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Don Fawcett

Don Fawcett was born in 1917 on a farm in Iowa where his father and his father's father had raised purebred sheep and cattle. While he was a boy, poor health forced the senior Fawcett to leave the farm. The family moved to Boston where the father became a successful wool merchant.

Fawcett attended the Boston Latin School, which, founded in 1635, was and is the oldest high school in the country. He went on to attend Harvard College in 1934 where he "sampled the humanities," but soon became fascinated with biology. While in college he illustrated a book on athletic bandaging that had been authored by the football team's physician. In the summers, Fawcett worked on Bailey's Island on the coast of Maine, where for awhile his task was to embalm and prepare small sharks for sale to colleges for comparative anatomy courses. Fawcett received his bachelor's degree in 1938.

College was followed by Harvard Medical School where Fawcett connected with Anatomy Professor George Wislocki. "I stole as much time as I could from my course work to do independent research on projects that included studies on the vascular bundles of aquatic mammals, and the amedullary bones of the manatee," he recalls.

In 1941 Fawcett married Dorothy Secrest, his childhood sweetheart from Iowa. Graduation from Harvard Medical School followed the next year, along with the beginning of a surgical internship at the Massachusetts General Hospital.

Of his internship, Fawcett remembers best "being on duty in the Emergency Ward the night of the famous Coconut Grove Nightclub disaster in which 440 died. We had been having a quiet evening when, without advance notice, we received 115 seriously burned patients within an hour and a half. Mobilizing all of the off-duty staff that I could reach, I continued on duty for 30 hours doing all I could to relieve the pain and dress the burns of the victims."

The interruption gave Fawcett a chance for reflection. "During the war, I had given much thought to what I wanted to do in the future, and although I had enjoyed surgery, I decided I was more interested in research and teaching." Thus, upon his return, Fawcett joined the Department of Anatomy at Harvard as a junior faculty member.

Coincident with his return to Boston, the electron microscope had recently been developed and Keith Porter had just published the first electron micrographs of tissue culture cells. "I had heard Porter was developing a microtome that would make it possible to study thin sections of cells and tissues. I was eager to become involved in a new and rapidly advancing field. Porter had been a graduate student assistant in one of the courses I had taken in college, and I hoped that he might remember me and allow me to join his group at the Rockefeller Institute." He did, and at Rockefeller Fawcett "undertook a project on the fine structure of ciliated epithelium that revealed the 9 + 2 pattern of microtubules in the cilia for the first time in a metazoan."

But Fawcett again returned to Harvard Medical School, this time remaining there for three decades. Equipped with an electron microscope, the years "were filled with the same excitement and anticipation of discovery that attends the opening up of a new continent for geographic exploration. Every tissue and organ studied revealed beauty and order in its organization that we had not imagined."

In 1955 Fawcett was named to the Chairmanship of the Department of Anatomy & Cell Biology at Cornell Medical School in New York City. He established an EM laboratory and trained others in its use. Four years later, he declined the offer of a chair at Oxford and instead returned again to Harvard in 1959 as Hersey Professor of Anatomy and Chairman of the Department. Fawcett remembers with amusement that the endowment for his chairmanship had been established "by Ezekiel Hersey in 1770 with a gift of 1,000 pounds, and my salary reflected the size of that endowment."

In the 1960's, Fawcett modernized the teaching of microscopic anatomy and established an active pre- and post-doctoral program. He takes pride in his role in guiding the research of many trainees who came to Harvard to learn electron microscopy over the next 23 years. Twenty-nine of his former students and postdocs have become medical school professors and 30 others have become chairs of departments of anatomy and/or cell biology in the U.S. and abroad.

