TO: American Society for Rickettsiology

RE: Herbert H. Winkler, Ph.D.

Dr. Herbert H. Winkler, Professor Emeritus of Microbiology and Immunology at the University of South Alabama (USA) passed away on August 2, 2016. He was 77. Dr. Winkler graduated *magnum cum laude* with a Bachelor of Arts degree in Biology from Kenyon College. He earned his Ph.D. in Physiology from Harvard University where he was an NSF pre-doctoral fellow. He completed post-doctoral work, also supported by an NSF Fellowship, with Dr. Albert Lehninger at Johns Hopkins University. Prior to joining the University of South Alabama in 1978, Dr. Winkler rose through the ranks at the University of Virginia.

Called Herb by friends and colleagues, he was one of the founding members of the American Society for Rickettsiology and served as vice-president and president. He was an outstanding scientist who dispelled the idea that rickettsiae had "leaky" membranes. Rather, as he so elegantly demonstrated, *Rickettsia* species, which replicate only within eukaryotic host cells, have evolved transport systems for obtaining high energy molecules lying just outside in the host cell cytosol. He published over 150 papers covering the growth, transport mechanisms, physiology, genetics, and host-pathogen interactions of his favorite rickettsial pathogen, *Rickettsia prowazekii*, the causative agent of epidemic typhus.

Herb was always excited to learn something new about the *Rickettsia*. This was demonstrated often by his liberal use of exclamation marks. For example, from one of his early review articles (ASM News, 1982, Volume 48:184-187) comes the classic – "*Imagine a microbe that is a combination E. coli/mitochondrian which unlike the mitochondrian, has never traded its soul for symbiotic safety but has evolved a membrane physiology - a unique biology – that allows it to exploit the host cell's cytoplasm!"* He conducted his research and interacted with other researchers with great enthusiasm and with the highest level of scientific rigor. He was well funded with his core research program supported by the same NIH R01 grant for over thirty years. The research initiated by Herb helped to establish USA's Select Agent Program.

Herb was one of the most intelligent people I have ever encountered. He was an icon in our department and was internationally recognized for his rickettsial research. Herb was also an outstanding mentor for faculty, postdocs, students and technologists. He demanded high-quality work and encouraged others to explore areas that had not been previously investigated. One of Herb's most impressive legacies is the many scientists he inspired and the important role he played in their development and success. All of us have benefited from Herb's "So what!" retort to some seemingly great idea that on further inspection wasn't that great. He could always come up with the simple question that would help clarify a complex problem and then proceed to devise the right experiments to answer it. He could write a grant proposal that would read like a work of artistic literature but that never lost its scientific rigor. Of course, it would invariably be sprinkled with exclamation points at just the right places and usually contained a word or phrase

that was new to me, requiring a definition search. The depth and breadth of his knowledge made him a great reviewer and helpful critic.

Herb received many prestigious awards. For example, he was invited to speak at the 100th Anniversary of the Institut Pasteur Program on Molecular Biology and Infectious Diseases and was awarded both the NIH Career Development and MERIT awards. However, I believe he derived special satisfaction from his participation in American Society for Rickettsiology (ASR) meetings. Of course, he liked the older name (American Society for Rickettsiology and Rickettsial Diseases - ASRRD) better and, wordsmith that he was, was saddened when the sesqui-annual meeting description became the more mundane annual. His wife Sue would often accompany him to ASR meetings where they were certain to have a unique adventure, usually involving camping and/or driving long distances.

For all the individuals who have benefitted from knowing an extraordinary individual, I say with as much Winkler exclamation as possible - Thank you Herb!!!

Herb's obituary can be found at the following link: http://medschoolwatercooler.blogspot.com/

David Wood