

## 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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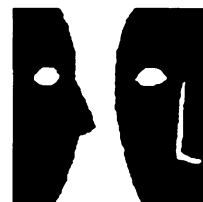
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# Postgraduate Study in the Biological Sciences

## 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.



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## Clinical Detective Stories

### A Problem-based Approach to Cases in Energy and Acid-Base Metabolism

M L Halperin and F S Rolleston



*Not just another biochemistry textbook, but a new concept in student learning*

This book is written for students who want to apply fundamental concepts of energy and acid-base metabolism to clinical problems. It uses more than 50 clinical cases, with data obtained in the hospital setting, to introduce each set of concepts, and to provide the basis for discussion of the needed biochemistry and physiology. Questions and commentary drawn from human and veterinary medicine provide a broad scope for understanding the concepts presented; details of metabolism are presented only when they are necessary to an understanding of clinical medicine. The book is divided into five sections:

- Energy and Acid-Base Physiology
- Clinical Applications
- Metabolic Function and Control
- Discussion of Questions
- Structures and Pathways

*"I am very impressed and enthusiastic about Clinical Detective Stories. I, and my students, have always learned better from books that are based on concepts and case examples. This is a great book!"*

John W Hallett, Jr, Director of Education, Mayo Clinic

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March 1993

**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.

**1 85578 046 1 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.

**1 85578 034 8 Hardback 200 pages £45.00/US\$81.00 December 1993**



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