



Congratulations/Félicitations

Gillian E. Wu, York University, The 2003 CSI -Hardy Cinader Award

I was asked to provide a biography for the CSI-Hardy Cinader Award. After writing it, I realized it was a little longer than I had expected it to be – perhaps because I have lived a few years longer than most of you. I was born in London, England. When we immigrated to Canada in 1951 my family first lived in Niagara-on-the-Lake and then St. Catharines as my father was a ship builder and ship building was booming in Southern Ontario. My mother raised her five children around the *times-tables* which she required us to chant at the dinner table. We all had after school jobs and responsibilities. I had a Globe & Mail Route which prepared me for a life of early rising, knowing the value of a nickel (the carriers collected 30 cents each week from the customer) and how to survive (the Globe came out with a new BIG Saturday edition but the cost doubled and half of my customers refused to pay for it.).

I chose McMaster for my undergraduate education based on distance. It was the closest university – luckily it was also an excellent one. A summer research project measuring cilia growth convinced me the life of a scientist was the best there could ever be (and I was right!). I was intoxicated with Science – all Science. When the time came to choose a Grad School I knew to ask advice from learned faculty – in this case the brother of Harold Johns. I was told the “best” in Canada was the Department of Medical Biophysics whose head was Harold Johns.... I knew I wanted to do research in lambda phage regulation and said so at the interview with Harold and Lou Siminovitch. They turned me down. But, two new assistant professors – Rick Miller and Bob Phillips took me on. Instead of lambda phage, I was to work on lambda light chains – and in fact I still am.

This is how I entered the field of Immunology, and I expect many of the other “oldies” also came in through a back door.

I was the first, and only at that time, female graduate student in Medical Biophysics. When I graduated (1969, MSc) I was the first female graduate of the Department. In Medical Biophysics, I took my only course in Immunology - taught by Hardy Cinader. Hardy and I spent many a time discussing Immunoglobulin structure in his closet-of-an-office (which later became Rick Miller’s closet-of-an-office). My Masters studies were on stem cell differentiation – “Can a hematopoietic stem cell give rise to functional antibody producing cells?”. It was a great and glorious time at the OCI, I learnt a tremendous amount with Rick Miller, Bob Phillips, Bun McCulloch Lou Siminovitch and Jim Till. In fact I married one of Bun’s students, Alan Wu.

Alan and I moved to Berkeley where he was a post doc (in lambda phage) and I was a “biophysicist” working at the UC Donner Labs. Berkeley changed me from a conservative Ontarian to a free thinking 60’s California Girl. Berkeley changed my life.

In 1971 we left Berkeley for Bethesda, Maryland where Alan worked with Bob Gallo in the early days of Interleukins and Lymphocyte Viruses, and I began the great project of raising our two children, Tim and David, (born in 1972 and 1974). Although I worked half time as a technician at NIH starting in early 1975, I did not return to full time until 1980.

We returned to Toronto in the Fall of 1976. I quickly obtained the amazing position of running undergraduate labs in the Faculty of Medicine. It was a perfect career for me at the time – challenging, interesting, and, PART TIME. When my youngest son entered Grade 1, I returned to my PhD studies in Medical Biophysics. Now I turned to my love of lambda phage and used it as the vector to clone immunoglobulin genes. In those days (1980) it took a year to clone a gene, now it takes less than a day.

After my PhD (and by then almost 1/3 of the grad students were female), I gained a spot at the Basel Institute for Immunology. Alan had passed away in 1981, meaning that as well as being a scientist, I had to earn a living. The Basel Institute paid their older members (me) more than their younger members (Chris Paige, Michael Ratcliffe, John Reynolds, Michael Julius), so I not only had a great scientific experience, I also was able to pay the bills and explore Europe! Yes Science is a wonderful profession!

I began a collaboration with Chris Paige in Basel that continues to this day. I believe it was my description of some of the Canadian characters – including Hardy Cinader - that convinced Chris to join the Canadian Immunology club rather than the US's. In Basel I also met Charley Steinberg who was to be my consort in life and science until he passed away in 1999. The Basel environment was such that we all developed a way of thinking that anything was possible – I studied V(D)J recombination, repertoire, locus mapping, B cell development and how to discriminate among wines. My sons flourished in the Swiss culture becoming stars of the Junior Basel Eis Hockey (along the lines of “in the land of the blind the one eyed man is king”).

The beginning of a new Department under the leadership of Rick Miller brought me back to Canada in 1986. Rick, Tania Watts, Marc Shulman, Jay Hay, Brian Barber, Stan Dubiski and HARDY CINADER formed the core of the Department of Immunology at the University of Toronto. My lab flourished with great graduate students – especially the first brave soul, Michael Atkinson who won the Hardy Cinader prize during his studies. My lab studied primarily how diversity is generated during B cell development – V(D)J recombination, RSS and repertoire formation. We had a fabulous time including stimulating space allocation discussions with Hardy.

I moved to the Wellesley Hospital Research Institute in 1993 and then back to my old home, the Ontario Cancer Institute in 1998. The full circle.

In 2001, I was offered the opportunity to take on additional responsibility as Dean of Pure and Applied Science at York University. York has a strong physical sciences program in Engineering, nanotechnology, particle physics, mass spectrometry, NMR, and encryption to name a few. In the Health Sciences, it has a huge Kinesiology program that has studies ranging from hormone variation in sports, to heart muscle re-generation to mitochondrial transport. Immunology research is my lab but there is much support with Bioinformatics, Genomics and real Molecular Biology. Although York does not have a Hardy Cinader, I can assure you it has its share of interesting scientists....

At York I am enjoying my first love – Science. I have an Immunology lab of curious interested trainees, and the problems we are studying remain exciting and diverse. It has been a privilege all these years to work with interesting clever trainees and colleagues. Hardy Cinader has been a part of my development at a number of key stages, and he has certainly been one of the more memorable scientists. Thank you all for honouring me with this award in his name.