Our laboratory research focuses on understanding how the immune system senses and tunes its response to senescent cells in diseases and aging. Senescent cells accumulate chronically with aging and more acutely in the disease state leading to tissue dysfunction. Here the endogenous immune surveillance mechanisms fail to maintain tissue homeostasis by not
removing senescent cells tissue and driving age-related diseases. The heterogeneity of senescent cell phenotypes and tissues indicates that different mechanisms have evolved that lead to accumulation of senescent cells and our laboratory is interested in identifying and targeting the endogenous immune surveillance mechanism that can promote elimination of senescent cells and reverse disease progression.

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