Genetic Engineering 3

Edited by Robert Williamson. (Pp xi + 173; figures + tables. £11.80, \$24.50.) London, New York: Academic Press. 1982.

When reviewing *Genetic Engineering 2*, I finished by saying that I could not wait for number 3! It arrived quickly and confirms that this is indeed an exceptionally good series. A fourth is promised to complete a description of the art of genetic engineering at the present time. *Genetic Engineering 3* has three major contributors who, like others in the series, manage to discuss their subject in sufficient detail to be of interest to those working in the field while still offering a lot to those just learning about recombinant DNA techniques. This volume has an additional feature, a useful list of all recombinants containing eukaryotic genes, as of October 1981, compiled by Kay Davies.

Russell Thompson reviews plasmid and phage M13 cloning vectors, starting with a general account of bacterial plasmids and general purpose amplifiable vectors, before describing specialised vectors like cosmids, those designed to promote gene expression,

and the use of single-stranded DNA phages. Bill Brammar reviews vectors based on bacteriophage lambda in the same sort of way, proceeding from a brief account of the lambda genome and the replication and maturation of lambda DNA to ways of recognising and screening recombinant phages, the expression of genes cloned in lambda, and their use in making gene banks. Peter Rigby describes vector systems derived from viral replicons that are specifically designed to allow the study of the expression of cloned genes in eukaryotic cells. Like many contributors in the series he has managed to portray the excitement generated by recent discoveries, even to those who do not understand all the details.

Direct DNA analysis is already being used in clinical genetic practice and is clearly going to dominate developments in antenatal diagnosis and carrier detection in the next few years. All involved in clinical genetics will have to learn about recombinant DNA techniques sooner or later, and once someone has had a basic introduction to the subject, they can do no better than to turn to these little red books.

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