

*To Doctor Thompson
with warmest personal
regards of Ray Truex*

A TRIBUTE TO
ELIZABETH C. CROSBY

Upon presentation of the
HENRY GRAY AWARD

April 3, 1972

by
RAYMOND C. TRUEX

Reprinted from

The Proceedings of the American Association of Anatomists
eighty-fifth meeting, THE ANATOMICAL RECORD, Volume 174,
pp. 70-73, September 1972.

The Henry Gray award, established by Lea and Febiger "in recognition of sustained and meritorious service to the entire scientific community through scholarly accomplishments in original investigation, teaching, and writing in the field of Anatomy," was made by Past President Truex. President Truex's tribute and awarding speech to Dr. Elizabeth C. Crosby follows:

"In 1970 and 1971 the numerous stars in the field of Anatomy were thoroughly surveyed in the search of two super stars. In 1970 'Boyden's Belt' was observed in the constellation of Pisces, and in 1971 'Duncan's Diad' was discovered under the sign of Aquarius.

"Tonight I am happy to report another successful celestial exploration by members of the Selection Committee — a quest for another star to add to the luster of the two previous recipients of the Henry Gray Award. We circled the zodiac, we navigated the Milky Way en route to the cluster of stars that shine over the fields of Anatomia — when lo, in the galaxy of Scorpio we discovered Antares, a super-star that possesses luminescence a thousand times greater than that of the sun itself. Antares has an inner source of energy and light that warms the planets around her as she benignly rules the constellation of Scorpius. The search was ended — we had found another super-star to complete the celestial triad. Our selection for the 1972 Henry Gray Award is Queen Antares of Anatomia — nee Elizabeth Crosby, Professor Emeritus of Anatomy at the University of Michigan and at the University of Alabama Medical Center. She is an inveterate traveler and it will interest many to learn that she still spends one fortnight each month in Ann Arbor, the other in Birmingham. This arrangement permits her to pursue several active research interests in both institutions while serving as Consultant to the two Departments of Neurosurgery. Long may Dr. Crosby, the Emeritus flying archangel, continue to dispense neurologic knowledge at the undergraduate and graduate levels in order to perpetuate the pleasures of her customary eighteen-hour day. For one so young in heart — so full of the zest for life — for one who reads

poetry and detective stories while jetting through midwestern and southern skies, there can never be such a thing as a generation gap.

"The one we honor tonight is an exceedingly smooth blend of a rugged German-English ancestry, parental encouragement in all endeavors, and the rich benefits that accrued from the fullest of symbiotic associations with several outstanding anatomists. Only Dr. Crosby could identify and evaluate the indelible threads that became woven into the fabric of her full and eminently successful life by three of her colleagues — namely, C. Judson Herrick, G. Carl Huber, and C. U. Ariëns Kappers.

"Neither poetic words, nor those of this ardent admirer, are adequate to evaluate the colossal mind and solid research contributions of this dynamic yet demure lady of science. Appreciation of the past often lends enchantment to the future, so began for me a search for the real Elizabeth Crosby as seen through the eyes of some who knew her best as student, teacher, research colleague and friend. Regrettably, time permits only a few brief samples from an enchanting box of stardust.

"Elizabeth Crosby, the only child of Lewis Frederick and Frances Kreps Crosby, was born of Scorpio on October 25, 1888, in the little town of Petersburg, Michigan. Even her birthplace conjures up visions of good things to come, for Petersburg is comfortably nestled amidst towns with such euphonious names as Dundee, Maybee, Blissfield, and Temperance. Being outstanding in alertness and intellectual capacity, she deciphered symbols and sentences at a very early age. She read Jane Eyre, the History of the French Revolution, and many other volumes before she received formal reading instruction in school. One can only speculate on the re-

relationship between these early reading achievements and two of her later papers, titled 'An experimental study of optokinetic responses' and 'Relations of brain centers to normal and abnormal eye movements in the horizontal plane.' Perhaps the penetrating vertical gaze is the more familiar eye movement to those who best know this kindly shepherdess of medical education. Few indeed are the American neuroanatomists who have not been held mesmerized by benevolent dark eyes transfixed midway between glass lens and hairline.

"Following high school Elizabeth propelled her way through Adrian College in three fast years to receive the B. S. degree in 1910 with honors in Latin and Mathematics. A one-term course in elementary zoology gave her an unquenchable thirst for more knowledge about things biological. Professor Jones of Adrian College, a torch-lighter in his own right, suggested that she journey to the University of Chicago to work with C. Judson Herrick, then Professor of Anatomy. With only one foot in the door she graciously yet very firmly resisted Dr. Herrick's advice to take more prerequisite courses in biology. She asked instead to take the gross and neuroanatomy courses prescribed for medical students. Years later Dr. Herrick recalled, 'At first she was disoriented and confused, but within a few months she was doing as well as the medical students. She received full credit for both courses. She did what I told her was impossible, and she did it with distinction.' Herrick once quoted General Arnold's motto, 'The difficult we do immediately; the impossible takes a little longer' — and then he noted that this motto certainly 'does not apply to Elizabeth Crosby, for the ability to perform such miracles abides with her.' This has continued to be but one of the many Crosby hallmarks. From the University of Chicago she received the M.S. degree in 1912 and the Ph.D. degree, magna cum laude, in 1915. Her doctoral thesis, titled 'The Forebrain of Alligator Mississippiensis' was published in the *Journal of Comparative Neurology* in 1917. This paper continues to be the keystone in the reptilian literature on the evolution of the neopallium. It stands as a published gem because of its clarity and magnificent illustrations.

