



Priscilla Ann Schaffer

Priscilla Ann Schaffer, Ph.D., who served two stints on the Harvard Faculty of Medicine, died from complications of Parkinson's Disease on November 18, 2009, in Oro Valley, Arizona. Priscilla was an internationally recognized virologist who published more than 150 papers. She was noted for her relentless, genetic approach to nearly every aspect of her organism of choice -- herpes simplex virus (HSV). She is also renowned for her mentorship of students, postdoctoral fellows, and fellow faculty.

Born in St. Louis, Missouri on December 28, 1941. Priscilla was a devoted Cardinals fan, even as her family moved from state to state, and especially when surrounded by rabid Red Sox supporters in Boston, particularly in 2004. Priscilla's childhood and adolescence were not easy, but, starting at a young age, science and music were strengths that provided comfort and joy. Priscilla performed dissections on her family's front porch, and became proficient at cello and baritone horn. Following graduation from Hobart and William Smith College in 1964, she began her forays into virology at Cornell Medical College, studying Venezuelan encephalitis virus infections in mosquitoes with William F. Scherer. Priscilla famously caught and fed mosquitoes with her arms. She received her Ph.D. in 1969.

Priscilla then began her career in HSV as a postdoctoral fellow with Matilda Benyesh-Melnick at Baylor College of Medicine, and within two years advanced to Assistant Professor, as she pioneered HSV genetics. She isolated and characterized an enormously valuable collection of temperature-sensitive mutants of HSV 1 and 2, as well as mutants resistant to immune cytolysis and antiviral drugs. Priscilla provided these mutants and those she created later in her career to other researchers. These mutants helped drive the molecular analysis of HSV, especially once the relevant tools became available, and are still important reagents for investigators worldwide.

In 1976, Priscilla began her Harvard Medical School (HMS) career when she was recruited to join the Department of Microbiology & Molecular Genetics and what was then the Sidney Farber Cancer Institute as an Associate Professor. The Farber was an exciting place to be, with terrific senior faculty and an expanding, creative group of young investigators, including Priscilla. Numerous postdoctoral fellows and graduate students joined her lab, making and analyzing mutants using the new tools of molecular biology to explore viral gene expression, DNA replication, glycoproteins, and drug mechanisms and resistance. Priscilla pioneered the use of complementing cells to generate replication-defective mutant strains that were very important for the study of essential HSV gene functions and have later been developed as tumor-

killing agents and vaccines. Beyond her science, Priscilla was a breath of fresh air. Trainees both in her lab and nearby saw a young dynamic woman directing a strong independent laboratory full of dedicated students and fellows that respected and admired her leadership. During “chill time” on Friday afternoons, Priscilla would heartily join in with great conversation, humor and her signature infectious laugh. She coupled her own success to that of her multiple trainees, coupling an encouraging personality with a tenacious drive. Priscilla taught -- not only in classes but daily in the laboratory. Her dedication to making material clear and interesting, to assuring that her students would succeed, and to inspiring the next generation’s commitment to research were as important as her own science and innumerable contributions to viral genetics. Priscilla was promoted to Professor in 1981.

In the late 1980’s, Priscilla began collaborating with two HMS colleagues, Donald Coen and David Knipe, to investigate latent infections by HSV using a mouse model. She became the principal investigator of a program project grant that lasted roughly two decades. Priscilla, together with her collaborators, applied genetic tools to help establish stages of latent infection, and the roles of various proteins and the viral latency associated transcripts (LATs) during these stages.

In 1996, looking for greater leadership opportunities, Priscilla left Harvard to become Chair of the Department of Microbiology at the University of Pennsylvania School of Medicine. During this time, her research expanded to host factors, particularly cyclin-dependent kinases. In 2000, Priscilla returned to HMS, taking the position of Professor of Medicine (Microbiology & Molecular Genetics), and establishing an active, productive laboratory in the Division of Infectious Diseases at the Beth Israel Deaconess Medical Center (BIDMC). In the Division, she mentored infectious disease fellows, who learned from her that studying basic mechanisms of viruses could enhance understanding of disease pathogenesis. At BIDMC more broadly, she was an inspiration in showing that knowledge of basic science opens doors to understanding mechanisms and treatment of disease. But, slowly the symptoms and then the diagnosis of Parkinson’s disease emerged. Priscilla owned land in the Arizona desert near Tucson where she had planned to build a house for her retirement. In 2007, her condition led her to leave Harvard for Arizona earlier than planned. She established a lab in the Department of Molecular and Cellular Biology at the University of Arizona, where she held the position of Research Professor. She was intimately involved in the building of her house, even when she had to push her walker around the construction site. She was fortunate to celebrate the housewarming, and to live in the house for one weekend before her death.

