Central Nervous System Radiation Oncology Research

The CNS Radiation Oncology Research Group is comprised of experts in diverse areas of research, including clinical investigations, physics, translational and basic sciences. This is an integrative research program whose objective is to advance knowledge and improve clinical outcomes for individuals with cancer.

All members maintain active clinical practices and conduct research, working together closely in both patient care and research investigations. Our research is characterized by extensive cross-disciplinary collaborations that address challenging and important questions in the field. Faculty investigators are also active in multiple nationally recognized research consortia. Summarized below are major categories of active investigation.
Clinical

Members of our group have made numerous contributions to advances in radiosurgery, research in patient outcomes and quality of life, development of novel radiotherapy and combined therapeutic approaches, including immunotherapy combined with radiation therapy.

Physics

Investigators are leaders in areas such as CNS stereotactic radiosurgery, use of radiomics-based analysis for prediction of disease response, quality assurance and practice guideline development.

Biology

Major areas of study include fundamental questions concerning cancer formation and response to therapy. To do this, our faculty developed novel experimental systems to dissect genetic and biochemical mechanisms of disease. Our members have made major contributions to the understanding of human cancer by applying state-of-the-art sequencing analysis to clinical specimens.

Principal Investigators

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