

Trypanosomiasis in monkeys (*Macacus rhesus*) in captivity.By **B. T. TERRY.**

[From the Laboratories of the Rockefeller Institute for Medical Research, New York City.]

In the blood of an experimental monkey (*Macacus rhesus*), Dr. Richard Lamar found on October 28, 1911, an actively motile trypanosome. This discovery led to my examining the blood of all of the monkeys at the Rockefeller Institute.

In examining 130 monkeys, 28 were found infected with trypanosomes. The infected monkeys had been used for experiments between July 17 and October 6. Six monkeys used on or before July 17 were negative, and 80 others, some normal, the rest used after October 6, were also negative.

With but one exception, all of the monkeys examined belonged to the *Macacus rhesus* species.

The trypanosomes found in the 28 monkeys were apparently of the same kind. They have been successfully inoculated into one monkey (*Macacus rhesus*), six mice, two rats, one guinea pig, and one young rabbit. In none of these animals has a rich infection been seen. The two rats were infected on the 8th day, the six mice between the 9th and the 52d day, the guinea pig and rabbit on the 16th day, and the monkey between the 16th and the 24th day. The trypanosomes do not appear to be very pathogenic.

The micronucleus is usually at the extreme posterior end of the parasite, is strikingly large, measures 1μ or more in diameter, and often projects on either side of the parasite. The nucleus is oval, measures $1\frac{2}{3}$ to $2\frac{2}{3}\mu$ in its long diameter, and is situated near the juncture of the anterior $\frac{1}{3}$ and the posterior $\frac{2}{3}$ of the body. The flagellum is very long, the free part measuring 10 to $12\frac{1}{3}\mu$. The entire length of the parasites thus far measured has varied between 25 and 28μ , the breadth between 2 and $2\frac{1}{4}\mu$.

If the future shows that the trypanosomes here described

belong to a new species, I propose for them the name *Trypanosoma rhesii*.

2 (621)

**On the question of immunization against transplantable cancer
by injection of an animal's own tissues.**

By **R. A. LAMBERT.**

[From the Department of Pathology, College of Physicians and
Surgeons, Columbia University.]

That the injection of a suitable quantity of homologous tissue induces in susceptible mice a certain degree of resistance to the inoculation of their transplantable cancers is a well-established fact. There appeared recently a paper by Woglom¹ in which experiments were described showing that autogenous tissue (spleen) injected subcutaneously was also capable of inducing this immunity. Woglom's work has been questioned by Apolant² who repeated the experiments with negative results. Apolant maintains further that the spleen of a mouse does not afford sufficient tissue for immunization, and that the question as to the possibility of immunizing with an animal's own tissues is still an open one.

In the experiments herewith reported, blood has been used as the immunizing agent. The quantity of defibrinated blood necessary for immunizing young mice was shown by Bashford to be about .3 c.c. In order to eliminate, however, the possibility of insufficient dosage, it was considered desirable to use at least .5 c.c. As Woglom stated in his paper, mice cannot be bled this amount plus the loss attending the bleeding without causing death. Interval bleedings from the jugulars were therefore resorted to. In nearly all of the experiments two bleedings only, on successive days, were necessary. About ten drops of blood in citrate solution were taken each time. The corpuscles were preserved in the ice box and injected subcutaneously on the day after the last bleeding. Ten mice were treated in this way; ten controls were injected with a similar quantity of homologous blood; ten normal mice were set aside as controls on the two

¹ *Jour. Exp. Med.*, January, 1910, p. 29.

² *Zeit. f. Immunitätsforschung*, July, 1911.