Lester Earl Casida, 1904–1986: A Brief Biography

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In the early 1930s, Dr. F. F. McKenzie at the University of Missouri mentored a number of graduate students who would eventually make significant contributions to agriculture. One of these individuals was Lester Earl Casida, who became nationally and internationally recognized for his research on various facets of the endocrinology and physiology of reproduction of domestic animals. Cas, as he was affectionately called by his colleagues and students, also became widely recognized for the remarkable success he had in educating young scientists.

Dr. Casida was born in Chula, Missouri on April 9, 1904. In 1926 he earned a B.S. degree from Northeast Missouri State Teachers College, with the intent of becoming a high school teacher. A scholarship awarded by the University of Missouri enabled him to complete the requirements for an M.A. degree in Animal Husbandry in 1927. He was then offered an assistantship by the university to continue his graduate work, but his marriage to Ruth Barnes in 1927, and a growing family over the next year, forced him to seek employment to cover expenses. Thus, from 1929 to 1931 he accepted temporary teaching positions with the Arizona State Teachers College in Tempe and the Arkansas State Teachers College in Conway. In the spring of 1931, he returned to the University of Missouri to complete the requirements for a Ph.D., which he earned in 1932. With the encouragement of Dr. L. J. Cole, Department of Genetics, University of Wisconsin, he accepted a National Research Council Postdoctoral Fellowship in Biological Sciences. In 1934, he was hired as assistant professor in genetics and thereafter rose through the ranks to become professor in 1946. He concluded a distinguished career at the University of Wisconsin in 1974, when he retired to become Emeritus Professor of Reproductive Physiology in the Department of Animal Science.

During his early years in Wisconsin he developed a close working relationship with another young faculty member in the Department of Genetics, Arthur B. Chapman. Chapman was trained in quantitative genetics and possessed a strong background in statistics. Because of this association, Dr. Casida acquired a deep appreciation for experimental design and statistics as applied to the solution of biological problems. A story passed on down through the years is that Cas came down with the mumps and was confined to bed for a week or more. He borrowed one of Chapman's statistics books and read it cover-to-cover during his confinement. Thereafter, rigorous statistical evaluation of data to facilitate their biological interpretation became a hallmark of Dr. Casida's research publications.

Dr. Casida's research on endocrine and environmental factors affecting reproduction of domestic animals, although primarily basic in nature, was not without practical significance to the livestock industry. Results of his early work on the relationship between estrus and ovulation in cattle (Nalbandov and Casida, 1942) was particularly important in the development of AI procedures for cattle. His students conducted numerous studies examining the genetic and environmental factors affecting age at puberty in swine, cattle, and sheep (Robertson et al., 1951; Kidder et al., 1952; Foote et al., 1959). Considerable research was devoted to examining the impact of dietary energy on ovulation rate and em-

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bryo survival in the gilt and ewe (Zimmerman et al., 1960; Bellows et al., 1963).

Dr. Casida's laboratory pioneered much of the research on the function of the corpus luteum in domestic animals. He was the first to recognize that the corpus luteum, through secretion of progesterone, was a controlling factor of the estrous cycle. This steroid was first used in his laboratory to synchronize estrus in sheep (Dutt and Casida, 1948), and this research became the basis for subsequent development and use of progestagens for estrus synchronization that occurred in the 1960s and 1970s. Research from his laboratory was the first to demonstrate that the uterus played a major role in regulating corpus luteum life span in domestic animals (Wiltbank and Casida, 1956). Subsequent research by students focused on defining the biochemical and morphological changes of the corpus luteum during the estrous cycle and pregnancy (Zimbelman et al., 1961). Throughout the 1960s a major effort by his laboratory was to evaluate the endocrine physiology of the postpartum cow. A series of comprehensive studies conducted by his students on this topic were compiled together in Wisconsin Research Bulletin 270 (1968).

Dr. Casida's philosophy with respect to the mentoring of graduate students is best described by him in a paper published in the *Journal of Animal Science* (Casida, 1966). Once a student was given major responsibility for a project the student was expected to carry the research to completion and in the process acquire the ability to critically evaluate his own work, as well as the related contemporary research of others. Dr. Casida met with each student every week and after the first of such meetings it was obvious to the students that he expected them to be able to think and use logic to solve problems or to answer his often probing questions pertaining to the conduct of the research. Under his guidance, one learned to be precise in experimentation and to focus on the problem, yet keep an open mind and eye for the unexpected response. One of his favorite expressions with respect to research was "Let the animal do the talking." Dr. Casida did not subscribe to the idea that sound research could be accomplished only through use of highly sophisticated laboratory equipment. He often admonished his trainees not to succumb to technology to the point that it became the "tail wagging the dog." Because of the standard of excellence that he set in mentoring trainees in reproductive biology, the American Society of Animal Science honored him by establishing the L.E. Casida Award for Excellence in Graduate Education and Research. During his academic career, 62 students earned the Ph.D., 49 obtained the M.S. degree, and several postdoctoral trainees benefited from his wisdom and guidance. These students and trainees were senior authors of the majority of 235 peer-reviewed research papers that were credited to his laboratory. His former students frequently sent others to acquire their education in his laboratory. Thus there was a continuity of his philosophical sphere of influence relative to research and development of young scientists.

Dr. Casida was an ardent supporter of the American Society of Animal Science and a charter member of the Society for the Study of Reproduction. He attended the annual meeting on a regular basis and virtually all his students received their baptism in making a platform presentation at these meetings. He served as editor-in-chief of the *Journal of Animal Science* for 6 years (1949 to 1954) and as president of ASAS in 1956. In recognition of his contributions to reproductive biology of domestic animals he received the highest honors given by six national and international societies.

Even after retirement, Dr. Casida was a frequent attendee at campus seminars. He passed away in July 1986. He and Ruth are survived by their daughter, Betty; sons Earl and John, and six grandchildren and several great-grandchildren. Dr. Casida's legacy lives on today through the research and instruction of his former students and no doubt will abound for a number of years through the succeeding generations of trainees related to this great scientist.

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