Priscilla was the personification of grit and determination, like some of her favorite Cardinals players. She was persistent, like her favorite herpesvirus. She was also very thorough. She was determined to understand all that genetics could tell her about HSV and its interactions with the host that lead to either productive or latent infection. She was determined to define all the essential HSV genes, and therefore collected a very large set of mutants for that purpose. She was determined to define the functions of the non-essential genes, and therefore generated and characterized numerous viruses mutant in those genes. She was determined to build her new house in Arizona, and she did.

Priscilla was remarkably generous to her lab members, her colleagues, and her community. Her generosity to community entailed taking on more committee work than anyone should at the Farber, at BIDMC, and at HMS. Her myriad committee service to HMS alone included the Subcommittee on Regulation of Hazardous Biological Agents, Committee on Animals, Committee on Admissions, Committee on Promotions and Reappointments, the Joint Committee on the Status of Women, Faculty Council, chair of the Committee to Revise the Policy on Sexual Harassment and Discrimination, Academic Review Committee of the Office of Technology Licensing and Industry-Sponsored Research, Program Director of the Training Grant in Viral Oncology, Minority Faculty Development Program, and the Standing Committee on Faculty Conduct. On this last committee, Priscilla dealt frequently with issues of scientific integrity in a forthright yet compassionate manner, and she brought her experience and wisdom on such issues to the national level as a member of the Expert Scientific Advisory Panel of the NIH Office of Scientific Integrity, and the Congressional Commission on Research Integrity where she helped draft guidelines for scientific conduct.

Priscilla trained more than 50 graduate students and postdoctoral fellows, and she was remarkably supportive. She not only mentored her trainees, but trainees in other laboratories, and faculty. At the reception held in her memory at the 2010 International Herpesvirus Workshop, a scientist who had been a graduate student in another laboratory at Baylor recalled how Priscilla worked to restore his confidence after he had been questioned harshly at a journal club. Priscilla had exceptional writing skills, which she assiduously sought to impart to her trainees. (Combining those skills with her great science, she achieved the enviable record of never having had an NIH grant rejected.) She covered drafts of paper with red ink, and her comments always sharpened the science and the writing. She also made sure that her trainees learned how to present their work orally. She rehearsed their talks for meetings over and over. The mentoring did not end when the trainees left the lab, not even when they became tenured faculty and department chairs.

Priscilla had a gift for making newcomers to Harvard Medical School feel welcome and included. Priscilla instituted and ran weekly herpesvirus community group meetings, and reached out to newcomers working on herpesviruses, encouraging them to participate, and making them feel at home. This feeling of inclusiveness was reinforced by Priscilla's encouraging words when she was encountered elsewhere on campus or at national and international meetings. Countless collaborations, cooperative ventures, and life-long friendships can be traced back to Priscilla's organizational efforts and her skill in creating a sense of community.

Priscilla was extremely neat and well organized. Her desk was amazingly clean, with every item parallel to an edge. Outside the lab, Priscilla was an avid equestrienne. She also liked driving fast cars, and recounted with a mixture of pride and horror how she did a 540° spin on an icy highway. Harkening back to her early musical training, she loved listening to classical music. Aside from her musical talents, Priscilla had excellent artistic skills. She loved trading stories over good food and drink. Thanks to a

contingent of Scottish herpesvirologists, she developed a taste for single malts. She was a constant at the International Herpesvirus Workshop meetings, and in her honor, her colleagues have established a fund to support an annual lecture by a junior faculty member, and presentations by graduate students and postdocs at these meetings. This summer's meeting will feature the fourth annual Priscilla A. Schaffer Lecture.

Despite Priscilla's love of conversation and her skills as a raconteur, she usually kept her private life rather private. She never married or raised her own children, but she did have important nurturing relationships. Aside from her many colleagues and trainees, Priscilla is survived by her mother, four siblings, her nephews and nieces, and her caretaker and friend Madelon Cook.

Respectfully submitted,

Donald M. Coen, *Chairperson*

Clyde S. Crumpacker II

Ronald C. Desrosiers

Joyce D. Fingerroth

David M. Knipe

Ann Nicholson-Weller