Ongoing research projects of Dr. Brantley are:

- Fe release and isotope fractionation during microbial alteration and weathering of shales, granites, and basalts.
- Coupling between weathering and erosion.
- Chemical, physical, and biological weathering in the Luquillo Critical Zone Observatory.
- Chemical, biological, and physical weathering in the Susquehanna Shale Hills Critical Zone Observatory.
- Neutron scattering analyses of weathering rocks.
- Reactive transport modelling of weathering.

Professor Brantley is a fellow of the:

- American Geophysical Union
- Geological Society of America
- Geochemical Society
- European Association of Geochemistry
- International Assoc. for GeoChemistry.


Notable recent awards include:

2012 - Soil Science Society of America (SSSA) Presidential Award
2012 - National Academy of Sciences
2013 - Penn State Faculty Scholar Medal

1980 - B.A., Chemistry, Princeton University, Magna cum Laude
1983 - M.A., Geological and Geophysical Sciences, Princeton University
1987 - Ph.D., Geological and Geophysical Sciences, Princeton University

Dr. Brantley has published more than 160 refereed journal articles and 15 book chapters.
Roscoe Ellis, Jr.

Roscoe Ellis began a career of contributions to science and society at Kansas State University as an instructor in 1949. After completing his Ph.D. degree at the University of Wisconsin in 1954, he resumed teaching and research responsibilities in the Department of Agronomy at Kansas State University. His career was marked by numerous scientific achievements up to his untimely death in 1982.

Roscoe became a highly respected soil chemist through his research in clay mineralogy, soil phosphorus and micronutrient chemistry. He researched the quantification of clay minerals in mixtures and greatly expanded knowledge on the mineralogy and chemistry of Kansas soils. His studies on the interaction of phosphorus and zinc chemistry in soils advanced theoretical horizons and provided practical implications for fertilizer management on Kansas farms.

Dr. Ellis’s characterization of zinc levels in Kansas soils led to the development of a zinc soil test procedure. That test was used to determine when responsive additions of zinc fertilizer could be recommended.

Dr. Ellis advanced the frontiers of knowledge in soil phosphorus chemistry through a variety of research studies. Perhaps his most significant work investigated the complexity of polyphosphate reactions in soils and their conversion to the plant available orthophosphate form. These studies advanced both the theoretical aspects of polyphosphate chemistry and the adaptation of polyphosphate use in crop production.

Dr. Ellis was highly sought after to partnership in studies involving soil chemistry. His cooperative studies with the USDA on soil and environmental factors causing magnesium deficiency in cattle (grass tetany) led to a better understanding of this significant problem.

Dr. Ellis mentored 32 graduate students and their efforts resulted in 45 scientific publications. He served his profession as Associate Editor of both the Agronomy Journal and Soil Science Society of America Journal, Soil Chemistry Program Chairman in 1962 for the Soil Science Society of America, and in 1979 he was named Editor-in-Chief of the Soil Science Society of America Journal.

Dr. Ellis’s career as a preeminent teacher, researcher and person provided an excellent example for all. He was recognized with memberships in the honor societies of Phi Kappa Phi, Sigma Xi, Gamma Sigma Delta, and Pi Mu Epsilon and as a Fellow of both the Soil Science Society of America and American Society of Agronomy.

The Roscoe Ellis, Jr. Lectureship was established to advance soil science at Kansas State University by attracting prominent scholars to interact with students and faculty.

The lectures honor the career of Dr. Ellis and commemorate his many years of outstanding service to his students, Kansas State University, and the soil science community. His dedication, knowledge and helpfulness influenced many in their educational and scientific pursuits.

Donations by family, friends, and associates of Dr. Ellis in excess of $10,000 endowed the Lectureship Fund with the Kansas State University Foundation. Income from this endowment supports expenses associated with providing this annual lectureship, but additional support is needed.

Please consider enhancing this fund so future soil scientists can continue benefiting from this lectureship. Your contributions and inquiries are encouraged and may be sent to:

Roscoe Ellis Lectureship
Department of Agronomy
2004 Throckmorton Hall
Kansas State University
Manhattan, KS 66506

By Dr. Susan Brantley
Distinguished Professor of Geosciences
Director, Earth and Environmental Systems Institute
Pennsylvania State University

“Water Resource Impacts during Unconventional Shale Gas Development with Hydrofracking: the Pennsylvania Experience”

4:00 p.m. Wednesday, February 5, 2014
1018 Throckmorton Hall
Kansas State University
Manhattan, KS

Refreshments @3:30 p.m. in TH Lobby