Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.
not held by all. For example, it is probably too early to dismiss a possible
time related association between microscopic and collagenous colitis.
Of course, there are histological differences but there are also differences
between active first attack ulcerative colitis and chronic quiescent disease.
Jass's views on the value of certain tumor characteristics in determining
outcome of colon cancer are not shared by all. Finally to be flippan;
one wonders if, in time to come, Brachyspira aalborgia were to receive
as much enthusiasm attention as H. pylori has received, whether almost
as strong a case could not be made for its role in colonic disease,
especially when we read that in India, a country plagued by diarrhea,
it is present in 60% of the adult population!
In summary, for the most part this publication achieves in good
measure its editor's aims. Enthusiastic gastrointestinal pathologists will
buy it, others will assess its worth in comparison to the many other
tomes currently available.

R. Whitehead

Methods in Cartilage Research. Edited by A. Maroudas and K.
Kuettner. Academic Press, Harcourt Brace Jovanovich, Publishers,
London, San Diego, New York, Boston, Sydney, 1990. ISBN
0-12-473280-1, pp. xxi + 370, AS129.00.

Given the rapid expansion of cartilage research in the last 20 years, the
distinguished editors of this book state that they considered the time
ripe for assembling currently used methodologies in a single volume
which would reflect the sophistication of various approaches, but be
comprehensible to investigators of other disciplines. To achieve this aim,
the 13 sections of the book are unusually constructed, with each section
beginning with an overview by a 'main author' having wide expertise
in the field, followed by chapters addressing various topics. References
are grouped at the end of each section.
The main author's overviews vary widely in purpose, content and
length. Some are philosophical, some are merely an expanded list of
the contents of the ensuing section, and a few are succinct overviews
of the field. Therefore, judged as a whole, the use of the term 'overview'
often is misleading, and, disappointingly, this approach does not add
significantly to the purpose of the book.
The topics in each section address all relevant aspects of cartilage
research, but, similar to the overviews, they also vary widely in apparent
purpose, scope and length. While some authors valuable address the
range of techniques, problems which may be encountered, and the
possible applications of the methods described, many topics are largely,
or entirely, conventional descriptions of experiments performed by the
authors and presented in a format familiar to readers of scientific
journals.
Despite these wide stylistic variations, the book offers a potentially
valuable compendium for those entering the complex field of cartilage
research with a particular interest in articular cartilage. It is not a bench
manual, but is a comprehensive guide to relevant references and to
Who's Who in cartilage research. It is a book which can be recom-
manded for those having a clearly defined interest in cartilage research,
does not seek a role outside that specialized field. Since it does not
address the clinical pathology of cartilage, or meaningfully review animal
models of articular disease, the book cannot be recommended to pathol-
ologists, rheumatologists, or orthopedic surgeons unless they seek insights
into specialized laboratory-based cartilage research.

B. Vernon- Roberts

Pathology of the Fischer Rat — Reference and Atlas. Edited by Gary
A. Bookman, Scott L. Eustis, Michael R. Ewell, Charles A.
Montgomery, Jr., William F. Mackenzie. Academic Press, Harcourt
Brace Jovanovich, Publishers, London, San Diego, New York, Boston,
Sydney, 1990. ISBN 0-12-115640-0, pp. xv + 580, US$125.00.
The authors have written a comprehensive pathology reference text on
the Fischer 344 (F344) rat.

