
 Book reviews

53rd Annual Report 1981-1982. The Jackson Laboratory, Bar Harbor, Maine. The Jackson Laboratory: Bar Harbor, Maine 1982. 176 pp., 23 figs.

Under the imaginative guidance of its new director, Dr. Barbara Sanford, the Jackson Laboratory is dedicated to "the increase of mans' knowledge on himself through research with genetically controlled experimental animals". In spite of vacillating governmental support of science, the Jackson Laboratory has continued its own way. It has been able to maintain and even broaden its strong experimental basis in mammalian genetics and to push forward into molecular biology. The report not only provides a detailed insight into support, financial backing, organization, training, animal resources and health programs, but also includes many short research reports in such fields as biochemistry, cell and developmental biology, immunology, formal molecular and physiological genetics. One important highlight is, arbitrarily selected: the linkage map of the mouse - last year alone nearly 100 new genes were found, over 30 of which have been added to the linkage map, so that at present more than 900 genes in the mouse are known, 581 of which have been located on chromosomes. Linkage studies of the rabbit have also been intensified, 10 new loci have been added. The current rabbit linkage map includes 9 autosomal linkage groups, 4 identified chromosomes, 5X-linked loci and a total of 47 loci - an increase of 20% over last year. Most impressive is the external supply of laboratory mice: 1.36 million inbred strains, 336,291 hybrids, 81,347 congenic histocompatible strains, 58,839 mutant stocks. This makes a total of nearly 2 million experimental animals, most of which are sacrificed in health programs and in fundamental research in immunology. No

doubt: the Jackson Laboratory plays a leading role in a new area of understanding of genetics and development.

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Barnard, C.J.: Animal Behaviour. Ecology and Evolution. London Canberra: Croom Helm 1983. 339 pp., several figs., several tabs. Soft bound £ 8.95.

It is nice to have before us an introductory text on animal behaviour that starts immediately with physiological mechanisms (ch. 1) and internal information processing (ch. 2). In this connection one can ask, however, why the author thought it necessary to reproduce, once again, the psychohydraulic model of motivation that has only a marginal historical significance. The next part of the book deals fairly adequately with behaviour genetics (ch. 3) and experiential factors (ch. 4). The author ought to have cited a larger number of original sources here. Chapters 5 through 10 show a strong emphasis on ecological aspects, illustrated by many examples concerning habitat selection, food-finding, anti-predatory behaviour, reproduction, social behaviour, and communication. There is a final chapter (11) on evolutionary aspects. Fortunately, the author generally refrains from wild sociobiological speculations, but statements such as *Heliconius* larvae are to some degree cannibalistic, so egg-laying females avoid plants which already have eggs on them (p. 306) are inadmissible. The writing style is almost always crisp and factual, using short sentences; in some places, however, it is somewhat colloquial, especially in chapter 8 (reproduction). The book will be a good acquisition for undergraduate students and their university teachers.

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