meryx, Blastomeryx, Mylogaulus, Sciurus, Paomys, Aelurodon, Pseudaelurus, Machaerodus, together with a few bird, reptile and anuran bones.

A preliminary study of this urodele material shows that the specimens, numbering over a hundred individuals, belong to one species and must be placed in the family Ambystomidae and probably in the genus Ambystoma. The size of the skeleton would be about that of some of the larger members of the genus Ambystoma living to-day, averaging about 225 mm in length. A study of the material is now being carried on and a complete description and diagnosis will be available in the near future. In so far as the writers are aware, these are the first urodeles to be described from the Lower Pliocene.

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THE ALBINO RAT

THE use of the term *Rattus norvegicus albinus* to designate the domesticated strain of albino rat, used so extensively in experimental laboratories, has been condemned by systematists on the grounds that albinos occur in practically all species and are only variants. That is a point for systematists to settle, but it seems evident that so far as the Wistar strain of white rats is concerned there is something more to be said. Recent work on the gametic composition of a colony of rats resulting from interbreeding the Wistar strain with the wild gray rat, *R. norvegicus* Erxl., a partial report of which appeared in the December 16, 1927, issue of SCIENCE, indicates the possibility of a greater difference between the parents than is ordinarily found in strains of one species.

The chromosomes of ninety rats have been examined, some of them being the ordinary albinos. No differences could be detected between the gametic composition of these and the other members of the group. A comparison of the albinos of the colony, however, and the Wistar strain of albinos, shows marked differences in gametic composition both in chromosome counts and in the chromosome number in the offspring resulting from matings made between them and other members of the colony. So far as our knowledge of the specificity of chromosome number and behavior goes at the present time, this would not be an expected result if the ordinary albinos of the colony and the Wistar strain were merely variants of one species. Examination of four wild gray rats, *Rattus norvegicus*, shows that these rats had a diploid count of forty-two chromosomes and both twenty-one and thirty-one chromosomes in the secondary spermatocytes, the dimorphism in the haploid number being the common characteristic of the members of our colony. According to Donaldson[1] the pure strain of albinos came from *R. norvegicus* and "is far removed from its wild ancestor and moderately inbred." How far this removal must be carried before species-differences arise is a matter of speculation, but the fundamental differences in gametic composition are suggestive in this connection. Since the ordinary albinos of the colony show the gametic composition of other members of the colony, it is probable that this change has occurred since the original strain of pure albinos was segregated from its wild ancestor.

This change is not confined to members of our own colony of mixed rats. The testes of two rats received from the laboratory of Professor R. A. Dutcher, Pennsylvania State College, gave chromosome counts of forty-two and sixty-two respectively, each showing both twenty-one and thirty-one chromosomes in the secondary spermatocytes. Members of a third colony came from Professor H. Steenbock, University of Wisconsin, in which the same conditions are found.

It seems possible that the primitive or basic number of chromosomes in *R. norvegicus* is forty-two, and that the dimorphism in the haploid number is a late acquisition, and that we have here a new species in the making which will ultimately come to have only 62–31 chromosomes.

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THE HIDING PLACES OF TREE-FROGS

A NOTE in SCIENCE (Mar. 9, 1928) on "Tree-Frogs in Pitcher-Plants," by Dr. E. A. Andrews, of Johns Hopkins University, in which he calls attention to an association between pitcher-plants (*Sarracenia flava*) and the tree-frog (*Hyla cinerea*) observed near Beaufort, N. C., in June and July of 1888, brings to mind a similar observation made by us on June 21, 1924, in a region of the same type. While collecting near Washington, N. C., at the head of Pamlico Sound some sixty miles north of Beaufort, we came upon an extensive sphagnum swamp, at the time very dry and firm enough to walk about on, and found it filled with orchids and pitcher-plants, *Sarracenia flava* most abundant. The swamp is surrounded by thin pine-woods interspersed with scrub-oaks, these occurring also on the dry knolls in the sphagnum. While opening the pitcher-plants in order to collect the insects hidden in the deep greenish yellow funnels we were surprised to find a long, thin, green tree-frog.

[1] Donaldson, H. H., 1924, Wistar Institute, Philadelphia.