



**AGS Distinguished Scientist Award. Gesner Medal 2016
Dr. David Lentz**

It is my privilege to introduce this year's winner of the Gesner Medal. I want to highlight a few things that I know from firsthand experience and touch on some others that I read in some of the 13 supporting letters of his nomination, which by the way come from across Canada and internationally.

I first met him in a field camp in southwestern New Brunswick during the summer of 1983, where he was working for Billiton Canada Ltd. as a fresh BSc graduate exploring for tin and tungsten. At that time, Billiton was in the process of getting the Mount Pleasant tungsten deposit ready for production. After talking to him for awhile, I remember thinking that this guy is very knowledgeable about granite-related deposits but he is also very talkative, a trait that he has not lost to this day.

Our paths crossed again when the GSC sent him to Bathurst in early 1991 to study hydrothermal alteration associated with massive sulphide deposits of the Bathurst Mining Camp. This work was part of a five-year, joint federal-provincial project (called EXTECH II). He moved into the room across from mine at the NBDNR Minerals Office in Bathurst. I was amazed at how much energy he had and how focused he was on his work, even though he had a young and growing family at the time. Every year, he contributed one or two papers to GSC Current Research. It was not long before he engaged the exploration community in Bathurst by giving talks about his work and getting others to talk about what they were doing. I remember the first talks were delivered in the basement of his house but they ultimately moved to my garage where there was more space to accommodate the crowd. Many geologists saw the inside of my garage!

In 1994, he joined NBDNR as the Mineral Deposits Geologist for the Province, based out of Bathurst. During his five-year term in this position, he conducted research on mineral deposits and encouraged exploration by interacting with company geologists and prospectors. He

authored or co-authored 40 publications and delivered more than 20 oral presentations at conferences over that time. His office was organized (and still is for that matter) based on the Law of Superposition, that is, the stuff on top of the pile is the most recent. In 1994, he also became Short Course Coordinator for the Mineral Deposits Division (MDD), a position he held for four years, and he dramatically changed the nature of short courses offered by the Geological Association of Canada (GAC). The short-course notes for his first course, published in 1994 and entitled: "***Alteration and alteration processes associated with ore-forming systems***" was a best seller for MDD. A second course in 1996 that he helped organize and contributed to was also a best seller. He also organized a short course for the Mineralogical Association of Canada (MAC) in 1998 entitled: "***Mineralized intrusion-related skarn systems***". For his efforts, MDD awarded him the **William Harvey Gross Medal** (Young Geoscientist Award) in 1999.

In early 2000, he joined the UNB as the Economic Geology Chair, where he has remained ever since. During the last 15 years at UNB, he has authored or co-authored over 100 publications and supervised or co-supervised numerous student theses. He was Co-editor of the MDD newsletter (***The Gangue***) from 1999-2003, was on the editorial boards of ***Mineralium Deposita*** (2003-2006), ***Canadian Mineralogist*** (2004-2007), and was guest editor of two special volumes of ***Exploration and Mining Geology***: one in 2006 entitled: "***Volcanic-hosted massive sulfide deposits and their geological settings in the Bathurst Mining Camp, New Brunswick***", and a second in 2008 entitled: "***Metallogeny and setting of gold systems in southern New Brunswick: Implications for exploration in the northern Appalachians***". He was very active in the CIM Geological Society for nine years, served on Executive from 2002-2005, and was a booster for the Society's journal, ***Exploration and Mining Geology***. For his efforts, CIM awarded him the **Distinguished Lecturer Award** in 2007, the **Julian Boldy Memorial Award** for exceptional service to the CIM Geological Society in 2009, and the **Barlow Medal** twice, in 2008 and 2010, for best paper in ***Exploration and Mining Geology***. He also received the **Distinguished Service Award** from GAC in 2007. Not only has he received awards, but he has also been diligent about nominating deserving candidates for awards; I have lost track of how many letters of support he has asked me to prepare and/or sign.

He has published papers in many journals, including ***Atlantic Geology, Canadian Journal of Earth Sciences, Canadian Mineralogist, Chemical Geology, Earth and Planetary Science Letters, Economic Geology, Exploration and Mining Geology, Geology, Journal of Geochemical Exploration, Mineralium Deposita, Mineralogy and Petrology, and Ore Geology Reviews***. Not many of us are so diversely published. Notably, his very first two papers were published in ***Atlantic Geology***.

