Results. On September 29, 1937, (21 days following inoculation) both mice were positive for *Trypanosoma cruzi* Chagas in fresh blood preparations and in stained blood smears. The mice died 5 and 6 days later respectively. Similar experiments were conducted simultaneously in which a large number of the argasine tick, *Ornithodoros hermsi* Wheeler were used. To date all feeding and inoculation tests have given negative results. Further experiments are in progress with *Ornithodoros turicata* (Duges) and *Ornithodoros hermsi* Wheeler.

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High Gonadotropic Hormone Concentration in Pregnant Ponies.

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Data from several hundred assays of mare sera for gonadotropic hormone point to the existence of an inverse relationship between body size and hormone content, draft mares usually having a lower concentration than the lighter Thoroughbred mares. This observation led to a study of the concentration in the pony. The sera of grade Welsh ponies were tested according to the method of Cole, Guilbert and Goss.[1] In some instances complete tests were not made, however, if the concentration was lower than 100 R.U. per cc. The results of tests on 10 ponies are shown in Table I. It is clear that a concentration of 200 to 400 R.U. per cc. is not at all uncommon, while we have never found sera testing 200 R.U. per cc. from Thoroughbred or draft mares. The range found is from 12 to 100 R.U. per cc. with a mean of 75 R.U. per cc. in the latter breeds. The data of Catchpole and Lyons[2] indicate that mustangs fall in the upper portion of this range. Thus the concentration in certain ponies is four times greater than has been found in the breeds mentioned. In serum testing 400 R.U. per cc. the rat unit represents approximately 0.25 mg. of dry matter. Thus it would seem that the blood of such ponies would be an excellent starting material for chemical studies.

The data of Table I show further that a variation in concentration occurs from year to year in the same mare. This is particularly

[1] Cole, H. H., Guilbert, H. R., and Goss, H., *Am. J. Physiol.*, 1932, **102**, 227.

[2] Catchpole, H. R., and Lyons, W. R., *Am. J. Anat.*, 1934, **55**, 167.

TABLE I.
Gonadotropic Hormone in the Blood Serum of Pregnant Ponies.

Designation of mare	Days pregnant	Rat units per cc.	Designation of mare	Days pregnant	Rat units per cc.
1	61*	100	5	59	25
	73*	200		73	<100
	65	100			
	71	100	6	60	100
				71	<100
2	72*	50			
	84*	<100	7	59	100
	55	100		66	100
	62	100		73	<100
	71	200			
			8	62	100
3	61	200		82	<100
	66	400			
	75	266	9	58	200
				64	200
4	64	200 to 400			
	70	400	10	61	200
				69	200

*These tests were made in 1936; the remainder in 1937.

well demonstrated in pony 2 in which the concentration in 1937 was 4 times that of 1936 at comparable stages of pregnancy. We have similar observations for mares of other breeds but have not been able to relate this variation to any difference in physiological or nutritional state.

The data, though incomplete, indicate that the time of maximum concentration of the hormone in the pony falls between the 60th and 75th days following breeding. Apparently the concentration begins to drop somewhat earlier than is the case in thoroughbred and draft mares, in which the greatest concentration is usually found between the 70th and 80th days. In 3 instances, mares 6, 7, and 8, the concentration was lower after the 70th day than in preceding tests.