My principal scientific interests are in the fields of sedimentary petrology, diagenesis, geological carbon sequestration, and environmental and petroleum geology. Topics I’m currently working on include:

- Reservoir/seal analysis for petroleum systems and proposed carbon sequestration sites
- Geologic controls on induced seismicity
- The relationship between carbonate cementation, fluid flow, microbial activity and permeability heterogeneity in clastic sedimentary rocks.
  - Controls on fault-zone cementation, fluid flow, and the relationship of fault zone diagenesis to permeability.
- Evolution of calcic horizons in desert soils — impact on the carbon/water cycle.