



Sang J. Shin

April 1, 1940 – June 3, 2018

Dr. Sang J. Shin, Professor Emeritus at Cornell University's College of Veterinary Medicine passed away on June 3, 2018 at his residence in Glen Mills, Pennsylvania surrounded by family; Dr. Shin was 78 years old. Dr. Shin was a long-time resident of Dryden, NY. Survived by his wife of 49 years, An Suh Shin; his daughter Jennifer Shin Han (David Han); his son Bryant Shin (Laurie Shin); 3 grandchildren, Alexandria Han, Kate Shin, and Anna Shin; his many brothers and sisters; and many nieces and nephews.

After serving proudly in the Korean Army as second lieutenant Sang graduated from Seoul National University in Seoul, South Korea and The Seoul National University Veterinary School receiving his DVM degree. He was a long-time professor at the Cornell University's Veterinary College and began working at the Diagnostic Laboratory (DL) at Cornell in 1973. Dr. Shin became a diplomate of American College of Veterinary Microbiology in 1985. He retired from Cornell in 2006 after having dedicated his life to microbiology research for 33 years. He was a great inspiration to the many staff and students he touched, and was a leader in advancing the Diagnostic Laboratory to being recognized nationally and internationally as one of the best.

Sang was deeply committed to his family, sustaining all with love and inspirational advice.

Sang was a long-time member of the Cornell University Golf Course and loved the game of golf throughout his life. He loved to share his gregarious nature with his many friends from all over the world.

Within veterinary microbiology Sang had wide-ranging interests, but he will be remembered most for his intense interest and dedication to the discipline. We want to highlight just a few of programs that Sang initiated with the early team from the DL, especially Valerie Patten as lab supervising microbiologist. Sang came to us from the University of Chicago where he had cultivated an interest in anaerobic infections and in mycology; he was well versed in enteric bacteriology and was also on top of antimicrobial susceptibility testing; in fact the first time Dr.

Pat McDonough remembered working with Sang was in 1973 when his graduate advisor Dr. John F. Timoney sent him to Sang's lab in the "DL" to learn the relatively new technique of Kirby-Bauer disk diffusion Antibiotic Sensitivity Test. Little did Pat know that he would be working for Sang in 1975 up until he retired! With Sang's guidance our Bacteriology/Mycology lab at Cornell's DL bloomed over the years. For much of that time Dr. John T. Timoney was a key collaborator on many of our microbiology projects.

Sang was well known for his interest and expertise in the infectious infertility and microbiology of the reproductive tract of cattle, horses and dogs; this was an area that would become perhaps the best know area for the DL (and Cornell Vet College) as a "go to" resource in the coming years for guidance and diagnostic expertise. Sang developed the methodology to validate all cattle semen extenders for the bovine artificial Insemination industry and worked with the Certified Semen Industry group in Wisconsin to do this. He also extended Dr. Louise Ruhnke's (Ontario Veterinary College, Guelph, Ontario) protocols and refined her culture techniques for detecting *Mycoplasma spp.* Dr. Shin was principle or co-principle investigator in over 50 research projects and published over 70 peer reviewed scientific papers.

Along with Dr. Peter Timoney (University of Kentucky, Lexington Kentucky) who was on the faculty of Cornell Vet at that time, Sang co-developed and validated the gold standard culture technique for Contagious Equine Metritis/*Taylorella* bacteria that is still used, with some modifications, by the United States Department of Agriculture/National Veterinary Service Laboratories, Ames, Iowa.

Sang also was greatly involved in Dr. Donald Lein's "3 Diseases" program in the Johne's disease diagnostic area. He and our team developed and validated the liquid culture technique for culturing *Mycobacterium avian paratuberculosis* that significantly shortened the time for cultural diagnosis over the then gold standard of solid culture. The lab worked closely with Drs. Susan Stehman and Chris Rossiter in applying our cultural to the Johne's control programs that were to become a key part of the New York State Cattle Health Assurance Program, Johne's Disease Module in collaboration with Dr. John Huntley, State Veterinarian for the Division of Animal Industry, NYS Dept of Agriculture and Markets.

Dr. Shin worked tirelessly to apply, validate and use Dr. Leland Carmichael's *Brucella canis* serology to the practical diagnostic application for canine brucellosis. To this day the lab at Cornell is a serological reference lab for the global veterinary community for the diagnosis of canine brucellosis.

Dr. John M. Fairbrother (Faculté de médecine vétérinaire Université de Montréal) was our first graduate student in Sang's lab and began our interest in leptospirosis diagnosis and complemented Sang's interest in cattle abortion and infertility.

Dr. Shin was the great ambassador between Cornell and Korea. Sang was the faculty advisor for over 400 Korean undergraduate and 180 graduate students at Cornell. Dr. Shin organized the visits for President Frank H T Rhodes to Korea and nine Veterinary College faculty members for various meetings. Dr. Shin organized the training of Korean equine veterinarians at Cornell for equine health service at the Korean Summer Olympics. Also, Sang organized training for several

Korean academic scientists, graduate students and interns at Cornell. Dr. Sang Shin was President of the Korean Veterinary Society of America (1981) and advisor and organizer of several meetings for Korean veterinary research institutes, laboratories, vaccine companies, and practicing veterinary organizations. Sang was recognized for his work by receiving the “Most Distinguished Alumni of the Year Award” in 2003 from his alma mater and the “Distinguished Honorary Scientist Award” in 2004 from the Rural Development Administration of the Republic of Korea. In memory of Dr. Sang Shin, the College of Veterinary Medicine at Seoul National University held a memorial ceremony to honor him for his contributions to the University and named a laboratory and planted a tree in lasting memory.

Written by Patrick H. McDonough, Richard H. Jacobson, Leland E. Carmichael and Donald H. Lein