If that was not enough to keep him busy, he also finds time to be external examiner of graduate theses (at least 9 PhD and 8 MSc theses that I know about, from Australia, Canada, India and Sweden); he has organized and chaired special sessions at many meetings; and he

has been invited to give numerous workshops at various places in Canada and elsewhere. He has chaired two major conferences at UNB: the 24th International Applied Geochemistry Symposium in 2009 and the GAC/MAC Annual Meeting in Fredericton in 2014. Furthermore, he is currently associate editor for several journals including: *Economic Geology*, *Journal of Geochemical Exploration*, and *Geoscience Canada*.

I hope that I have demonstrated that Prof. David R. Lentz, (Dave to his friends) deserves to receive the Gesner Medal. He definitely has through his own efforts developed and promoted the advancement of geoscience in the Atlantic Region and his contributions have had an impact well beyond Atlantic Canada. In case you have any lingering doubts, let me read you a few comments from some of the 13 supporting letters of his nomination.

Comments from Supporting Letters:

“Dave is truly passionate about geology. It is in one way or another entwined in every aspect of his life, as is evident by the name of his oldest child 'Carlin' who was no doubt named after the famous gold deposits in Nevada. “

“Words that spring to mind in describing Dave’s character include ‘inquisitive’, ‘enthusiastic’, ‘energetic’, and ‘innovative’.” (I would add, sometimes annoying, but I mean that in a good way!).

“Prof. Lentz has continually impressed me with his keen scientific insights, breadth of knowledge, strong publication record, and service to the geological community. His guidance and mentoring of students at all levels is most impressive, resulting in well-educated and committed graduates who have carried on his strong tradition of careful field work, detailed laboratory studies, and rigorous interpretation of data.”

“His interests and impact reach far outside his homeland. He has supported several collaborative research and education initiatives between nations around the Atlantic rim, including Canada, USA, Ireland, Sweden, Norway, Portugal, Spain and Morocco, and no doubt others that I am not personally aware of.”

“Another aspect of Dave’s contribution to geoscience is his dedication to teaching and training the next generation of geoscientists. This is reflected in the large number of students he has supervised at various levels and his frequent participation in seminars, clinics and workshops. Dave’s commitment to supporting the broader geological community has been, and continues to be exemplary. His membership and active participation in a large number of geological associations is truly remarkable, which once again speaks to his almost limitless energy and enthusiasm.”

“Dr. Lentz is an extraordinary researcher. He has published numerous papers and one of the exceptional aspects of his work is the breadth of topics that he investigates. His knowledge and recall of geological details are encyclopedic and when combined with his

enthusiasm and energy, his passion for the geology of New Brunswick is boundless. I would like to point out that Dave infuses this enthusiasm into his students. And by his I mean any student that has a beer with him, which is a far larger population than those he directly supervises.”

“Dr. Lentz’s research in the ore deposits and geochemistry disciplines have far-reaching implications. He has published hallmark papers and short-course chapters that are used in undergraduate teaching and as reference volumes in geoscience Departments across Canada, and has provided industry (through collaborative research, usually involving students) with deposit models from studies of a diverse range of ore systems. Many of these studies have been based in New Brunswick, but the outcomes of that research are clearly applicable to major ore forming systems elsewhere and have led to important revisions to global deposit models.”

“He has probably done more to promote and organize scientific activities alone than several of us could possibly accomplish collectively. Dave’s contributions to scientific knowledge, and specifically to our knowledge of mineral deposit systems in Atlantic Canada, are both numerous and comprehensive.”

“Dave is an excellent researcher who covers a breath of ore deposit studies both within Canada and abroad. He remains one of the most active researchers in ore deposit geology anywhere, and through his efforts has projected both the mineral resources and intellectual wealth of Atlantic Canada on a global stage for all to see and learn from.”

“In closing, the Atlantic Geoscience Society could not find a more deserving person to carry on the tradition of excellence among the worthy recipients of the Gesner Medal.”

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