Our Multiple Myeloma (MM) researchers engage in extraordinary scientific endeavors to further our understanding of myeloma pathogenesis.

Supported by the resources within the UAB Comprehensive Cancer Center, our ongoing myeloma investigations include the following:

- Efforts to increase our basic understanding of myeloma-host cell interactions, including exploring the function of the enzyme heparanase, and development of drugs to block the tumor-promoting effects of this enzyme in myeloma patients
- The Molecular And Genetic Epidemiology Study (IMAGE) of Myeloma, sponsored by the National Cancer Institute, is a resource that includes data and samples from thousands patients with Multiple Myeloma (MM) and Monoclonal Gammapathy of Undetermined Significance (MGUS), which is used to identify genetic and non-genetic risk factors for the susceptibility and progression of these plasma cell proliferative disorders.
- Investigation of the mechanisms of myeloma bone metastasis and myeloma induced bone disease, as well as the contribution of osteoclasts, osteoblasts and osteocytes in myeloma progression in bone.
- Pre-clinical animal model research in tumor immunology and osteolytic cancer metastasis
- Development of therapeutics to block TGF-beta growth factor activity that promotes myeloma growth, immune dysfunction, and osteolytic bone disease
- Understanding the pathogenesis of kidney damage due to immunoglobulin deposition seen in AL amyloidosis and light chain deposition diseases
- Understanding how cell surface proteins, like CD38, influence myeloma cell survival

Our robust research activity in myeloma and the collaborative relationships between basic scientists and our disease specific myeloma clinical practice providers makes UAB well positioned to raise the bar on the care of MM patients in our state and accelerate basic, translational, clinical, and disparities research efforts related to this disease from our own UAB-based program.