RESEARCH INTERESTS

My research aim is to understand the influence of natural and anthropogenic stresses on environmental and earth systems. My objectives are to characterize, predict, and quantify uncertainty in processes and responses across spatiotemporal scales through development and application of novel data fusion and knowledge discovery techniques.

- Characterization of water fluxes at the earth-atmospheric boundary
- Data-fusion, data-mining, machine-learning, hybrid applications
- Influence of climate, land-use, and land cover on flow, transport, and ecology
- Physical/biogeochemical interaction among groundwater, surface-water, and ecology
- Real-time mapping of landscape and subsurface features using remotely sensed data
- Scaling and estimation of spatiotemporal hydrogeophysical data and processes