Response by Arthur W. Snoke  
Structural Geology & Tectonics Division Career Contribution Award

Thank you, Al, for your generous words. Thanks also, to the Geological Society of America, Structural Geology and Tectonics Division, and the nominators supporting this honor. I am humbled to join the rich company of previous recipients.

My career-long fortune has involved tutoring from inspiring mentors, interacting with outstanding colleagues, and learning from interested students. Every one of those geologists helped train me in structural geology and tectonics. Receiving this honor caused me to ponder key decisions linked to developing my career. I wish I could say they were carefully planned. But, as in research, they took me down diverse paths—always interesting and often unpredictable.

The decisions to attend Franklin & Marshall College and Stanford University were strategic and wise. In fact, Don Wise, an enthusiastic and inspiring teacher, introduced me to structural geology and tectonics. Tony Morse taught me the ‘how’ of pursuing scientific research via my senior thesis. Back then, I didn’t fully appreciate what an incredible opportunity that Franklin & Marshall provided.

I enrolled at Stanford University in 1967 at a time when ‘New Global Tectonics’ was first being applied to the complex histories of mountain belts. Outstanding geologists such as Bill Dickinson and Ben Page were applying these new concepts to the Mesozoic history of California. It was an exciting time to be at Stanford, because all of us were sharing a major paradigm-shift in Earth sciences.

The next stroke of good fortune was to serve as a field assistant for Porter Irwin of the U.S. Geological Survey in the southern Klamath Mountains in 1968. Porter suggested that I study the ultramafic-mafic rocks in the Klamath Mountains, and he directed me to the Preston Peak area. That was sage advice because the area exposed two suites of ultramafic-mafic rocks that recorded different aspects of the tectonic evolution of the western Klamath Mountains.

While pursuing my studies in the Klamath Mountains, my fellow graduate student, Vicki Todd, was working in northwestern Utah on a metamorphic terrain characterized by recumbent folds, mylonitic rocks, and low-angle faults. I also became interested in such complexities. To that end, my dissertation advisor, Bob Compton, supported my plan to develop a post-doctoral project in the Ruby Mountains–East Humboldt Range, Nevada. I was offered a NRC-USGS fellowship to work under Max Crittenden on mylonitic rocks and low-angle faults in the northern Ruby Mountains. In turn, Keith Howard masterfully introduced me to the geology of the area. That introduction led to research that continues today. Northeastern Nevada, across several decades, has proven to be a fertile area for research for many graduate students.

Studies in the Ruby–East Humboldt core complex focused my interest in mylonitic rocks. Indeed, that led to working with Jan Tullis and Gordon Lister on various
aspects of mylonitic rocks. In 1981, Jan, Vicki, and I convened a Penrose Conference on
the petrogenesis of mylonitic rocks. That conference was transformative for me, because
it brought together geologists working on fault rocks from around the world. New
collaborations were spawned, including my work with Gordon on S–C mylonites.

After I finished my post-doctoral studies, I joined the geology faculty at the
University of South Carolina in 1974. Don Secor introduced me to the geology of the
South Carolina Piedmont, and that began long-term research collaborations. At that time,
study of the internal zone of the southern Appalachians was undergoing a renaissance,
especially through combining detailed field investigations with radiometric dating.

I enjoyed a productive decade at the University of South Carolina. But an
opportunity arose to join the geology and geophysics faculty at the University of
Wyoming (UW). UW provided new opportunities and collaborators including: Carol
Frost, Ron Frost, Jay Lillegraven, Scott Smithson, Bobbie John, Kevin Chamberlain, and
Dave Fountain. I also initiated research collaborations with Cal Barnes, which continue
today. Jim Wright and I worked together in documenting a geochronological history for
the Ruby–East Humboldt core complex. My career as a regular faculty member at UW
lasted 31 years, until retirement in 2015. I have not stopped doing research, and I hope to
continue for many years.

Being a field-oriented geologist has been a remarkable experience and led to a
scientifically fulfilling career. However, my greatest legacy is my 45 graduate students. It
has been very satisfying to watch their careers evolve over the years!

What can I pass on to my younger colleagues, especially students, as gained from
50 years as a geologist? Examples are many, but I have selected five items especially
important to me. (1) Search out good mentors. From my previous comments, early-career
mentors were crucial to my professional development. (2) Collaborate with other
scientists, especially ones having complementary expertise. (3) Learn to identify good
research problems. Some will be at the cutting edge of a topic, but others may at first
seem only to have potential to evolve into unexpected results. (4) Regularly participate in
field trips and conferences. You could then see a wealth of geologic settings and meet
leaders in the field. When you have more experience, convene conferences and organize
your own field trips. (5) Be prepared to recognize the unexpected among field
relationships and lab results. Almost invariably in science, it is the anomalies that lead to
real breakthroughs in understanding.

In closing, I want to thank my partner in life, my wife, Judy. When she realized
that fieldwork was destined to be a major part of my career, she agreed that the family
should share the summer field seasons together. Thus, we took our daughters, Cindy and
Alison, to the Klamath Mountains and northeastern Nevada. They know the joys of
sleeping in a tent from early ages.

Thank you again for this very special honor.