

In Memoriam

Stuart B. Moss, PhD

April 1, 1950 – November 13, 2021



Andrology lost one of its staunchest supporters with the recent death of Stuart B. Moss, PhD, in Washington, DC, on Saturday, November 13, 2021. Stuart received his undergraduate degree with honors from Union College in 1972 and then attended graduate school at the University of Rochester, where he received his PhD working in the laboratory of Jerome Kaye. From 1980-1985, he was a Research Fellow in Physiology at Harvard Medical School with Anthony Bellvé and, from 1985-1989, was Staff Scientist in the laboratory of Mark Groudine at the Fred Hutchinson Cancer Center in Seattle. In 1989, he moved to Philadelphia to join the faculty of the Temple University School of Medicine and, was recruited in 1992 to join the Center of Research on Reproduction and Women's Health of the University of Pennsylvania School of Medicine. Fifteen years later, Stuart left to take administrative positions in the US National Institutes of Health (NIH), first as a Scientific Review Officer with the Center for Scientific Review and, two years later, as a program officer with the Fertility and Infertility Branch of the Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD). He also worked since 2014 in the NICHD Office of the Director on legislative matters.

Stuart's research examined several important aspects of spermatogenic cell differentiation. His work on sperm nuclear structure instilled a long-term interest in the roles of histones in mouse and avian spermatogenesis. He also incorporated techniques of molecular biology to examine gene regulation during spermatogenesis, dissecting the cellular and molecular processes involved in building other sperm structures such as the flagellum. These studies led to the discovery and elucidation of several new proteins involved in anchoring and regulating signaling processes important for sperm motility. His work was some of the first to demonstrate that haploid-expressed proteins encoded by the X-chromosome are components of both the X and Y chromosome-bearing spermatids. In 2002, while on sabbatical as a Visiting Professor in the laboratory of Masaru Okabe (2017 ASA Distinguished Andrologist) in Osaka University, Japan, Stuart expanded his repertoire of techniques to include gene editing and functional fertilization studies using sperm from mice containing experimentally-induced mutations.

As a laboratory scientist dependent on grant funding, Stuart learned first-hand how important it is to have grant proposals fairly evaluated and to have the feedback from reviews clearly communicated to the applicants. He took this understanding to his positions at NIH, first in the reviewing process and later as a Program Officer responsible for the portfolio of grants dealing

with andrology. In this role, he assisted many early-stage investigators navigate the granting process and helped to guide more senior scientists entering the field for the first time.

On a personal level, Stuart had a quiet, non-assuming outward demeanor. He came from a small, tight-knit family that included his parents and a younger sister. Although he had no children of his own, he was very close to his niece. He often took her or children of his friends to amusement parks or sporting events. To many, he was an honorary “uncle”.

Stuart built family wherever he went. The relationships he established over the course of his career continued throughout the remainder of his life. With his interest in science and generous nature, he made an impact on all the colleagues that he treated as his scientific family. As examples of his “scientific relatives”, we would like to use this platform to illustrate briefly how Stuart impacted our lives and careers.

GLG: I first met Stuart in 1982, when I was a Postdoctoral Research Associate in Clarke Millette’s laboratory at Harvard Medical School. We developed a strong bond of friendship through our shared interests in spermatogenesis and support of each other’s careers. This brotherhood continued after we both left Harvard and was reinforced when he came to Philadelphia in 1989. I was overjoyed when he decided to come to Penn three years later. Upon his arrival, he moved into an adjacent laboratory and we established a long-standing collaboration that included structural and functional studies of flagellar proteins such as AKAP4. When he left Penn in 2007, I was torn. I lost my closest collaborator, but, on the other hand, I knew that NIH was gaining a committed, ethical, and very competent administrator; it was especially good news for the field of andrology when he transitioned to become a Program Officer.

PEV: Stuart became an important role model for me when I joined Penn in 1991 as a postdoc in Greg Kopf’s lab. At the time, Stuart worked in spermatogenesis and on what was my scientific passion, cAMP-dependent signaling events in sperm. Besides the AKAP4 work with George Gerton, he was the corresponding author in a classic manuscript showing that ADCY10 is the main source of cAMP during sperm capacitation. Stuart also worked late hours, the best time to discuss results and listen to his suggestions. During one of these evening exchanges, he offered to teach me molecular biology. We designed a project to clone novel testis-specific kinases and I still remember how he patiently taught me the necessary techniques for the project. Stuart was an avid tennis and squash player. We met weekly to play with others from our Penn family, sometimes gathering afterwards at a bar to discuss our projects. I still remember his subtle sense of humor and our meaningful conversations.

After I left Penn and moved on with my career, Stuart and I kept in touch and I could not believe how lucky all of us in the field of reproduction and, specifically, andrology, were with his decision to move to NIH. In this position, he encouraged everybody to do their best. He always willingly read our Specific Aims pages, supported us when the scores were not encouraging, and counseled us to be “cautiously optimistic” when we received good scores. I will always remember Stuart as an “universal” mentor, knowing perfectly well how to talk to scientists at all levels of experience. If you were developing a grant proposal, Stuart was the “go-to” person to learn if your idea fit within the programmatic purview of the NICHD research portfolio.

In the field of andrology, we often speak of our colleagues as “family”. At some level, conferences such as the Annual Meeting of the American Society of Andrology are “family reunions”. Stuart was an active participant in the ASA meetings where he annually presented an update of the funding climate at NIH. He also took part in symposia and luncheons for trainees. In conversations with colleagues at these meetings, the questions “Have you met Stuart yet” and “Have you spoken to Stuart about your research idea” were frequently uttered; only his first name needed to be said, we all knew who was meant.

The announcements of Stuart's death released an outpouring of emotions of sorrow for his passing and gratitude for everything he had done for his scientific family and the field of andrology. Our hearts go out to all who knew him and, especially, to his companion of 20 years, Pat Pileggi; his mother, Dorothy Moss; his sister, Wendy Moss; his niece, Jordana Haviv; and his grand-nephew Julian Joshua Torres.

George L. Gerton, PhD, Past President American Society of Andrology, 2019-2020

Pablo E. Visconti, PhD, American Society of Andrology Council Member, 2013-2016