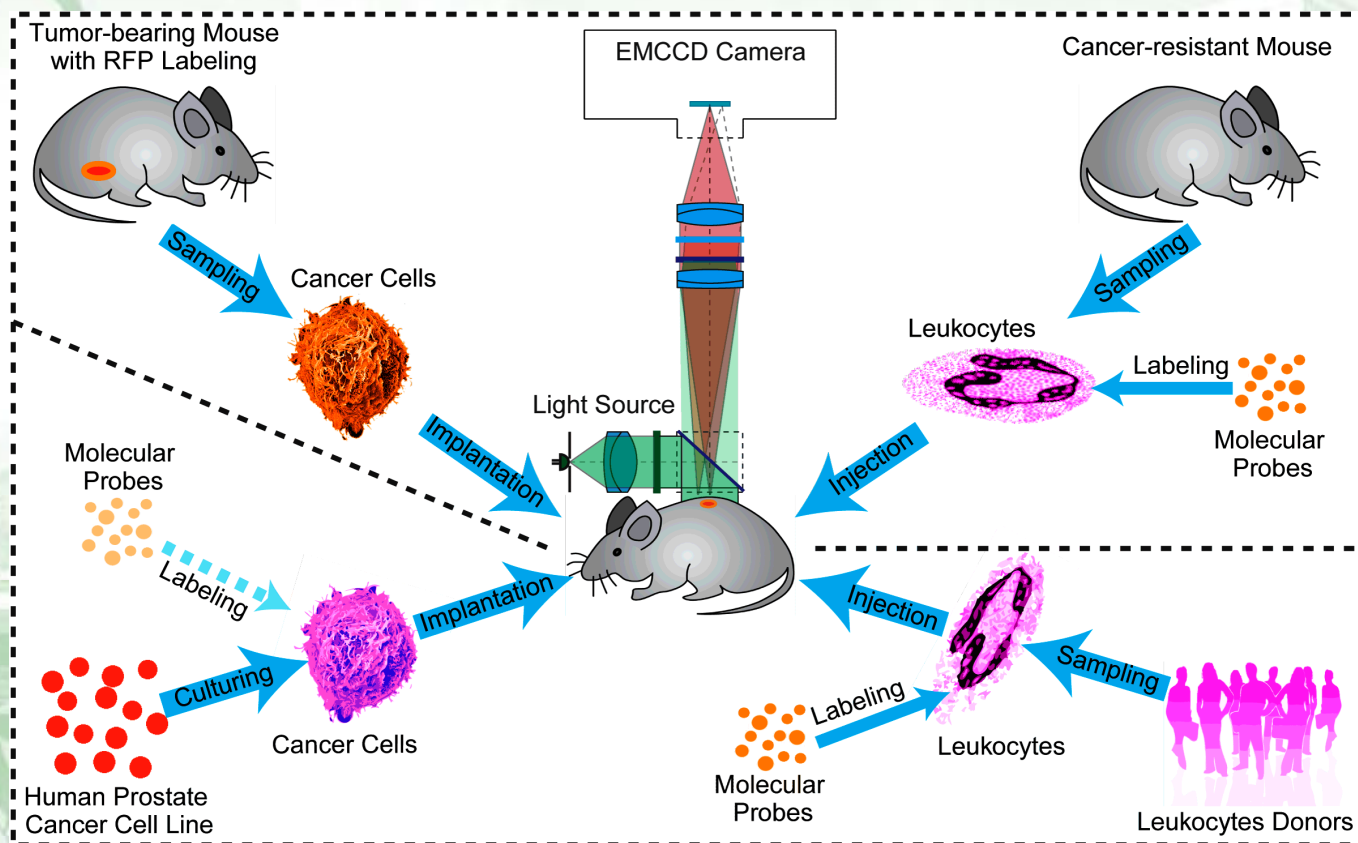


Fluorescence Tomography — Monitor Malignancy in Mice



Dr. Cui's group at Wake Forest has been investigating a newly discovered innate anticancer immunity in a colony of cancer resistant mice, and already demonstrated that the anticancer activity in the mice stems from the innate immune system, specifically from the granulocytes and macrophages. In 2007, they confirmed *in vitro* that the human granulocytes are capable of killing cancers effectively, suggesting a novel approach for cancer treatment. The FDA has approved this granulocyte infusion therapy (GIFT) for a phase II clinical trial.

In collaboration with Dr. Cui's group, our main hypothesis is that optical molecular imaging of the granulocyte infiltration and cancer-killing activities in a mouse-based test-bed would identify potential donors and optimize outcomes in the clinical trial. The overall goal of this project is to develop a unique fluorescence tomography system that quantifies the leukocyte infiltration and cancer-killing abilities on prostate cancer sites in the murine model to evaluate the cancer-killing mechanisms and guide the GIFT trial.

Papers by Our Team

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