

Bartlett Award, 2007

Confessions of a misfit

Although I am deeply honored, this award has been more than a pleasant surprise and a genuinely humbling experience. When I consider the past recipients of this prestigious award and the vast number of individuals that are deserving of receiving it, I am borderline embarrassed. Clearly, this award embodies the efforts of many contributors; I have been fortunate to have interacted with numerous graduate students, residents, and colleagues whose silent efforts have culminated in the recognition for which this award was intended. On their behalf, I graciously accept this award.

Over my 40+ years as a veterinarian, I, as well as my college classmates, would have never predicted that I would be doing what I am doing today. My transformation from a student to an academician may be worthy of a story and may serve as an example, or provide some hope and encouragement to students and others that have yet to “find themselves”.

I had to be the most irresponsible student that ever attended the School of Veterinary Medicine at Kansas State University. For this, my duly belated apologies and respect to all faculty members who witnessed my irresponsible behavior and for having to put up with this classical example of immaturity. As a student who ranked 65th out of a class of 66 students, and an individual who was considered as “destined to fail in life”, I was clearly not a favorite among the faculty. My focus was not in learning, but in “letting the good times roll”. Having barely graduated (with a number of “F” grades and make-up courses included in my record) and more than likely granted a degree in order to assure that I would not return, I continued to be the irresponsible individual and feared having to work for a living. Being very intimidated by horses throughout veterinary school, I envisioned myself in a glamorous role as a canine surgeon performing high-tech surgery. However, this was only a fantasy, since I realized that it would

take some effort to accomplish what I had envisioned and I could not see myself putting in the effort. I continued seeking excuses not to work after receiving my degree. Returning to my native State of Hawaii, in search of “easy living” and employment that facilitated access to the beach ended miserably as I justifiably failed the state’s Veterinary Board examinations. Fortuitously, and in this land of opportunity, I was able to continue to avoid the reality of working for a living. I was blessed, but unknowingly at that time, of being able to obtain further government-funded education as a Master’s student, and even further as a student in a PhD program. I could not imagine that anyone would pay me to go to school, but felt that this was a golden opportunity for not having to work. In these programs, I mastered the art of dissecting salivary glands from *Aedes aegypti* mosquitoes and realized that Hydatidosis or Echinococcosis were not simply long words to memorize for examinations, but a serious animal-to-human transmittable disease after all. It was during this period and nine years after receiving my veterinary degree that I began to appreciate what the sciences had to offer. Having completed these programs, other less-stressful opportunities availed themselves and I continued my education in the clinical setting as an intern and subsequently as a resident in equine reproduction and internal medicine. Oddly enough, I was not interested in the equine species as a veterinary student and only became interested while serving as a “paid” officer in the United States Air Force playing volleyball for the Air Force’s team on a full-time basis.

Since joining the faculty at the University of California at Davis in 1979 (after a short term at Washington State University in Pullman), I have been, and continue to be, interested in a very simple question that remains elusive: Why does the uterus of some

mares, under similar clinical environments, become chronically infected, whereas others do not? I recall our first attempt in answering this question by evaluating the immunoglobulin contents of the uterus and comparing them to plasma concentrations. How naïve and overconfident was I to think that this was going to be the end-all answer to the question that had been posed. And how little did I know that I was going to have a long-standing relationship with this question for perhaps the remainder of my career. For the past 27+ years, and despite significant advances that various laboratories throughout the world have made in their attempts to answer this simple question, I am simply amazed that the underlying answer still has not been determined. Yes, we now know that compromised uterine contractility and clearance are major contributing factors associated with chronic uterine infections, but the underlying cause for compromised uterine contraction in the mare (as well as in other species) remains elusive. Equally intriguing is that this question continues to hold my interest after such a longer interval ... a distant thought from that of the young, immature boy in veterinary medicine at Kansas State University whose focus and attention to the life sciences could not have been any shorter than it was.

From a very biased perspective, I am now fascinated by the synchrony and coordination required of the equine female reproductive system in preparation for ovulation, conception, implantation, and foaling. Even more astonishing and somewhat overwhelming, is the coordination of molecular and cellular events that occur in the egg and the sperm in preparation for fertilization. And how can anyone design such an architectural wonder as the utero-tubal junction of the mare, whereby billions of sperm are ejaculated into the uterus during copulation, but only a select or preferential few gain entrance into the oviduct? As I go through the maturation process (and continue to do so), I realize how little I know about the life sciences and how much of an opportunity I was given, but missed, while attending college. I am constantly reminded that although we have made substantial advances technologically as well as academically in resolving conditions associated with the problem mare, the stallion is often able to resolve the problem much easier if left alone with the mare.

Despite the shortcomings, I've enjoyed this profession immensely. As an academician, I am consistently reminded from day to day, of how little I know and how

much one can learn if I am willing to keep an open mind and simply listen to what others have to say. Although I aspired to be an attorney at one period of my life, the legal profession requires being able to think on your feet and being able to express one's thoughts verbally ... and spontaneously. It was quite clear that this was not a strong point of mine, as I constantly struggled to present a coherent lecture in the earlier days of my teaching career. How I admired those that are gifted in being able to express their thoughts verbally, as well as on paper. Yet, I am extremely grateful to those who have watched over me through the years and to those who have influenced my life and my career. Although there were some rough spots and many questionable moments, I would do it all over again if given the opportunity ... but perhaps with a little more thought, common sense, and discretion.

Of all the professional options available to choose from, I fortuitously "fell" into this profession which, as I look back, has been a very self-satisfying and gratifying profession. From my perspective, I could not have "fallen" into a better profession. The camaraderie and ethical atmosphere in this specialized discipline of veterinary reproduction is impressive and I highly recommend it to those who are giving it consideration.

In summary, there are a substantial number of individuals who have contributed to me being able to accept this award, far too numerous to point out individually and by name. Additionally, and consistent with my age and memory, I fear for unintentionally leaving out individuals who have had significant influences throughout my transformation from a student to an established academician, not to forget that my wife Amy, is one of them. I would also like to thank those who are responsible for the nomination, support, and approval of the selection. I am deeply humbled and I accept the award on behalf of the many individuals who made substantial contributions to my modest career.

Irwin Liu*

*Population Health and Reproduction,
School of Veterinary Medicine,
University of California, Davis,
1114 Tupper Hall, Davis,
CA 95616, USA*

*Tel.: +1 530 752 1358

E-mail address: ikliu@ucdavis.edu