

2011 MEDALS & AWARDS

ISRAEL C. RUSSELL AWARD

Presented to
W. Berry Lyons



W. Berry Lyons
Ohio State University—Columbus

Citation by Scott W. Tyler

It is an honor and a tremendous pleasure for me to present the citation for the Israel Cook Russell award for major contributions to the field of limnogeology to my dear friend and colleague, Berry Lyons.

Berry has been a leader in the broad field of environmental geochemistry, and is recognized internationally as an expert in wide range of areas, including trace element transport in the environment, geochemical evolution of lakes and lacustrine sediments and global climate change in the Polar Regions. His diversity of interests and expertise is phenomenal; he has conducted seminal work on the geochemical evolution of saline lakes and in the same year, published groundbreaking work in the sediment fluxes to the oceans. Berry has published over 180 research papers covering some of the broadest topical areas I have ever seen. He has collaborated with a tremendous group of colleagues from around the world, including his accomplished wife and colleague at the Ohio State University, Dr. Anne Carey. Berry has also served tirelessly on editorial boards of journals ranging from Applied Geochemistry to Water Resources Research, National Academy panels, all while serving as PI and Chief Scientist for a decade, of the National Science Foundation's Long Term Ecological Research Site at the McMurdo Dry Valleys in Antarctica. He has been widely recognized by his peers including Fellow of the American

Geophysical Union, the Geological Society of America, the AAAS and the Explorers Club.

I have had the pleasure to know and work with Berry for almost the same amount of time, and every meeting is joy and exciting. My emotions are shared by all of Berry's colleagues, and I would like to read to you a few of their words and their appreciation for Berry's contributions, collaboration and friendship.

"Berry is a gung-ho scientist who finds great joy in discovery and collaboration. He is as much of a people person as he is a scientist. This combination makes working with him a wonderful experience both from a professional perspective and for just having fun"

"He combines the people-skills with a rigor for organization and setting reasonable goals. As such he has a wonderful ability to create a team out of a group of self-directed and focused scientists."

Berry is able to take in the big picture and motivate group goals such that everyone has a buy-in"

"Berry, your generosity, humility and friendship has been enduring and valued in more than 20 years of collaboration"

"Berry Lyons is a true friend to many and a wonderful scientist who epitomizes the term interdisciplinary in every way."

"Hurray for Berry!"

Berry's accomplishments could fill this lunch hour easily, but as you heard from his colleagues and students, his spirit of discovery, camaraderie and energy are those of a truly a great scientist, educator and colleague. I cherish the collaborations and friendship that I have been fortunate to have with Berry Lyons, and ask that you join me in recognizing and congratulating the Limnogeology Division's 2011 Israel Cook Russell Awardee, Dr. William Berry Lyons.

Response by W. Berry Lyons

Thank you Scott for your gracious and very generous words. I would like to begin by thanking the Limnogeology Division of GSA for this wonderful honor. It is particularly gratifying to me to follow my long-time colleague Bill Last as the second awardee, as Bill and I collaborated on the investigation of Canadian Prairie lakes in the late 1980's. It is extremely humbling to be honored by your peers and I found it difficult to reflect on my limnogeological career in just a few words.

Bill mentioned last year in his response that having grown up within meters of Lake

Michigan that he had always been fascinated by lakes. I grew up within a few kms of the ocean and as I grew into adulthood knew that I wanted to be an ocean scientist. My oceanographic career ended abruptly in the early 1980s as I became more interested in terrestrial aquatic systems, especially salt lakes. Also as I taught aquatic geochemistry for the first few times, I became intrigued by the seminal work by Hardie and Eugster on closed-basin lake chemical evolution, and soon began to think about how elemental variation in lake systems was reflected by both watershed and in-lake biogeochemical processes. Two other career changing influences occurred soon after that increased my desire to refocus my research interests on lacustrine geochemistry—both of these connected my oceanographic past to my limnological future. The first was the reading of a paper by Karen van Dam and John Edmond that essentially asked the question—What would the chemistry of the oceans look like without mid-ocean spreading centers? The answer in their minds was to look to alkaline, saline lakes in Africa. The second epiphany came from the work of Bill Green and his students who approached the understanding of Antarctic saline lake evolution by applying an oceanographic perspective on solute mass balance. About this same time Mark Hines, Andy Herczeg, John McArthur and Dave Long and I were working on acid lake systems in Australia and Bob Wharton asked me to become part of the McMurdo Dry Valleys LTER project, where I had the great opportunity to conduct research on these fascinating and unusual closed-basin lakes at 78°S.

So from the late 1980's one of my major research and teaching interests has been the study of the geochemical behavior of lakes. Along the way, I have literally been blessed to have been associated with many hard-working, inspiring, and life-sharing colleagues, collaborators, post-docs and students. I am proud to say that I have never had a single authored publication— the life's work that you have honored for today has really been the work of many. Although I do not have nearly the space or time to acknowledge them all, I will note a few! These include the Australian work with Mark, Andy, John and Dave noted above, my brief, but greatly rewarding work in Lake Naivaska, Kenya with Bwire Ojiambo and Bob Poreda, my interest in Great Basin lakes I owe to individuals such as Karen Johannesson, Larry Benson and Scott, and my two decades of Antarctic work I have shared with many wonderful colleagues and students including,

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to name just a few, Kathy Welch, Peter Doran, Klaus Neumann, Becki Witherow, Sarah Fortner and a major source of knowledge and dedication—John Prisco. I am also grateful to my wife and colleague of over 25 years, Anne Carey, for her support, understanding and collaboration.

Let me finish by adding my astonishment to be associated with the 'likes of Israel C. Russell. In the introduction to 1895 book on lakes he summarized what processes and

linkages a scientist had to understand to discern a lake's history.

“The history of a lake begins with the origin of its basin and considers among other subjects the movement of its waters, the changes it produces in the topography of its shore, its relations to climate, its geological functions, and its connections with plant and animal life.” He was clearly a man ahead of his time, with a truly interdisciplinary

perspective on lacustrine environments. We can only hope to uphold this tradition.

I am greatly appreciative and grateful to the Limnogeology Division for receiving the IC Russell award. Thank you all very much.