

SYMPOSIA SERIES No. 44

Biochemistry of Genetic Engineering

Edited by **P. B. Garland** and **R. Williamson**

pp. 145 (ISBN 0 904498 08 5) £12.50 (US\$27.50)

A Biochemical Society Symposium held in London in July 1978

The Biochemical Society's Forty-Fourth Symposium held at University College London in July 1978 reviewed in a two day meeting the exciting and rapidly expanding area of Genetic Engineering. Leaders in the field gave general introductions to the biochemical basis, practice and aims of many aspects of the subject, illustrated with accounts of current research. Subjects included ranged from the enzymology of restriction nucleases, ligases and polymerases, proceeded through vectors and hosts for recombinant DNA, considered in depth selected plant and animal systems, and concluded with industrial prospects and social perspectives. These excellent and well-received presentations form the basis of this publication, which will serve not only as a readable introduction to the biochemistry of genetic engineering but also as a valuable account of the activities of a number of leading laboratories as of summer 1978.

List of contents and authors:

Preface.

Restriction Nucleases, Ligases and Polymerases in Genetic Manipulation by **A. D. B. Malcolm**.
Safe and Useful Vector Systems by **W. J. Brammar**.

Plasmid Vectors for Genetic Manipulation in vitro by **D. J. Sherratt**.

Analysis of Restriction-Fragment Patterns from Complex Deoxyribonucleic Acid Species by **E. M. Southern**.

Application of Site-Directed Mutagenesis to Ribonucleic Acid and Deoxyribonucleic Acid Genomes by **C. Weissmann, H. Weber, T. Taniguchi, W. Müller & F. Meyer**.

Recombinant Deoxyribonucleic Acid and the Study of Human Genetic Disease: the Haemoglobinopathies by **P. F. R. Little, J. M. Kooter, E. De Boer, G. Annon & R. A. Flavell**.

Primary-Sequence Changes in the Differentiation of Immunoglobulin Genes by **T. H. Rabbitts**.
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K. T. Shanmugam, F. O'Gara, J. R. Mielenz, C. L. Hershberger & R. C. Valentine.

SV40 and Polyoma Viruses: their Analysis by Deoxyribonucleic Acid Recombination in vitro and their Use as Vectors in Eukaryotic Systems by **P. W. J. Rigby**.

Structures of Unintegrated and Integrated Forms of the Deoxyribonucleic Acid of Ribonucleic Acid Tumour Viruses by **H. E. Varmus, P. R. Shank, S. H. Hughes, H.-J. Kung, S. Heasley, J. Majors, P. K. Vogt & J. M. Bishop**.

Genetic Manipulation Advisory Group (GMAG) and the Environment for Genetic Engineering in Britain by **R. Williamson**.

Genetic Engineering: Do We Need It? How Would We Do It? by **A. J. Hale**.

Human Genetic Engineering: a Social and Political Perspective by **K. Bergman & J. Beckwith**.
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SYMPOSIA SERIES No. 45

The Lymphocyte Cell Surface

Edited by **P. B. Garland** and **M. J. Crumpton**

pp. 124 (ISBN 0 904498 10 7) £15.00 (US\$35.00)

A Biochemical Society Symposium held in Cambridge in June 1979

The Biochemical Society's Forty-fifth Symposium held at Cambridge in June 1979 dealt with two areas of biomedical research currently regarded as among the most exciting and clinically important research interests: the molecular mechanics of the immune response and the biochemistry of the cell surface. Speakers at the Symposium reviewed results from this work and in addition gave emphasis to those research aspects providing greatest promise in future work with the lymphocyte. A number of the major contributions to the Symposium form the basis of this publication.

Preface

A Calcium Hypothesis for the Control of Cell Growth

by **J. C. Metcalfe, T. Pozzan, G. A. Smith & T. R. Hesketh**

Cell-Surface Antigens of Lymphocytes: Markers and Molecules

by **A. F. Williams**

Structural Similarities Between Thy-1 Antigen from Rat Brain and Immunoglobulin

by **D. G. Campbell, A. F. Williams, P. M. Bayley & K. B. M. Reid**

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by **L. Wanger & K.-G. Sundqvist**

Functional Studies on Receptor Complexes of B-Lymphocytes Involved in Regulation of Growth and Maturation

by **F. Melchers, J. Andersson, W. Lernhardt & M. H. Schreier**

Biosynthesis of Cell-Surface Immunoglobulins

by **P. A. Singer, H. H. Singer & A. R. Williamson**

The Natural History of Transmembrane Cell-Surface Glycoproteins

by **H. F. Lodish**

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