
Incoming Member of the CSBMCB Executive Board 2006-2007

Reinhart Reithmeier, Vice-President

I was born in Germany and moved to Canada with my parents at the age of two. I grew up in the



countryside just outside Ottawa and attended a one-room schoolhouse for the first three years of my schooling. My parents were great nature lovers and encouraged my interest in biology. They also put up with my doing “chemistry experiments” in the basement.

With the help of a scholarship from a local golf course, where I worked for eight summers, I attended Carleton University and graduated in the first biochemistry class in 1972. Stan Tsai patiently supervised

my honours project on lysozyme catalysis and he got me interested in research. For two summers I worked at the NRC Labs in Ottawa with Mak Yaguchi and Lou Visentin. From Mak, I learned research was hard work, and from Lou that it was fun. I worked on the sequencing of ribosomal proteins purified from bacterial thermophiles and halophiles, and histones from plants (carrot cells grown in culture of all things!) and began to think of myself as a protein chemist.

Both Mak and Lou encouraged me to go to graduate school, so I applied to Toronto, Alberta and UBC. I didn't hear a thing until I was awarded an MRC Studentship, then the phone began to ring. I wanted to work with Gordon Dixon at UBC, a world expert in histones, but he was moving to England. Gordon passed my letter on the Phil Bragg who worked on bacterial membrane proteins. I had heard of the “fluid mosaic model” and thought that membrane proteins would be interesting. Little was I to know that membrane proteins would become my scientific life!

After graduating with a Ph.D. from UBC in 1976, and with the encouragement of Dennis Vance, who was on my supervisory committee, I started postdoctoral studies at the Biological Laboratories at Harvard University with Guido Guidotti. Guido had a large lab and you could do pretty much what you liked. I decided to work on human red cell proteins. He encouraged creative thinking and collaboration within the group. I worked with two great people, Lewis Cantley and Anjana Rao, who have gone on to spectacular careers. My MRC fellowship was for only two years (due to budget cuts!), so I decided to return to Canada and worked in David MacLennan's lab on the biosynthesis of muscle membrane proteins. David was an inspiring leader who demanded top quality work. Luckily, I was assisted by Stella DeLeon and Vijay Khanna, who made sure that my experiments were always up to David's high standards.

I really enjoyed the MacLennan lab and would have been happy to stay on forever, but David said that I was ready to start my own research group. That was in 1979 and there were no jobs, so I wrote to several biochemistry departments in Canada and asked them to sponsor me for an MRC Scholarship. John Colter, Chairman of the Biochemistry Department at the University of Alberta, was very keen to have me join his department, which had (and still has) a very strong protein structure group. I won the MRC Scholarship, so I was Alberta bound. The Alberta Heritage Foundation for Medical Research had just been set up, so money was available to set up my lab and to recruit students and post-doctoral fellows. I decided to return to work on the structure and function of red cell membrane proteins, which has continued to this day. John, and other members of the Department like Cyril Kay and Neil Madsen, were great mentors and were always available to guide me through the rough patches. The Department had a great sense of community and collaborations were the norm.

In 1986 I was recruited back to Toronto by Mel Silverman to join his Membrane Biology Group in the Department of Medicine. This group had a focus on kidney physiology and my group expanded to also work on kidney membrane transport proteins. I was fortunate to be supported by an MRC Scientist Award and an MRC Group Grant for many years. An MRC-CNRS Award allowed me to spend a sabbatical year in France with Jacques Pouyssegur where I learned about cell physiology and fine wine.

In 2002 I became Chair of the Department of Biochemistry at the University of Toronto, where I had held a cross-appointment and had been Graduate Coordinator. I am completing my first term this year and must say that this is the best job that I have ever had. Challenging to be sure, but in the Faculty of Medicine at the University of Toronto Chairs are given the resources and the mandate to build departments that meet the highest standards of international excellence in research and teaching. I have continued my

research program and have been busy as a CIHR Delegate, lobbying for increased research funding. I have been very involved in teaching and this year met the challenge of lecturing to 1,200 students in our introductory biochemistry class.

Over the years I have been very fortunate to have many excellent technicians, graduate students and post-doctoral fellows in my lab. Some have gone on to academic research careers of their own, others to medical or dental school, others to research administration and some into teaching. I am very proud of their accomplishments and the talent and energy they bring to the lab. My family has always been a constant source of support.

The CSBMCB is a vital organization driven by a talented group of dedicated people. The Society runs first-rate meetings and our advocacy efforts have had a real impact. I am very proud to serve as Vice-President of the CSBMCB as the Society enters its 50th year.