Mags and superfluids provide the simplest examples of symmetry breaking and correlations in interacting quantum systems. When disorder is thrown into the mix, particularly in low-dimensional quantum systems, novel and universal behavior often emerges. In my talk I will first explore some surprising effects of disorder in systems of non-interacting electrons, and magnetic chains. I will then focus on the superfluidinsulator transition for interacting bosons in a disordered environment. Recent research on this system has brought about a new understanding of superfluidity and its demise in low-dimensional disordered bosonic systems.