

## New titles from Portland Press ...

### **Nitric Oxide: Brain and Immune System**

Edited by **S Moncada, G Nisticò and E A Higgs**

Nitric Oxide was nominated molecule of the year by *Science* in 1992. New and unexpected roles for biologically synthesized nitric oxide continue to be identified. This book contains the proceedings of the First International Meeting on Nitric Oxide: Brain and Immune System, held in Calabria, Italy in September 1992. The meeting brought together specialists from various subjects in an attempt to pull together this still diverse research into a unifying field dealing with the understanding of the communication and reciprocal interaction between the brain and the immune system.

Interest in nitric oxide biochemistry and physiology covers many scientific speciality areas. Everybody involved in research in nitric oxide plus researchers in immunology as well as the cardiovascular system and the CNS will be interested in this book.

**Contents:** Twenty-nine chapters in three sections: Interactions Between CNS and Immune System; Nitric Oxide: Basic Mechanisms and Role in the Nervous System, and Nitric Oxide: Role in Immune Mechanisms and Inflammation.

| 85578 046 | Hardback 300 pages £78.00/US\$124.00 December 1993

### **Neurochemistry of Drug Dependence: From Molecular Targets to Behavioural Consequences**

Edited by **S Wonacott and G G Lunt**

The proceedings of this meeting brings together neurochemical information about drug targets and their mechanisms on the one hand, with psychopharmacological and behavioural studies of drug dependence on the other. Presented in a jargon-free style, it aims to stimulate cross-fertilisation of ideas that will span the disciplines and enhance our understanding of this important topic.

The symposium encompasses discovery of the opiate receptor, the key role of dopamine in reward pathways, a receptor for cannabis, the molecular targets of alcohol, the benzodiazepines and the psychomotor stimulants.

| 85578 034 8 | Hardback 200 pages £45.00/US\$81.00 December 1993



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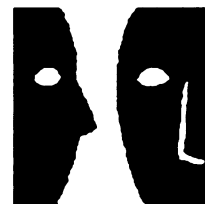
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# Postgraduate Study in the Biological Sciences

## A Researcher's Companion

R J Beynon

Thinking of a career in research? About to start - or finish - your PhD? About to start post-doctoral research? Then this guide is essential for you. It provides some of the basic advice and information that will be needed during a research training, with a two-fold emphasis; the importance of planning, and the need to develop independence of thought and action.



*What is in it for you?*

**Students:** It presents, in an easy and non-dictatorial style, an indication of the way that you can proceed, and a brief description of the types of resources which can facilitate your progress.

**Supervisors:** This book will excel as a foundation course on essential skills for research students that, although seen as peripheral to experimentation, mark a professional scientist. Used as a supplement to your established practices, it aims to extend student awareness and skills through their own efforts.

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ISBN | 85578 009 7 Paperback

150 pages

May 1993

£9.50/US\$17.00



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## New from Portland Press ...

### Hemicellulose and Hemicellulases

Edited by M P Coughlan and G P Hazlewood  
Portland Press Monograph Series No. 4

This book is an authoritative and up-to-date treatment of both the substrate (hemicellulose) and the enzymes which convert it to products of smaller molecular weight. It brings together the salient features of this group of enzymes with considerable biotechnological potential. It will be of interest to academics, postgraduates and researchers involved in biomass conversion, pulp and paper manufacture, brewing and flour modification.

Topics covered include: Chemistry of hemicelluloses; Biochemical aspects of the production of microbial hemicellulases; Enzymological aspects of microbial hemicellulases; Feruloyl and p-coumaroyl esterases from the anaerobic fungus *Neocallimastix* strain MC-2; Molecular biology of hemicellulases; Applications of hemicellulases in biopulping, bio-bleaching, food, feed and pulp and paper industries.

ISBN | 85578 036 4 Hardback

£38.95/US\$60.00

156 pages approx.

June 1993

### Immunotechnology

Edited by J P Gosling and D R Reen  
Portland Press Proceeding No 4

This book provides a detailed account of the current state of immunotechnology and aims to promote increased interaction between practitioners of the different applications.

Topics covered include: Generation of antibodies cross-reactive with proteins by peptide immunization; Regulation of immunoglobulin gene expression; Combinatorial libraries; Genetics of antibody assembly in plants; Single-chain immunotechnology of Fv analogues and fusion proteins; Real-time BIA for the direct measurement of antibody-antigen interactions; Functional mapping of proteins with monoclonal antibodies; Advanced immunoassays; Catalytic antibodies; Monoclonal antibodies and their fragments for drug targeting; The application of engineered antibodies to the treatment of neoplastic disease.

ISBN | 85578 035 6 Hardback

£45.00/US\$72.00

164 pages approx.

July 1993



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## New titles from Portland Press ...

### Membrane Protein Expression Systems

#### A User's Guide

Edited by G W Gould

Laboratories interested in a wide range of different aspects of membrane proteins are beginning to appreciate the power of molecular biology when applied to membrane proteins, and as a consequence more and more researchers worldwide are initiating programmes designed to express proteins in different systems.



This book is a simple-to-read laboratory manual describing the principles behind the commonly used expression systems, e.g. *Escherichia coli*, *Xenopus* oocytes, baculovirus, vaccinia, yeasts, and cell culture systems. Detailed experimental protocols for each system are provided in an easy-to-use, step-by-step format. The benefits of each system, as well as the likely pitfalls that newcomers might encounter, are discussed in each case.

I 85578 031 3 Spiral 300 pages December 1993 £29.50/US\$45.50

### Proteolysis and Protein Turnover

Edited by J S Bond and A J Barrett

The proceedings of the 9th International ICOP Conference held in Williamsburg, Virginia discusses the latest discoveries on how living cells break down proteins and how cells determine which proteins are to be degraded. Scientists from a variety of disciplines discuss the regulation and mechanisms at different levels of biological organization.

Proteolysis participates in an impressive array of biological processes that includes blood clotting, tissue remodelling, nutrient acquisition, antigen processing and the meiotic cycle. The technologies of molecular and cell biology have had a tremendous influence on this field in recent years. In this book, leading experts portray a sense of how the field is moving, highlight the important discoveries and trends, and pinpoint the areas where progress is still to be made.

**Contents:** Thirty-six chapters covered in five sections: Keynote address; Molecular Aspects of Proteolytic Enzymes and Inhibitors; Cellular Aspects of Proteolytic Systems and Mechanisms of Intracellular Proteolysis; Protein Turnover in Tissues/Organisms, Pathological Aspects of Protein Turnover.

I 85578 039 9 Hard 250 pages December 1993 £65.00/US\$100.00



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