

Preface

Both normal and diseased cells under apoptosis or programmed cell death. Apoptosis has a role in maintaining the cellular integrity of tissues and the functional viability of organs. In many diseases the normative features of apoptosis are perturbed. Thus, understanding how apoptosis behaves in health and disease is a key step in the advancement of science and health in general. This book **Apoptosis** is designed to impart important information on programmed cell death, be multidisciplinary and cover all scientific levels.

Apoptosis has eight major sections, covering (1) General and cellular aspects, (2) Metabolic and organ specific disease, (3) Cancer, (4) Cardiovascular and pulmonary tissue, (5) Neuronal tissues, (6) Immunologic and infectious aspects, (7) Inhibitors and finally (8) Methods. The simplistic nature of the main section headings, however, should not detract from the fact that individual chapters are highly detailed. For example the coverage includes the following in relation to apoptosis: pathways in mitochondria, genetic defects, polyphenols, caspases, calpains, neurodegenerative diseases, TNF-related apoptosis-inducing ligand, endoplasmic reticulum, selenium, steroid receptors, skeletal muscle, spinal column, liver, alcoholic liver disease, pancreatic beta-cells, oxidative stress, cancer of the lung, prostate, colon and blood, vascular disease, reperfusion injury, potassium channels, lung, heart, exercise, ageing asthma, neurological disorders, epilepsy, multiple sclerosis, inflammation and infections, HIV/AIDS, autoimmunity, lupus, Bax Inhibitor-1, inhibitors, identification and screening. In other words it is holistic in its coverage with a wide range of topics and areas.

There are three distinguishing features of **Apoptosis** that sets it apart from other scientific texts. As well as an Abstract, each chapter has one or more Key Facts or Key Features which expands areas of interest for the novice. There are also at least five definitions and explanations of key terms or words used in each chapter. Finally, each chapter is summarised with at least five bullets points. The book is well illustrated with numerous figures and tables and the entire book has an excellent index. As a consequence of these features the readership is designed to be broad, from the novice to leading expert.

Contributors of **Apoptosis** are all either international or national experts, leading authorities or are carrying out ground breaking and innovative work on their subject. The book is essential reading for research scientists, pathologists,

molecular biologists, biochemists or cellular biochemists, clinicians, health care professionals, general practitioners as well as those interested in disease in general.

Apoptosis is part of the **Modern Insights into Disease from Molecules to Man** series.

Professor Victor R. Preedy