HISTOCOMPATIBILITY TYPING IN
MONGREL POPULATIONS: MAN AND DOG

Final Report
for Period March 1, 1968 - February 28, 1977

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Final Report

Assorted procedures for controlling graft vs. host reaction by pretreatment of marrow with antithymocyte sera, anti-lymphocyte sera, anti-brain (anti-theta) sera, anti-globulin sera, and Fab preparations have been tried in dogs and mice. These procedures, whose modus operandi is an intent to remove thymus-conditioned lymphocytes from the donor marrow, have not proved successful to date primarily because of associated damage to hematopoietic stem cell potential.

We have been unable to establish malignant cell lines in the Cooperstown beagle colony to date.

We have developed a panel of cytotoxic iso-immune sera in the dog. Using this sera we are able to type for tissue compatibility in our beagle colony and outside our colony by matching the white blood cell types (lymphocytes). This procedure allows pre-selection of satisfactory combinations of donors and recipients for the transplantation of tissues in general and for transplantation of marrow in specific for the treatment of lethal exposure to radiation. Typing in the dog makes this animal a suitable experimental subject for the development of procedures that are applicable to man.

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