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The University of Wyoming is looking for MSc or PhD applications for the following potential research projects starting in Fall semester 2021:

- Contrasting aerosol-cloud interactions in global climate models with satellite and aircraft observations (McCoy, co-advised with NCAR).
- Understanding the physical mechanisms driving extratropical cloud feedback (McCoy, Lebo).
- Improving model representation of feedbacks between precipitation and boundary layer winds (McCoy).
- Mesoscale organization and microphysics of shallow convective clouds in cold-air outbreaks over open water (Geerts, French)
- Methane emission from cattle feedlots (Caulton)
- Fugitive greenhouse gas emissions from unconventional oil and gas (Caulton, Murphy)
- Estimating population exposure to air pollution using diffusive samplers and low-cost sensors (Field)
- Modeling of convection, with a focus on cloud and precipitation processes (Lebo)
- Improved prediction of hazardous winter weather including blowing snow (Lebo, Geerts)
- Microphysics of clouds producing freezing precipitation over the eastern US and Canada (French)
- Dynamics and microphysics of winter storms over mountains, including the impact of cloud seeding (Geerts, French)
- Airborne instrument characterization and algorithm development (several faculty)
- Improvement of methods used to determine snowfall rate (Snider) and snow pack depth in complex terrain (Geerts)

If you are interested in any of these topics, contact the faculty listed in parentheses, or Dr. Shane Murphy (shane.murphy@uwyo.edu)

Applications submitted by 1 Jan 2021 will receive full and equal consideration.

