Biographical Feature

Silas G. Farmer, Ph.D.

Gary V. Doern, Editor in Chief, *Journal of Clinical Microbiology*

University of Iowa, College of Medicine, Division of Clinical Microbiology, Iowa City, Iowa, USA

In 1969, Silas G. Farmer, then the director of clinical microbiology at the Milwaukee County Medical Complex (MCMC) and an assistant professor in the Department of Pathology at the Medical College of Wisconsin (MCW), petitioned the American Board of Medical Microbiology (ABMM) for certification via a process that obviated the requirement for taking a written examination; one had to take only the oral portion of the exam. This process had been put in place during the very early days of the ABMM explicitly for doctoral-level clinical microbiologists with substantial experience, the kind of experience that Dr. Farmer had. His request was denied. Having thus been rebuffed, during the next 2 years, he sat for four different certifying exams, successfully completing both the written and the oral sections of all four, and as a result gained ABMM certification in microbiology, mycology, virology, and immunology. Indeed, in several content areas, exam ques-

tions were predicated on paradigms that he had helped to develop. Silas Farmer remains today the only individual to have achieved ABMM certification in four different specialty areas. Ironically, he would later become a central participant in numerous ABMM initiatives.

This anecdote underscores two important attributes of this enormously accomplished clinical microbiologist. The first was Silas Farmer's knowledge base in clinical microbiology, which was

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exceptionally broad. And second was the success he invariably achieved when confronted with a challenge, be it taking ABMM exams or more important things like effectively directing a clinical microbiology laboratory in a large and diverse academic medical center. It was my good fortune to have trained with Dr. Farmer, and I am privileged to write this biographical feature.

After 5 years as a corps man in the U.S. Navy, Silas Farmer began undergraduate studies at Marquette University in Milwaukee, WI, and graduated with a B.S. degree in 1951. He received his M.S. degree in microbiology and immunology from Marquette in 1957 and his Ph.D. degree in pathology from the Marquette University School of Medicine in 1962. During this period, he also worked as a bacteriology technologist at St. Luke's Hospital in Milwaukee and as the chief bacteriologist at St. Luke's Memorial Hospital in Racine, WI. Upon receipt of his Ph.D. degree in 1962, Dr. Farmer became the director of clinical microbiology at the MCMC, the primary teaching hospital of the MCW, a position he would hold for the next 30 years. He was awarded Fellowship in the American Academy of Microbiology in 1973. He retired in 1992 at the academic rank of professor of pathology at the MCW.

During all of his tenure at the MCW, Dr. Farmer also held a concomitant academic appointment in microbiology at the Marquette University School of Dentistry. In addition, for 10 years, he served in an adjunct faculty role on the Committee on Postgraduate Educational Programs (CPEP)-approved postdoctoral training program in medical and public health microbiology whose center was at the Mt. Sinai Hospital in Milwaukee. Upon retirement in 1992, he was granted emeritus faculty appointments at the professor level at both the MCW and the School of Dentistry at Marquette.

Silas Farmer was, during his long and distinguished career, the prototypical triple threat; he was a laboratorian, a scholar, and an educator. As the director of clinical microbiology at the MCMC, he developed and then directed a full-service clinical laboratory that provided comprehensive diagnostic services in bacteriology, mycology, mycobacteriology, parasitology, virology, and infectious disease serology. Dr. Farmer was at the MCMC during a period of immense change in clinical microbiology. Gradually, the discipline of clinical microbiology was morphing from what had been a near-universal manual exercise to various forms of instrumentation. The clinical microbiology laboratory at the MCMC under Dr. Farmer's direction was at the forefront of this evolution.

Dr. Farmer was also exceptionally productive as a researcher, making numerous seminal contributions, especially in the area of the laboratory diagnosis of fungal infections (1–6). His chapter entitled “Diagnostic Clinical Mycology,” which appeared in the text *Progress in Clinical Pathology* in 1970, remains a classic (7), and his work in the area of medical mycology was groundbreaking. Secondary research interests included the use of surrogate measures in diagnosis of meningitis (8, 9) and the role of anaerobes in various infectious disease syndromes (10–12). In addition to his own scholarly activities, Dr. Farmer spent a professional lifetime actively supporting the research interests of others, including colleagues and collaborators as well as students and trainees.

Silas Farmer was a truly gifted teacher in the setting of a didactic classroom, in the less formal setting of the laboratory, and as an invited lecturer at dozens of different medical-scientific meetings.

His comprehensive knowledge base, his charisma, his enthusiasm, and his wonderful use of the English language all combined to make Silas Farmer an enormously effective teacher. Perhaps not surprisingly, many of the individuals whom he taught chose to pursue careers in clinical microbiology. Under his guidance, three individuals obtained master's degrees, and seven individuals obtained Ph.D. degrees, each with an emphasis on clinical microbiology. I am fortunate to count myself among those in the latter category. With Dr. Farmer as your mentor, anything was possible. Rarely did he not teach you something when were you in his presence. Beyond everything else, it was his example that you carried with you.

Perhaps as a result of a boyhood spent in the hills of West Virginia, Dr. Farmer had an uncommon ability to communicate in ways that were unfailingly understandable. His wisdom was often conveyed in the form of short phrases that you remembered forever. A couple of examples: “The distance between the ill patient's bed or the outpatient-clinic, and the clinical microbiology laboratory, is only as long as you choose to make it” and “Don't ever allow anonymous people to give you a sense of your own self-worth” (oft opined when talking about hospital administrators).

One personal experience speaks volumes. Early during my time as a student in Dr. Farmer's laboratory, I had been instructed to propagate a stock culture of *Haemophilus influenzae* on a chocolate agar plate. One of Dr. Farmer's research technologists showed me how to reconstitute a frozen stock culture and then streak the material onto a chocolate plate. She then told me that the plate was to be incubated in a candle jar, which in turn was to be placed in a walk-in incubator. I was left to my own devices, but the damn candle kept going out when I screwed the lid onto the candle jar. So I proceeded to punch holes in the lid of the jar so that the candle would continue to burn. Satisfied with my handiwork, I placed the whole thing in the incubator and went about my business. Well, a short time later, Dr. Farmer happened to have occasion to enter that incubator and there found a candle burning brightly in my candle jar. Later that day, I found a note on my desk from Dr. Farmer in which he had penned a simple question, “Gary, what are the atmospheric conditions in which *Haemophilus influenzae* grows best?” Point taken. Dr. Farmer had taken my stupidity and turned it into a teaching moment. He did that sort of thing constantly with all of his students, even the smart ones.

Beyond his clinical activities, his research, and his teaching, Silas Farmer was also an active participant on dozens of intramural committees, working groups, and forums at the MCW. In addition, throughout his career, he was engaged in numerous extramural activities. These included serving over a 22-year period in several different capacities on the ABMM and the American Academy of Microbiology, offering consultation advice to the then Centers for Disease Control and the World Health Organization and participating in various activities of the College of American Pathologists. He was active as a member of the editorial board of *Journal of Clinical Microbiology* beginning with its inception in 1975 and was a section editor for three editions of the *Manual of Clinical Microbiology*. Outside the realm of clinical microbiology, Dr. Farmer is a master woodworker, a gifted composer and pianist, a lifelong devotee of the Boy Scouts of America, and a continuing advocate for Christian education in the United Church of Christ.

In view of the foregoing, it is altogether appropriate that Dr.

Silas G. Farmer be the focus of this *Journal of Clinical Microbiology* biographical feature. His contributions to the discipline of clinical microbiology have been enormous. I have been truly fortunate to have been touched directly by this remarkable gentleman and am privileged to have offered this perspective.

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