

Memorial Resolution of the Faculty of the University of Wisconsin-Madison On the Death of Professor Emeritus Mark Brownfield

Dr. Mark Brownfield, Associate Professor Emeritus in the Department of Comparative Biosciences in the School of Veterinary Medicine at the University of Wisconsin-Madison, died on November 21, 2017 at 69 years of age.

Born on February 6, 1948, Professor Brownfield earned his undergraduate degree (Zoology, 1972) and a master's degree (Anatomy, 1977) from Colorado State University. He developed an interest in neuroendocrinology and hypothalamic function working with Dr. Gerald Kozlowski and received his Ph.D degree (Anatomy, 1979) from Colorado State University. From 1968-1978, he also worked as a medical, surgical, and orthopedics nurse at Loveland Memorial Hospital in Loveland, Colorado. He was a postdoctoral fellow with Dr. William Ganong at the University of California-San Francisco where he studied serotonergic neurons, angiotensin, and other neuropeptide hormones.

In 1982, Professor Brownfield became an Assistant Professor in the Department of Comparative Biosciences within the newly established School of Veterinary Medicine at the University of Wisconsin-Madison. His most important and influential work was in the physiological characterization of serotonergic neurons, as well as the localization and function of serotonin receptors. He was highly successful in the design, generation, and testing of antibodies to specific receptors in the brain, especially serotonin receptors. Several of the antibodies that he designed were sold by commercial companies for use by other scientists. The impact of his contributions to neuroscience is substantial when one considers how many hundreds of scientists have used his antibodies over the past several years. Professor Brownfield also collaborated with many other faculty at the University of Wisconsin-Madison while studying neuroendocrine regulation of body fluids, feeding and metabolism, and cardiovascular function.

As a teacher, Professor Brownfield helped to develop the curriculum for the new veterinary school, particularly in the fields of endocrinology and physiology. He taught Endocrine Physiology to every veterinary student who graduated from the School of Veterinary Medicine from the first class that entered in 1983, through the spring of 2016, his last semester before his retirement. He was particularly devoted to providing research opportunities for undergraduate students at the University of Wisconsin-Madison. During a typical semester, Professor Brownfield often had 2-3 undergraduate students working in his laboratory. Accordingly, in 2016, Professor Brownfield was nominated for the university's Award for Mentoring Undergraduate Research Students. Professor Brownfield provided a warm approachable environment in the laboratory that allowed students to freely and openly discuss their career goals. In many cases, Dr. Brownfield's discussion and advice proved to be instrumental in advancing the students' academic careers. Many of his undergraduate students presented posters locally on campus, as well as at national science meetings, and several students have won awards for their presentations. After his retirement and at the time of his passing, he had continued to direct his research laboratory and advise undergraduate researchers.

Professor Brownfield was beloved by his many associates and colleagues. He will be remembered for his caring spirit, sense of humor, and unassuming manner. He was helpful, thoughtful, supportive, and friendly to his colleagues and students. He had limitless generosity in sharing the secrets of successful immunocytochemistry and endless patience while training undergraduates in his lab. He always had time to listen and to talk about science, whether it was neuroendocrinology or astronomy.

Professor Brownfield is survived by his son Andrew Brownfield, daughter Marialisa Brownfield, and their mother, Jane Mahoney, as well as his brothers, Ned and Joseph Brownfield.

Memorial Resolution Committee

Stephen M. Johnson, Associate Professor, Department of Comparative Biosciences

Linda A Schuler, Professor Department of Comparative Biosciences

Thaddeus G. Golos, Professor and Chair Department of Comparative Biosciences