man and considers other possible causes of the high percentages of females it is strongly suggested that fallout radiation (perhaps mainly beta radiation in the water supply) was the main cause of the unusually high percentage female values in Drosophila. It is recommended that only distilled or reconstituted distilled water (with only the helpful chemicals added) should be used for Drosophila experiments. There may be important implications of this finding for all living organisms.

Parádi, E.* University of Milano, Italy.
Establishment of a new cell line from Drosophila mutant embryo.

I made the primary cultures from 12-14^{h} old T(Y;2)C, cn^{3} Drosophila melanogaster mutant embryos, which contain a translocated Y chromosome (1). When younger embryos are used for the primary cultures, the cells are fragile during the dissection; on the other hand, with the older embryos the tissue fragments are too large and don't attach to the bottom of the vessel which is essential for the tissue cultures (2).

The embryos were kept at 25 ± 0.5°C. The Drosophila eggs were washed several times with sodium chloride, after it with 1% sodium chloride which contained a few drops of soap solution (to reduce the floating of the eggs). Then 10 min. treatment with 2.5% sodium hypochlorite solution to sterilize and remove the chorion. The embryos treated in this way were mechanically dissected by conical glass homogenizer. The cell groups settled on the bottom of the homogenizer, while the injured cells remained in the liquid.

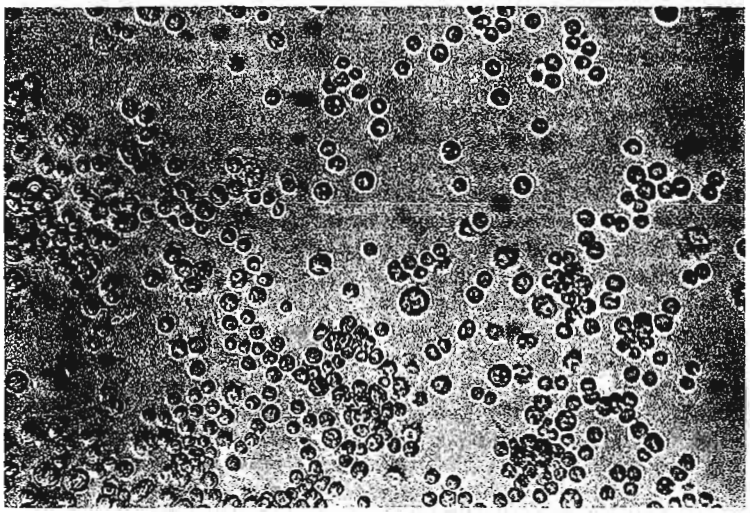

Fig. 1. Embryonic cells derived from T(Y;2)C, cn^{3} Drosophila mutant. Living cells, x 280.

I used for the primary cultures the small flasks described by Vago and Flandre (3). The vessels containęd 0.3 ml D 225 medium (2) which was supplemented with 20% fetal calf serum.

The cultures were incubated at 25 ± 0.5°C. The medium was changed weekly; in this manner the cell aggregates which didn't attach to the bottom of the vessel were removed. For the first two weeks an intensive cell multiplication started. After it a rest period followed; in this period only some of the cell aggregates showed convulsions.

Three months later relatively small, round, light cells grew up from the cell aggregate because of the intensive cell division. First they were together, after it the cells dispersed and in one week they filled the flask. First the cells appeared in a single layer, then when they filled the flask they were inclined to aggregate.

The cells kept their mitotic activity in T-30 vessel, where they were transferred. The cell population is heterogeneous as to the cell size, but only round cells can be seen (Fig. 1).

According to the first preliminary examinations the obtained IH_1 cells are mainly tetra and octoploids.

The importance of this cell line is that the second autosome which contains the translocated Y chromosome can be detected readily, e.g. in fluorescence way, so thus the fate of this chromosome is readily detectable, e.g. in cell fusion experiments.

References: (1) Dobzhansky, Th. 1930, Biol. Zentr. 50:671; (2) Echalier, G., A. Ohanessian 1970, In vitro 6:162; (3) Vago, C. and P. Flandre 1963, Ann. Epiphyties 14:127.

* Present address: Dept. of Evolution and Genetics, Eötvös Lóránd University, Budapest, Hungary.