He also headed the project of analyzing all strong-motion accelerograms -digitizing the data, computing velocity, displacement, and response spectra and publishing the results in a multivolume set of books in the 1970s. The coauthor, with George Housner, of two important textbooks-Applied Mechanics-Statics and Applied Mechanics-Dynamics-Hudson also published more than a hundred technical papers and reports.

Elected to membership in the National Academy of Engineering in 1973, he was also a member of the Seismological Society of America (president 1971-72), the American Geophysical Union, and the Indian Society of Earthquake Technology. He was a fellow of the American Society of Mechanical Engineers and the Indian National Academy of Engineering, and an honorary member of the Earthquake Engineering Research Institute and the International Association for Earthquake Engineering, which he served



Don Hudson helped design a number of instruments for analyzing earthquake. He is shown here in 1966 with his analog spectrum analyzer.

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as president from 1980 to 1984.

In 1989, the American Society of Civil Engineers awarded its Nathan M. Newmark Medal to Hudson for his contributions to structural mechanics and measurement analysis and his interpretation of the response of structures to dynamic forces and motions. He was also awarded the Housner Medal in 1992 by the Earthquake Engineering Research Institute.

Several of his longtime colleagues, almost all of whom had known Hudson for 40 to 60 years, spoke at a memorial service in Dabney Lounge on June 17, recalling Hudson as a teacher, mentor, and colleague. A common theme in everyone's recollections was Hudson's calm and patience, his love of music, and his thoroughness and generosity. Paul Jennings, PhD '63, professor of civil engineering and applied mechanics, former provost, acting vice president for business and finance, and a former student of Hudson's, claimed to "still know exactly where my notes are [for Hudson's courses] in case I have to rely on them once again for courses that I teach." His blackboard work was so beautiful, said Tom Caughev, PhD '54, the Hayman Professor of Mechanical Engineering,

Emeritus, "you could have photographed it and published it as a book."

Bill Iwan, '57, PhD '61, now professor of applied mechanics, spoke of how he "literally fell in love with dynamics" in Hudson and Housner's course. Hudson's enthusiasm in class also carried over into his lab work. Iwan said, and "taught me something about what my attitude ought to be toward research." Samri Masri, PhD '65, now professor of civil engineering at USC, praised Hudson's leadership at that institution, during what Masri described as "essentially an extended sabbatical from Caltech," where he was "a true father of future generations of earthquake engineering research." His many productive PhD students there are "proof that the legacy of his ideas will live and multiply through his students and his students' students."

In the earlier part of his career, Hudson was notably a member of a small group of inveterate bachelors on the Caltech campus—"the most confirmed bachelor I ever met," said Jennings. Caughey related how he remembered distinctly that when Earnest Watson finally married at the age of 62, George Housner, another bachelor, sternly warned Hudson to keep his guard up; "eternal vigilance is the price of freedom." But Hudson apparently let his guard down and in 1972 married Phyllis Patterson, "the first really great secretary we ever had," according to Harold Wayland, professor of engineering science, emeritus. The Hudsons enjoyed traveling together, something they did in their characteristic wellorganized way, journeying around the world sharing one suitcase.

He read widely in history and literature, collected Asian

art, loved music. Hudson, said Wayland, was the epitome of what Caltech's founders "were trying to achieve when they insisted that all undergraduate students put between 25 and 30 percent of their time in the humanities"-to become "human beings and not just engineering automatons." George Housner, the Braun Professor of Engineering, Emeritus, who had known Hudson since they shared a cubicle office as teaching assistants in 1939, described his love of art and music. "Don," said Housner, "spent a considerable fraction of his income on records, the old 78 rpms." When 33s came in, he started all over again amassing a new collection. And then came compact disks; Hudson started collecting those too. Although Hudson was fondest of string quartets and Lieder, said Housner, when once he happened to be exposed to a recording of the Beatles' "Sgt. Pepper's Lonely Hearts Club Band," he allowed that "there really is some musical merit in there."

Rolf Sabersky, professor of mechanical engineering, emeritus, who claimed that he and Hudson had seen each other almost every day for 50 years, ended his remarks by addressing Hudson "wherever you are—I'm sure there's a round table where the faculty meet for lunch. Reserve a few seats for us, as we will be joining you there and will continue where we left off."