

Bone marrow transplantation

Recipient mice will be placed on antibiotic-containing (SulfaTrim) water for one week prior to bone marrow transplantation and continued for four weeks after the procedure. Afterwards, mice are returned to reverse osmosis water. On the day of the transplantation, recipient mice are irradiated with 450 rads from a cesium source with a repeat dose 3-4 hours later. Bone marrow will be harvested from the tibia and femurs from donor mice. Bone marrow cells are gently dispersed, washed and counted. 1×10^7 bone marrow (Project 1, 2, 3, 4) or 1×10^6 retro-viral transduced (Projects 3 and 4) cells will be injected via the tail vein of the recipient mice. This is a technically easy procedure with the exception of the tail vein injection which requires an experienced animal handler. Generally there is a <5% loss due to death during this procedure. After repopulation of donor cells, mice will be placed on experimental protocols. We have used this transplantation protocol in our previous studies.⁵⁻⁸