

1:32 concentration, may be required for a similar lysis of fibrin formed by coagulating rabbit-fibrinogen with human-thrombin. Since native human fibrin is dissolved by a 1:64 concentration of this filtrate, the relative susceptibilities of the 2 Tillett-Garner hybrid fibrins may be expressed as 75% and 50% of that of normal human fibrin.

Adopting this same percentage method of recording our experimental data, the relative susceptibilities of about 100 other hybrid fibrins are summarized in Table I.

From this table it is seen that both human-fibrinogen and human-thrombin are carriers of the normal human susceptibility to the Tillett-Garner streptococcus fibrinolysin. With certain human-veterinary hybrid fibrins an almost complete loss of the human susceptibility is noted. Both rhesus-fibrinogen and rhesus-thrombin are approximately 10% human in streptolytic susceptibility.

With the discovery² that certain veterinary streptococci are specifically lytic for lower animal fibrins, the above hybrid fibrins were retested with 2 antiveterinary fibrinolysins. Data thus obtained are recorded in Table II.

In these tests, also, both the fibrinogen and thrombin of the susceptible animals (horse, swine) are species-specific in their relationships to streptofibrinolysins. There is here, also, an apparent denaturation of the susceptible component in certain hybrid fibrins. Three hybrid fibrins show fibrinolytic hypersusceptibility.

7799 C

Attempt to Modify Hereditary Chromogenic Genes by Heterophile Antimelanin Immunization.*

CARL-GUSTAF TILLMAN. (Introduced by W. H. Manwaring and C. H. Danforth.)

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The demonstration by Adant¹ that beef-choroid melanin is antigenic for albino rabbits and that the resulting antisera give com-

² Madison, R. R., *PROC. SOC. EXP. BIOL. AND MED.*, 1934, **32**, 444.

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¹ Adant, A., *Compt. rend. Soc. Biol.*, 1932, **111**, 241.

plement-deviation reactions with rabbit-melanin, has suggested the possibility of modifying hereditary chromogenic functions by heterophile antimelanin immunization.

To test this possibility, a series of 12 pedigreed female albino rabbits were given 6 subcutaneous, 6 intraperitoneal, followed by 6 intravenous injections with native beef-melanin, at 5-day time intervals, the technic identical with that used by Adant. About 4 days after the final immunizing dose, the presumably melanin-immune albino females were mated with a pedigreed heterozygous black. Subcutaneous melanin injections were resumed 3 to 6 days later and continued at weekly intervals throughout pregnancy.

Eight litters, born to these presumably melanin-immune albino mothers, and 4 control litters born to non-immune albino females, are summarized in Table I.

TABLE I.

Litter number	Pigment Distribution			Non-immune Controls		
	Black	Gray	White	Black	Gray	White
1	4	0	4	3	0	3
2	4	0	3	4	0	4
3	2	0	1	4	0	3
4	1	1	1	4	0	4
5	3	0	6	—	—	—
6	6	0	4	—	—	—
7	4	0	2	—	—	—
8	2	0	9	—	—	—
Total	45%	2%	53%	52%	0%	48%

Within the limits of the experimental error, no modification of hereditary chromogenic functions is demonstrable by this method of heterophile immunization.

7800 C

A Test for Filtrable Forms of *M. Tuberculosis* Using Ultrafilters.

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A vast amount of work has been done which apparently supports the theory that a filtrable stage exists in a life cycle of *M. tuberculosis*. It should be noted that the outstanding criticism of all such work lies in the fact that in each case use has been made of Cham-