"We are all indebted to the few elusive diencephalic fibers that found their way to the thin general cortex of the alligator forebrain, for they needled the imagination and sparked the neuroanatomical curiosity of an active mind. In some hundred publications, including four textbooks, our Michigan authoress has lucidly presented the structure and function of the entire nervous system in a wide variety of vertebrates including that of man — yet the forebrain and comparative neurology have remained her true loves. Today Dr. Crosby stands unrivalled as the world's foremost authority on the nervous system throughout the vertebrate phylum, thanks to leathery mississippiensis.

"My utter fascination in the joint exploits of Crosby and the alligator have led me to outrun biographic sequence, for upon graduation from the University of Chicago, parental illness motivated Dr. Crosby to return to Petersburg, Michigan. Here she remained to teach in the high school for five years, serving three years as Principal and two as Superintendent. In the spring of 1920, after the death of her mother, Dr. Crosby sought and obtained a teaching position with Professor G. Carl Huber at the University of Michigan in Ann Arbor. Though hired to teach osteology in the fall she began teaching in histology and neuroanatomy — the true reasons for this academic switch are speculative, but most fortunate for all concerned. This was the beginning of an outstanding teaching and research career in Anatomy — one that spanned thirty-nine productive years. The notable events and contributions of Dr. Crosby during these nostalgic years were fortunately recorded for posterity in volume 112 of the *Journal of Comparative Neurology* that was dedicated to her when she attained the rank of Emeritus Professor in 1959. The volume contains scientific papers by some of her former graduate students and research colleagues. A more recent biography by E. Carl Sensenig and the late Tryphena Humphrey appeared in the *Alabama Journal of Medical Sciences* (1969, 6: 357-363).

"Another colleague who knew her throughout the era of the Huber-Crosby coalition and into present times states:

'Her clinically oriented teaching was truly outstanding and no effort was ever too great if the end was better student understanding. She was sympathetic to students in their difficulties and immensely helpful to them, but she has never given an easy course . . . Her philosophy was simply stated: don't teach for the mediocre; pitch your course to stretch the brains of the very best.'

"The same philosophy and meticulous guidance prevailed as she challenged graduate students and clinical residents alike to strive for knowledge and academic excellence. One of her greatest legacies to the discipline of Anatomy is vested in the thirty-nine recipients of doctoral degrees whom she mothered and prodded as necessity dictated. The vast majority of them are presently teaching on medical and dental school faculties throughout the world, along with countless thousands of physicians in a wide variety of clinically related fields. Many are in this hall tonight.

"Little wonder that one endowed with such energies and a Rolls Royce mind should be called upon to give innumerable distinguished lectures, serve as visiting professor, or act as convener and president of neurological conferences throughout this country, Europe, and Asia. Dr. Crosby is an active participant in a host of scientific societies; she presently serves on the editorial board of four scientific journals, and contributes endless hours of time to several trusteeships and scientific commissions at home and abroad. Her unselfish devotion to others and to the scientific community at large have made her the recipient of eight honorary degrees (Sc.D., Adrian College, 1939; Marquette University, 1957, and Denison University, 1959; M.D., University of Groningen, Holland, 1958; LL.D., Wayne State University, 1958; Sc.D., Woman's Medical College, 1967; Sc.D., Smith College, 1967; Sc.D., The University of Michigan, 1970) as well as fifteen prestigious worldwide scientific and academic awards that include the University of Michigan Distinguished Alumni Service Award in 1968 and the Lashley Award of the American Philosophical Society in 1969.

"Dr. Crosby's close associates and re-

search colleagues constitute her 'immediate scientific family' and these have received untold enrichments from her guidance and affection. Her 'real family' consists of two girls, whose care and education she undertook, and five grandchildren. These generous and precious attributes characterize the life credo of this remarkable and unusually fine woman. Candidly I know of no other who so eminently fulfills the criteria of success prescribed by William Osler — to acquire the art of detachment, the virtue of method, and the quality of thoroughness, but above all the grace of humility. All of us who have profited from her research, her writing, and her stewardship in behalf of others, vicariously consider ourselves honored to be only peripheral members of her 'scientific family at large.'

"There is no doubt in my mind as to which author proposed the following words of Abraham Lincoln on the Preface page of *The Comparative Anatomy of the Nervous System* by Kappers, Huber, and Crosby — listen to these prophetic words — 'I do the very best I know how; the very best I can; and I mean to keep doing so until the end. If the end brings me out all right, what is said against me won't amount to anything. If the end brings me out wrong, ten angels swearing I was right would make no difference.'

"So tonight your scientific colleagues say you did your very best dear Elizabeth, and in the end you came out right. In the process you have brought all of us along with you not only to a better understanding of the nervous system, but to a fuller appreciation of the meaning and responsibilities of life itself. You have painted a brilliant scientific global landscape as you worked your way through mounds of animals and acres of neurons — humble yet always confident.

"It would bring me much personal joy to present the Henry Gray Award to Dr. Crosby. However, there is one among us who has known and worked with her longer than all others. He deserves the privilege of making the Henry Gray Award presentation, as well as to continue a long established custom that originated out in badger country. Each year, at the conclusion of the course in Neuroanatomy, the

AMERICAN ASSOCIATION OF ANATOMISTS

appreciative medical students presented Dr. Crosby with a bouquet of roses. We the colleagues of Queen Antares are still her students — we can do no less. I now call upon our distinguished retiring Sec-

retary-Treasurer and valued friend — Dr. Russell Woodburne.”

Dr. Woodburne then read the citation and presented the award and roses to Elizabeth Caroline Crosby.