Following introductory comments concerning a Washington State College Physics MS degree recipient from 1928, selected research from four recent decades will be summarized. Some examples to be considered include the close relationship between optical and acoustical scattering research and the value of understanding short and long wavelength scattering processes. Novel forms of rainbow and glory scattering were discovered. In some cases waves can be simultaneously used to probe and control the shape and position of drops and bubbles and to stabilize liquid columns; investigations outside the laboratory included reduced-gravity aircraft and the Space Shuttle. Related developments concern radiation torque, vortex beams, and tractor beams. In other developments, lessons from short-wavelength scattering experiments were applied to acoustical situations having reduced symmetry, facilitating improved interpretation of acoustical images and signatures of objects in water. Participation of students and program alumni in acoustical field experiments for the remediation of unexploded ordinance (UXO) will be noted.

Please meet our guest speaker at a reception to follow, 5–6pm in the foyer on floor G