# 2026 MGPV Division Distinguished Geological Career Award to Calvin G. Barnes: Acceptance

Calvin G. Barnes, Texas Tech University
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Many thanks to Carol Frost for the nice citation and to the other nominators: Gary Ernst, Art Snoke, and Ken Johnson. Being the recipient of the MGPV Distinguished Geologic Career Award was a big surprise and is a great honor, for which I am most grateful! Writing a response to Carol's citation led me to reflect on a career, on the interplay of curiosity, education and mentoring, and on formative collaborations during that career.

It is not clear why a kid from eastern Nebraska, a place devoid of crystalline rocks, should find igneous and metamorphic rocks interesting. Luckily, my parents put up with my interest in rocks, in collecting forays to local gravel pits, and in a basement strewn with samples and "rockhounding" equipment. This hobbyist beginning led to the geology program at the University of Nebraska. In those days, UNL offered a classic geology program, which resulted in a deep appreciation for the excitement, joys, and sorrows of field geology. I was lucky to share these experiences with an academic competitor and first colleague, Greg Harper. (Little did we know that our Ph.D. field areas in the Klamath Mountains would be just 60 km apart!). My mentor at UNL was Old Antarctic Explorer Sam Treves, who put me to work over two field seasons in the Dry Valleys of Antarctica—an experience that opened many geologic and professional horizons.

Graduate school at the U. of Oregon was a grand time, where classmates Barbara John and Helen Lang started a "granite mafia" and faculty members, particularly Jack Rice, Allan Kays, and A.R. McBirney challenged us to think deeply about high-temperature rocks. With Al Kays' help, I landed a summer job at the USGS doing resource evaluation of Klamath Mountain wilderness areas. Our major project involved my USGS bosses Mary Donato and Bob Coleman, plus Al Kays, Gary Ernst, and Bob Jachens. Conversations on outcrops and over dinner with this crowd were fun and full of advice and encouragement.

It was perhaps predictable that I landed a job at Texas Tech, because on the High Plains there are as many crystalline rocks as in eastern Nebraska. This meant more work in the Klamath Mountains! With encouragement from Art Snoke, Mary Donato, Gary Ernst, Porter Irwin, and Ron Kistler, a bevy of students and I began studies on Jurassic magmatism and tectonism and their relationships to terrane accretion. While this work was fun and informative, too many field seasons in the Klamaths became tiring. Enter the Helgeland Nappe Complex.

We met Tore Prestvik during grad school, while he was on sabbatical in Eugene. He encouraged more work on "old" plutons in the Norwegian Caledonides, and he helped me land Fulbright funding in 1991. The Fulbright year was a fantastic introduction to

Caledonian geology, with alkaline igneous rocks and a surplus of metapelites and marbles. Tore and Øystein Nordgulen of the Norwegian Geological Survey, patiently schooled me in Caledonian geology, encouraged detailed work on the plutons and their host rocks, and provided geologic, logistical, and analytical help. This great introduction led to acquisition of NSF support with Aaron Yoshinobu and Carol Frost, which meant we were able to involve students from Texas Tech and the University of Wyoming over the course of two decades.

In addition to convergent margin geology, there were forays into the Ruby Mountain core complex with Art Snoke, Keith Howard, and Ph.D. student Sang-yun Lee, and the Precambrian basement of the Southwest with Kate Miller. By this time, we were ready for a return to the Klamath Mountains. It was actually more than one return: first with Art Snoke to his dissertation area, then with Aaron, Nolwenn Coint, and Kevin Chamberlain in my dissertation area, and then with Aaron, Callum Hetherington, and crew of grad students on the age and tectonic history of high-grade metamorphic rocks. Finally, there was a project on the provenance of the Late Jurassic Galice Formation (sandstone! gasp) with Aaron and Kathy Surpless.

A throughgoing topic of our pluton studies has been open system behavior, particularly assimilation and magma mixing. In the Klamaths, much of the evidence is cryptic but decipherable, as Charlotte Allen and I initially demonstrated using Sr, oxygen, and trace element data, and as shown in greater detail through Nolwenn Coint's work on trace elements in augite. In Norway, we studied assimilation in several mid-crustal settings, where hybridization with partially-melted host rocks was evident in the field. One outstanding location involved assimilation of siliceous carbonates and formation of critically saturated and even undersaturated syenite. This example was an ideal target for trace element analysis of magmatic skarn minerals formed during assimilation. Therefore, Yujia Li and I turned to Charlotte Allen's expertise in laser ablation (LA) analysis. Visits to her lab in Canberra were seminal in providing lots of data, an understanding of LA methods, and the impetus to set up a lab at Texas Tech. This analytical capability has fostered new and on-going projects with Vali Memeti, Tapani Ramo, Katie Ardill, Kevin Werts, Ken Johnson, and Scott Paterson, among others.

In much of this response, I've used the pronoun "we". This is not the royal "we", rather it refers to my long-term partner in field work, analytical work, travel (for fun), and in life: Dr. Melanie Barnes. She was/is an invaluable part of this research, a mentor to untold graduate and undergraduate students, and the analytical geochemist-in-chief at Texas Tech. It is also important to acknowledge financial support over the years from NSF, the Norwegian Geological Survey, the State of Texas, the Fulbright program, and the Petroleum Research Fund.

In summary, any success in geology I have enjoyed has been possible because of talented students, generous colleagues, and numerous collaborators who have influenced my views on geology, petrology, and tectonics. With their constant help, I can

say that my initial curiosity about rocks and minerals evolved into a life-long journey of discovery, confusion, understanding, and sharing. To all of them and to the members of MGPV, my heartfelt thanks.