

## Elizabeth H. Leduc, 1921–2010

Elizabeth (“Dukie”) Hortense Leduc passed away on January 30, 2010, at 88. Born in Rockland, ME, on November 19, 1921, she grew up in northern Vermont and graduated with a BSc from the University of Vermont in 1943. She subsequently earned an MA from Wellesley College (1945) and a PhD from Brown (1948). Dukie held a National Institutes of Health (NIH) postdoctoral fellowship at Brown (1948–1949), was an instructor in anatomy at Harvard Medical School (1949–1953), and then returned to Brown in 1953 as assistant professor.

At Brown she was appointed associate professor in 1957. In 1964 she became only the third woman to be appointed full professor in Brown’s 200-year existence. In 1967 she was appointed director of biology, the first woman to lead an academic department at Brown. From 1973–1977, she served as dean of biological sciences. She served as associate dean for the college from 1987–1988.

Dukie had an illustrious career as an effective teacher, a successful administrator, and a scientist with international credentials. She mentored seven PhD candidates and was a gifted teacher of cell biology and histology. Stanley Falkow, formerly a graduate student at Brown, wrote: “I remember especially Elizabeth Leduc’s cell biology lectures seemed like poetry.”<sup>1</sup>

Dukie had broad interests in cell biology. Her early papers co-authored with her PhD mentor, J. Walter Wilson, focus on mitosis in the liver and the effects of different stimuli on mitotic activity, and on the production of polyploid nuclei and multinucleate cells. While her research on liver was ongoing, Dukie was also pioneering important new methodologies in cytochemistry. In 1951 and 1952, she co-authored papers describing the use of histochemistry to localize acid and alkaline phosphatase. Later, in work with Wilhelm Bernhard of the Institut de Recherches Scientifiques sur le Cancer at Villejuif, France, she pioneered the use of water-soluble embedding media and ultrathin frozen sections for electron microscopy. From her summers in France from 1959 to the mid-1980s, she published a series of papers with her collaborators on the formation of perichromatin granules and the effects of quinacrine on

nuclear structure. In 1984, shortly before her retirement, she brought together many of her scientific interests in a paper entitled “Immunocytochemical Identification of Nuclear Structures Containing snRNPs in Isolated Rat Liver Cells.”

During her academic career, Dukie was a widely known and influential scientist. She was a member of 12 professional societies and served on several editorial boards. From 1969–1972 she served on the cell biology study section at NIH and was named a member of the National Advisory General Medical Sciences Council of the NIH (1972–1976). In 1975 she served on an ad hoc advisory committee for the Director of NIH. From 1979–1983 she was a member of the American Cancer Society Cell and Developmental Biology study section, serving as co-chair in 1980.

Dukie was a founding member of the ASCB (1960–1961) and was an elected member of the ASCB Council (1976–1979). She also served on the ASCB Constitution Committee and the Legislative Alert Committee. Concurrent with her service on the ASCB Council, Dukie was appointed to U.S. President Gerald Ford’s Committee on Science and Technology (1976–1977). She was the only woman on the nine-person committee and one of only a few women to advise the U.S. president on scientific matters. This committee reviewed the entire structure of federal science.

Brown has recognized Dukie’s contributions in many ways: the Elizabeth Leduc Award for Excellence in Teaching in the Life Sciences, The Leduc Bioimaging Facility, and the Elizabeth Leduc Prize in Cell Biology to an outstanding Brown undergraduate. For all her achievements, Dukie was an approachable person with a ready smile who delighted in showing schoolchildren her mouse colony. As a pioneer in cell biology and cancer research, as a devoted teacher, and as a stellar administrator, Elizabeth Leduc was truly a role model for women in science. ■

—Susan A. Gerbi, Yale University; Peter Heywood, Brown University; and Kenneth R. Miller, Brown University



Elizabeth H. Leduc

### Reference

<sup>1</sup>Falkow S. (2008). The fortunate professor. *Annu Rev Microbiol* 62, 1–18.