Book Reviews

Newth, D.R. Balls, M. (eds.): Maternal effects in development. Cambrigde: Cambridge University Press 1979. 420 pp., 59 figs., 21 tabs. Hard bound £ 35.00.

'Maternal effects in development' was the title of the 4th Symposium of the Brit. Soc. Devl. Biol. held in Exeter in September 1978. The topic covers an area which is an 'Outer Province' in the Imperium of Developmental Biology, where the genome rules. The leading theme is the well established fact that development is not the outcome of the genetic programme, but that the egg in addition is equipped with spatial and temporal instructions that shape the embryo. If this sounds provocative, the interested geneticist should read this book. Already in the first paper, lucidly written by J. Cohen, one is confronted with the current ideas in this field of developmental biology. Studies using self-supporting embryos, i.e. embryos which develop independently of the maternal organism, appear to teach us most. To name a few contributions, those by Dohmen, Lees, Smith and Warn provide facts and ideas which will intrigue the reader.

Maternal mutants which give rise to defects in early morphogenesis can help us considerably in understanding how the egg is equipped by the mother to guide its first steps in development. The contributions by Malacinski and Beetschen offer promising perspectives. All of the 17 contributions are interesting. The last five by McLaren, Billington, Morriss, Deuchar and Jones deal with development in mammals. Here, obviously, the understanding of maternal effects, in particular those in man, is of great practical importance. However, their multi-factorial origin often prevents a clear distinction between the role of the inherited code, that of the decoding machinery, and environmental, i.e. enduring maternal effects. Here the reader is introduced into a field where investigations have only just begun.

That no discussions are recorded and that only a few papers have summaries are minor points of criticism in this well laid-out book. J.G. Bluemink, Utrecht

Gori, G.B., Book, F.G. (eds.): Banbury Report. A safe cigarette? New York: Cold Spring Harbor Laboratory 1980. 364 pp., 77 figs., 75 tabs. Hard bound $ 54.00.

In the last two years the proportion of low-tar cigarettes sold each year in the USA has nearly doubled. The subsequent reduction in consumption of nicotin and tar has been associated with a slight positive effect on cigarette-smoke morbidity. In the future no adverse effect thresholds of the poisonous chemicals in cigarette smoke could be reached. This achievement of a complete prevention goal in smoking and health would then add two years to the average persons longevity (a costly fact: think of unemployment, aging population).

For me, a non-smoker, it is almost unbelievable that instead of pushing the benefits of non-smoking, a vast amount of tax money has apparently been used in universities and research institutes to study different ways of decreasing the risk of cigarette smoking. Among the different approaches I found: genetic engeneering of the tobacco plant, changes in agricultural practice, reconstituting cigarettes after eliminating tar from pulverized tobacco leaves, and the design of filters. Unfortunately, it seems that the smoker tends to compensate for the limited loss of poison by inhaling deeper or by smoking more cigarettes. But in spite of this, the population of smokers is getting accustomed year after year to a lower level of tar and nicotin. When the chronic adverse effects of nicotin are further disproven, the earlier mentioned threshold of no-adverse-effects in the long run, becomes a reasonable goal. The acute pharmacological effects of this drug will remain.

This Branbury report is to be recommended as a source of facts and opinions on the dangers and safeties of cigarettes. It also stands as evidence for the discrimination of the non-smoker whose health is apparently not worth such an extensive amount of community money. J.E.H.M. van Bronswijk, Utrecht