

“CBRS: Cooperate and Innovate”

By Art Andersen, CBRS Emeritus Member

Since my retirement I have spent some time reminiscing about my career and realized how much it has been influenced by fellow chlamydiologists. I was thrust into chlamydial research in 1983 at a time when the political pressure was strong under President Reagan to reduce the size of the government, especially in Washington, D.C., where I was in charge of the Agricultural Research Service cattle, sheep, and horse disease research program. Being the most recently hired "low man on the totem pole" in the animal disease area, I was relocated from Washington, D.C., to the National Animal Disease Center (NADC) in Ames, Iowa, and told to work on chlamydia. I didn't even know how to spell the word, and knew less to nothing about it. I realize now that my assignment was determined by the NADC director. Chlamydia was under a supervisor whose only suggestion when I asked for direction and equipment was, "I think we should close out the project." Little did I realize that he was using the chlamydia funds to support his other projects. When I learned what was happening I informed the NADC director, who then reassigned me and the project to another supervisor's unit. This permitted me to hire a post-doc at NADC and to develop contracts to other researchers to encourage research in swine and on tetracycline resistance. Later, the influence of my first supervisor resurfaced when a new NADC director was convinced by him, again without notice to me, to reduce funding for chlamydia, to reduce my time on it to 50%, and to attempt to close it out during the last few years before my retirement. After I retired, no one was hired to continue the program, and it ended. I was able to transfer samples of the strains in the collection to another researcher before they were destroyed. The recipient, Deborah Dean, was able to obtain funding to preserve the strains in her lab and to continue to work with them.

In the early 1980s Chlamydial research was at a stage where there were only a few laboratories in the United States working on the organism, especially in animals. It was a time when many questioned its importance as a pathogen and what direction research should go. Then, with the development of new diagnostic tests and a new focus on chlamydia in humans, chlamydial research gained its rightful importance.

In the 1980's and 90's when I was learning about chlamydia, I found chlamydial scientists to be very open, supportive, and non-competitive; indeed, being cooperative and strongly encouraging to newcomers. I must give special thanks to Gerald Byrne, San-pin Wang, James Grimes, Les Page, and Hans Storz who went out of their way to support and encourage me in the beginning; and to those who helped me become the scientist I am: Karen Everett, Dan Rockey, Daisy Vanrompay, Anne Rodolakis, Andreas Pospischil, Doug Rogers, and Deborah Dean.

At NADC, I was fortunate to have been left a very large collection of animal strains, thanks to my predecessor, Les Page. I soon realized that the strains were fairly specific to their hosts. This in turn led to the reclassification of animal and human strains, encouraged by Hans Storz, but unwelcome to others.

My interest in swine chlamydia arose mainly through questions from producers, their veterinarians, and diagnostic labs about conjunctivitis in baby pigs. Then came my accidental discovery that the swine isolates they provided were resistant to tetracycline. My current thinking is that tetracycline resistance likely arose through early and wide spread use of antibiotics in pigs.

During the 1990s and early 2000s, I was fortunate to be able to attend some of the European and international chlamydial meetings and personally get to know the European scientists I had corresponded with. My wife Lucie accompanied me to most of these meetings. Lucie has a strong science background (psychology and methodology) and usually served as my editor. She attended many of the poster sessions and social events and became acquainted with a number of the scientists. She used the information gained from the presentations in her university lectures on human development. We both value the bonding and broadening experiences we shared with other attendees, such as the 1992 mail boat trip up the Swedish archipelago, when we were deposited on an island for a few hours on a cold and rainy day. The photo that Lucie took proves that the archetypal Scandinavian red mushrooms with white dots are not a folk myth. Just this year we read that the trip is a tourist “must do” when visiting Stockholm, but we recommend choosing better weather. Lucie also remembers being willingly stuffed with multiple courses of food and wine at lunch and dinner at the hospitality school in a chateau in Chantilly, France, the site of the 1994 meeting (so many were falling asleep after

lunch that our waiters were asked to ease up on the libations at noon). She also enjoyed serving as my “interpreter” with her rusty French when we visited Anne Rodolakis' lab near Tours.

The first meeting of the Chlamydia Basic Research Society was held in Memphis, Tennessee, in 2003. It was fostered as an organization to encourage openness and cooperation, which I am pleased to see that it is accomplishing. Until a conflict this year, I had attended all of the meetings, three as a scientist and the rest as an emeritus. During these meetings we have renewed our friendships and made many new ones. But just as important to me as a retiree is to see the changes in chlamydial research and the new research groups entering the field.

Lucie reminds me that creativity flourishes in informal situations such as the posters and social settings. This in turn reminds me of when I was at the USDA in Washington and visiting labs around the country: it was during the cocktail hours when solutions often were reached and new plans emerged. While the cocktails may have contributed, the trust and ideas engendered by sharing experiences and life stories were crucial. The formal presentations are needed also, to start us thinking about applications of the new areas of research that are emerging. Some researchers ask questions at the time of the presentation, while others mull over and assimilate information from multiple presentations in preparation for later insights.

CBRS is doing a stellar job of fostering communication across age groups and among those educated in different areas and species (human and non-human) of research. It reminds me of my Iowa State University veterinary school class, whose motto was “cooperate and graduate”, but in chlamydial research, we “cooperate and innovate”.