



**AGS Distinguished Scientist Award. Gesner Medal 2010  
Dr. Randall Miller**

Dr. Randy Miller has made an important and wide-ranging contribution to Atlantic Geoscience since his appointment as Research Curator at the New Brunswick Museum, in 1986, and in the course of his three terms as Head of Natural Sciences from 1988-1991, 1999-2001, and most recently, 2004-2006. During this time, the Museum has flourished as a regional leader in research, conservation, education, and outreach and, to a significant degree, this is a direct result of Randy's influence.

**Research:** Randy's research in palaeontology has covered a bewildering array of topics from Quaternary beetles to Devonian sharks and Pre-Cambrian stromatolites, and has resulted in more than 80 peer-reviewed journal papers and book chapters. Some of these discoveries have been published in top-rated journals like *Nature* and have attracted considerable media interest. In fact - rarely out of the public eye - Randy has made more than 200 appearances on TV/radio and his work has been the subject of more than 150 newspaper/magazine articles since 1990. An excellent communicator, Randy has contributed widely to the public understanding of science through articles in *American Scientist* and other magazines. What makes Randy's research really stand out is his application of novel or emerging technologies to the study of fossil systematics, ecology and physiology. Whether CT-scanning a fossil shark brain or analyzing stable isotopes in beetle exoskeletons, Randy is always eager to think out of the box. It is no surprise then that he has collaborated with some of the leading international figures in his field and acquired significant research funding.

**The History of Geology:** Randy is enormously knowledgeable about the history of geology in Atlantic Canada, and has written extensively about the work of G.F. Matthew, J.W. Dawson, Charles Lyell, and the earlier seminal works of Abraham Gesner, New Brunswick's first provincial geologist. Arguably one of Randy's most remarkable achievements is the "re-discovery" of Gesner's original geology collection, which comprises the oldest museum collection in Canada. Once thought lost, Randy has pieced together this historic collection through painstaking searches of museum archives over two decades and written extensively

about the turbulent history of the collection in his care. This feat alone should make him a worthy recipient of the Atlantic Geoscience Society's Gesner Medal!

**Research leadership and service:** In addition to his own personal research, Randy has also exerted a strategic leadership over the development of geoscience research in Atlantic Canada. For example, he was instrumental in establishing the G. F. Matthew Research Fellowship, in 1986, which he administers through the New Brunswick Museum. To date, this fund has supported more than 33 researchers from seven countries and resulted in 25 peer-reviewed journal papers and PhD theses. Randy devotes considerable time in the field with Matthew grant recipients and is well regarded for his mentoring and encouragement. Randy also serves and supports the regional geological community more widely through his position as Adjunct Professor at the University of New Brunswick where he teaches Biology classes and acts as examiner for BSc, MSc and PhD research projects. In addition he had served as a Member of Council of the Atlantic Geoscience Society, since 1993, during which time he has played a significant role in education and public outreach.

**Public Engagement:** Needless to say, Randy is committed to sharing his passion and knowledge of geology to the widest possible audience. We have already highlighted his work with news media, but this is only one avenue of engagement. In 1997 Randy oversaw the bold reinvention of the geology galleries of the New Brunswick as they moved to a downtown location in Saint John. He took a multisensory approach and worked alongside local artists such as Judi Penannen to create evocative reconstructions of the History of Life. Many of these artworks will be well known to members of the Atlantic Geoscience Society as they were widely reused in *The Last Billion Years*. He is currently involved in a \$1 million initiative addressing the cultural transformation of Saint John where he playing a key role in developing local geology as an educational and cultural resource. In the future he aims to share that geology with an even wider audience through the creation of a UNESCO GeoPark in Saint John, New Brunswick In summary, Randy is a gifted researcher, a clever strategist, and a passionate communicator, and we encourage you to recognize his enormous contributions to Atlantic Geology through the award of the prestigious Gesner Medal