In the 1960's the study of the ultrastructure and biochemistry of cells was gaining momentum. To build on that momentum, Keith Porter proposed to the Tissue Culture Association that it broaden its mission and change its name to the Society for Cell Biology. But, Fawcett recalls, "the officers and membership were more concerned with unsolved problems in cell culture and rejected this proposal, suggesting that cell

biology would be better promoted by establishment of a new society." On January 9, 1960, 21 electron microscopists and biochemists gathered at the Rockefeller Institute, designating themselves a Provisional Council for the establishment of an American Society for Cell Biology. At a second meeting in May, an Executive Committee was appointed, chaired by Keith Porter, and including Montrose Moses, Morgan Harris, Hans Ris, Hewson Swift and Herbert Taylor as well as Fawcett. They charged themselves with organizing an inaugural scientific meeting of the American Society for Cell Biology.

In 1961 the NIH awarded funds to Hewson Swift and Keith Porter for project RG-8554, "First Meeting of American Society for Cell Biology." It was held in Chicago from November 2-4 that year and consisted of three symposia: Aspects of Replicating Systems, Cell Diversification-Clonal Diversity and Differentiation, and Characteristics of Cell Interfaces. Fawcett was elected the first President of the new organization at the meeting in 1961. Thinking back, Fawcett comments, "I am sure none of us ever imagined that the Society would one day have nearly 10,000 members."

In 1976 Fawcett resigned his chairmanship and accepted an appointment as Harvard's Senior Associate Dean for Preclinical Science. But after decades of devotion to academic science and administration, when Fawcett retired he wanted to make an entirely different contribution. So in 1985 he left the familiarity of Boston to take the position of Senior Scientist at the International Laboratory for Research on Animal Diseases in Nairobi, Kenya. There, he worked in parasitology in a well-equipped laboratory financed by the World Bank and other international agencies. Its mission was to find methods of controlling two parasitic diseases, theileriosis (also known as East Coast Fever) and trypanosomiasis, which together kill hundreds of thousands of cattle annually in East and Central Africa. "There, free from administrative duties, I could do research full time in a very interesting new field. I had a small German microscope and all the ancillary equipment needed. In those years, I was able to add significantly to what was then known about the parasites and their arachnid and dipteran vectors."

The Fawcetts spent their weekends taking small safaris to explore the region. "I had been doing nature and wildlife photography as an avocation. Every weekend Dorothy and I would take off in a small Japanese 4-wheel drive vehicle to observe and photograph the mammals and birds of East Africa," he recalls. Fawcett's wildlife photographs have been displayed at Harvard Medical School and at the University's museums, and have won awards at an international film festival and at the Nature & Wildlife Photo Contest of the Pittsburgh Museum of Natural History. After five years in East Africa, the Fawcetts returned to the United States. But African life had left them unprepared to face the urban congestion and density of Boston, so they made a new home in Montana. The Fawcetts continue to travel, having returned to Africa on safari several times, as well as visiting the Amazon and Alaska.

Fawcett has received a number of awards and honorary degrees, and in 1988, a Fawcett Lecture in Cell Biology was established at Harvard Medical School. Past Fawcett Lecturers have included former ASCB Presidents George Palade, Marc Kirschner, Randy Schekman, and this year, Elizabeth Blackburn.

The move to Montana brought the Fawcetts closer to two of their four children. Donna Boggs is an Associate Professor at Eastern Washington University, teaching physiology and anatomy and doing research in comparative physiology; Robert Fawcett is Director of Hatcheries & Game Fish Stocking for the State of New Hampshire; Joseph Fawcett is Operations Manager for a charter aircraft company in Little Rock, Arkansas, and Mary Papish is a homemaker and mother of five in Eugene, Oregon. Among their children, the Fawcetts have 13 grandchildren.

Fawcett is keenly aware of the important history of cell biology of which he has been a part. In a speech in Siena, Italy in 1974, Fawcett said, "I am grateful for having been able to participate in a branch of science where one can combine aesthetic satisfaction with the intellectual rewards of wrestling from nature her closely-guarded secrets — and thus contributing in some small measure to man's store of knowledge."