**Cancer Translational Research Laboratory (Jon Ramsey, PhD - Director):** The CTRL is centrally located within a 1000 ft2 space on the UVM College of Medicine campus. The laboratory is certified for biosafety level-2 (BSL-2) work, equipped with a fully functional tissue culture suite complete with a biosafety cabinet, inverted microscope, and water jacketed CO2 incubator. The CTRL also possesses cryopreservation equipment (liquid nitrogen storage, -80°C upright freezer), and a refrigerated clinical centrifuge for blood processing. Balances and a pH meter are located in a designated buffer preparation area. Equipment and materials for routine molecular biology techniques commonplace to translational research (NanoDrop, thermocycler, electrophoresis apparatus, western blotting apparatus, power supplies, shakers, water baths, incubators, PIPETMAN® pipettes, etc.) are fashioned throughout the laboratory. Space is available in a cold room located adjacent to the general laboratory area. In addition to the laboratory space occupied by the CTRL, personnel have access to resources and space in the laboratory of Gary Stein, PhD, which is comprised of 4,600 square feet of newly renovated laboratory space in the Given building and immediately adjacent Health Sciences Research Facility (HSRF). Within these laboratories are a cell culture facility equipped for mammalian somatic and human embryonic stem cell culture, a dedicated RNase-free work area, a BS2 facility for virus preparation, and a histology area with equipment for embedding and cutting mouse embryos and soft and hard tissues.

**Clinical:**

The Given Building, in which the CTRL is located, is adjacent to the University of Vermont Medical Center (UVMCC) and houses extensive office space for UVMCC clinicians involved in both teaching and research efforts. The proximity of the CTRL to the UVMCC allows for effective retrieval and timely processing of patient research materials. CTRL staff maintain credentialing by UVMCC to meet HIPAA and cGLP standards. On average, the CTRL procures and processes approximately 100 patient samples per year, and currently stores >500 patient samples in cryopreservation. The CTRL also contains a designated area for preparing dry-ice shipments of samples for sharing with collaborating research centers.