My research interest is focused on enhancing the effectiveness of radiation therapy and immunotherapy in lung and brain tumors using innovative experimental platforms. My research approach is divided into two programs: 1.) A translational laboratory group dedicated to uncovering the biological mechanisms of radiation and immunotherapy resistance in tumors; and 2.) A data science group examining the interaction of patient factors, such as seemingly unrelated incidental medications use and community flu incidence, on treatment response and patient survival.