

hair, 49.4 years for medium hair, and 49.1 years for dark hair. For this sample it seems a fair approximation to say that at 50 years of age 50 per cent of people are at least 50 per cent grey, irrespective of sex or hair colour. The good fits in the log-probit transformations indicate that susceptibility to greying is normally distributed.

It seems probable that the rate at which the pigmentary content of human hair diminishes is independent of the initial concentration, but that visual impressions of degrees of greying are strongly influenced by the contrast between the original colour and white.

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Strange Male Block to Pregnancy: its Absence in Inbred Mouse Strains

A SERIES of papers by Bruce and colleagues¹⁻⁴ has described a pre-implantation block to pregnancy in non-inbred laboratory mice which is evoked by the presence of strange males of the same strain or of a different strain ('alien' males). This effect is olfactory-mediated. The phenomenon has also been reported in another species, non-inbred prairie deer mice (*Peromyscus maniculatus bairdii*)⁵.

We felt that the physiological mechanisms involved in this phenomenon could be studied most effectively using highly inbred strains of mice, both because of a high degree of genetic control and because strains might differ in manifestation of the pregnancy block. Therefore a preliminary survey was made of the capacity for implantation to be blocked by strange or alien males in a number of inbred strains.

Experimental procedure for blocking implantation was as follows: females were paired individually with stud males of the same strain in the morning. All females were examined for the presence of a vaginal plug on the following four mornings. The stud male was removed from the home cage of a female after she showed a vaginal plug, and a 'strange' male of the same strain or an 'alien' male of a different strain was introduced. The strange or alien male was removed after 48 h, and all inseminated females were autopsied seven days after insemination to determine if implantation had occurred. In controls the stud male was removed, and the female remained isolated for the entire 7-day period until autopsy.

Five strains were tested. Although the data are not exhaustive with respect either to experimental design or to sample size, there was no indication that the pregnancy block was operating in any of the strains, in females exposed either to strange or to alien males (Table 1). Probability testing was by χ^2 and there were no significant differences between controls and experimentals within any of the strains.

It is perhaps premature to speculate extensively as to why the inbred strains that were tested failed to show the

Table 1. THE PERCENTAGE OF PREGNANCIES ON DAY 7 POST INSEMINATION IN SELECTED STRAINS OF INBRED HOUSE MICE EXPOSED TO A STRANGE OR ALIEN MALE FOR TWO DAYS AFTER INSEMINATION OR TO ISOLATION

Strain	Control	Strange male	Alien male
C57BL/6J	88 (56)	89 (72)	90(41) CBA/J
CBA/J	89 (9)	100 (21)	—
CBA/Ca	100 (26)	96 (26)	—
SWR/J	93 (27)	93 (27)	—
129/J	71 (63)	61 (62)	68(25) CBA/J or C57BL/6J

Figures in parenthesis give the numbers of mice in the sample.

pregnancy block. An inability of the females to discriminate between strange and stud males of such close genetic similarity could explain the results of within-strain testing. However, attempts to prevent implantation with alien males of a strain different from the stud male were equally unsuccessful. It is impossible to determine from the data whether blocking capacity is absent in males, females, or both.

Because of the many problems in reproduction that usually arise during intensive inbreeding, naturally occurring mechanisms that interfere with reproduction might be selected against in efforts to maintain a productive inbred line.

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A New Record for *Leptopenus*, a Rare Deep-water Coral

AMONG the rarest of the deep-water corals are specimens of *Leptopenus* (family Micrabaciidae). At present the only records of this delicate coral I have verified are those of the *Challenger Expedition*¹, which took 5 specimens from 4 localities, all from depths in excess of 2,700 m. Reported occurrences of the genus off the South Australian coast² are probably incorrect and are more possibly worn specimens of *Letepsammia*, another micrabaciid coral. The Verco Collection examined by Dennant cannot now be located (F. McNeill, *in lit.*), but specimens of *Letepsammia* have been taken from South Australia in comparable depths³.

The rarity of this coral and the great depths from which it has been recorded make additional specimens very significant. Only one coral, *Fungiacyathus marenzelleri*⁴, has been recorded from greater depths (5,868 m). The family Micrabaciidae, in its evolution, shows progressive adaptation to life in deeper waters from *Micrabacia*, through *Stephanophyllia* and *Letepsammia* to *Leptopenus*, at the end of the series. In this genus skeletal structures are greatly reduced with the result that a striking corallum is formed.

The specimen described here was taken from greenish clay at 2,000 m in Makassar Strait (*Galathea* Station 453, 3° 56' S., 118° 26' E.). The specimen is the central part of the corallum and was dead when collected. Maximum diameter of the fragment is 6.0 mm and its height is 2.5 mm. Septa are reduced to spines, with particularly stout and elongate spines developed over the delta formed by the union of septa of the first, second and third cycles (Fig. 1).

Leptopenus discus is the best known of the two species of *Leptopenus* described by Moseley¹, being represented by four specimens taken from three localities:

Challenger Station 147: 46° 16' S., 48° 27' E., 80 miles west of Hog Island, Crozet Islands, 2,926 m.

Challenger Station 157: 53° 55' S., 108° 35' E., southern Indian Ocean, 3,566 m.

Challenger Station 323: 35° 39' S., 50° 47' W., east of Rio de la Plata, 3,475 m.

L. hypocoelus is known from a single specimen from *Challenger* Station 299; 33° 31' S., 74° 43' W., off Valparaiso, Chile, at 3,950 m.