

LeRoy Lesher Barnes

October 23, 1902 — June 11, 1981

After forty years of devoted service to Cornell students and thirty-eight years of pioneering collaborative work in bridging the gap between physics (always his home base) and each of many different aspects of biology, Professor Barnes retired in 1967 to the status of professor of physics and biophysics emeritus. Then, his physical health, robust throughout all but the last of these years, gradually ebbed away. Having been of late essentially confined to his home or to the hospital, he has now passed on. But by thousands who benefited from his kindly, artful influences in our own lives and in the life of our community, his passing is mourned and his achievements during his many years of service are celebrated.

He was born and reared in Wakeman, a small town in northern Ohio. He attended nearby Oberlin College and was there granted the Bachelor of Arts degree in June 1926. The next year he distinguished himself as a graduate student and teaching assistant in physics at Amherst College in Massachusetts and transferred to Cornell in 1927. At Cornell he was appointed instructor in physics in 1929, a title which he held until 1938 (his Doctor of Philosophy degree was awarded in 1932). However, in 1936 the instructorship in physics (in the College of Arts and Sciences) was supplemented with a research position in animal nutrition (in the College of Agriculture). Note his succession of appointments thereafter (all bridging between the two colleges): assistant professor of biophysics in 1938, associate professor of biophysics in 1943, professor of physics in 1948, and, finally, his emeritus title.

In those days, bridging the gap between academic disciplines was somewhat novel, although believed to be a highly desirable enterprise for anyone who could do it. LeRoy could and did. First, in teaching: Soon after obtaining his doctorate, he was placed in charge, in accord with his budding interests, of designing and teaching a second-year physics course for students of biology, especially for premedical and pre dental students. Cornell, as well as LeRoy, was pioneering in this effort. He annually revised the course, after picking the brains of both physicists and biologists, and continued to teach it until his retirement. Second, in research: His Ph.D. thesis research was in pure physics (thesis title: "Emission of Positive Ions from Heated Solids") and, of his forty research publications, the first five (1931 through 1934) were in this tight area. His next publication, in 1938, was titled "Calcification of the Aorta, Heart and Kidneys of the Albino Rat." All of his subsequent research publications were in the areas of animal nutrition, physiology, pathology, or animal (including human) gerontology, and in all these publications, except for one, he was a joint author. He was a superb catalyst in collaborating with biologists, with his own infusion of

innovative contributions from physics. Both in teaching and in research he was one of the very few true pioneers in the field that is now, at last, fully legitimized as biophysics.

But that is not all. Perhaps the most outstanding aspect of Professor Barnes's contributions to Cornell involved his work with the Advisory Board for Premedical Students. He served as chairman of this board for some twenty-five years. During the last ten years of his tenure the board prepared letters of evaluation for an average of about 130 students each year—students in the College of Arts and Sciences who were applying for admission to the study of medicine or dentistry. These letters, each painstakingly drafted for the board by Professor Barnes, were models of care and conciseness; they drew not only upon the applicant's record of academic performance but also upon the personal acquaintance which Professor Barnes sought to establish with each student, beginning with the freshman year. He was a kind and patient man, genuinely interested in students and their welfare. But he held them to high standards, and his hopes for their success were balanced by a strong concern that each applicant be honestly and fairly evaluated for consideration by admission committees at the professional schools.

Finally, a comment about music, which, either vocal or instrumental, was a joy to Professor Barnes: blessed with a fine bass voice, he loved to sing. He sang in college choirs and choruses, and in church choirs during most of his years in Ithaca. As a young man he had been a trombonist but later learned to play the cello, which became his favorite instrument. His wife, Lucy, herself a talented musician, accompanied him on piano or violin. The Barneses also enjoyed playing string quartet music with informal groups of friends either from Cornell or from the community at large.

Yes, his passing is mourned, but his life is celebrated.

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