The first and second chapters include an introduction and history of the
F344 rat. Chapters 3 to 34 pertain to organs and organ systems.
Each of these chapters follows the same format of introduction:
embryology; normal anatomy, histology and physiology; and congenital,
degenerative, inflammatory and vascular, hyperplastic and neoplastic,
miscellaneous and toxicologic lesions. Chapter 35 concerns tumor
incidence in F344 rats and includes tumor incidence tables.
The pathology data and specimens used as the primary resource for this
text were derived from toxicity and carcinogenicity studies conducted
under the auspices of the National Cancer Institute (NCI) and National
Toxicology Program (NTP).
In order to make the text more readable, and with general access to
computerized bibliographic searches, references have generally not been
included in the body of the text. For each chapter the authors have
included the most pertinent or recent references or those that may not
be readily found in routine pathology literature searches.
The book is very well illustrated with schematic drawings, diagrams
and particularly histological illustrations. The latter, in black and white,
have in many cases pertinent pathology arrowed or lettered.
As would be expected, given the institutional databases that this text
was resourced from, it is in the areas of carcinogenicity and toxicity
that it is particularly comprehensive. For example, in the chapter on
lungs the section on hyperplastic and neoplastic lesions receives more
detailed attention than respiratory diseases, not infrequently diagnosed
by laboratory animal science veterinarians, such as Mycoplasma
pulmonis, CAR bacillus, rat coronavirus, sialodacryoadenitis virus and
Sendai virus. However, the latter have been well covered in a number of
texts whereas previously carcinogenicity and toxicity have often received
relatively scant attention.
The authors have attempted to provide a readable and well illustrated
text, useful for those with an interest in rat pathology and also investi-
gators from a variety of disciplines who use the rat as an animal model.
By and large they have succeeded.

Simon Bain

Models of Lung Disease: Microscopy and Structural Methods. Edited
by Joan Gil. Marcel Dekker, Inc., New York, Basel, 1990. ISBN
0-8247-8096-5, pp. xix + 992, US$198.00.
This book is volume 47 in an excellent series entitled "Lung Biology
in Health and Disease" which commenced publication in 1976. Previous
volumes have addressed a number of aspects of pulmonary physiology
and pathology, as well as selected topics in clinical respiratory medicine.
"Models of Lung Disease: Microscopy and Structural Methods" reviews
morphological techniques and their application to the evaluation of
pulmonary structures. The editor notes in the preface that research
relating primarily upon anatomical studies has suffered in recent years,
as funds have been redirected to more fashionable areas such as cellular
and molecular biology. Consequently, the relevance of structural
methods may not be adequately emphasized to new investigators, a
potentially dangerous oversight in pulmonary research.
This book is aimed at experimentalists and others in the field who
need to perform morphological studies of the lung. It is divided into
3 sections, of which the first, subtitled "General Techniques", is perhaps
the most valuable. Among other things, it deals with critical issues in
specimen preparation for electron microscopy, techniques for light and
electron microscopic immunocytochemistry, and other histochemical
methods. There is a wealth of detail in these chapters, which contain
numerous practical hints and tips, and the potential for further exploita-
tion of the techniques is highlighted. There is also a masterful and
up-to-date review of morphometric methods by Weibel, although this
chapter may be somewhat daunting for the uninitiated.
The second and third sections deal with applications of structural
techniques, firstly to the study of normal tissues and then in experimental
pathology. These include informative chapters on the use of labelled
tracers and of autoradiography, and valuable reviews of methods for
the study of airway epithelia, glands, pulmonary vasculature, and the
pleura. However, the sharp focus provided by the contributors to the first section is lost in the discussions on type 2 pneumocytes and endothelial cells; these chapters, although intrinsically interesting, deal primarily with methods of cell culture rather than with morphological techniques. Occasional chapters on experimental models are somewhat off target, concentrating on the models rather than on structural methods for evaluating them; however, the chapters on the evaluation of minimal injuries and acute alveolar damage are noteworthy exceptions to this. Throughout the book, illustrations are consistently of a high quality. The abundant references are mostly recent and relevant. Thus the book is certainly a useful resource for those who wish to learn more about the proper use of morphological techniques. It is perhaps too expensive for individual purchase, but, like previous volumes in the series, would be a worthwhile addition to a library.

R. Kumar

The Biology and Clinical Applications of Interleukin-2. Edited by ROBERT C. REES. IRL Press, Oxford University Press, Oxford, New York, Tokyo, 1990. ISBN 0-19-963137-9, pp. xvii + 181, £59.50.

This book, published in 1990, presumably is the outcome of a symposia held in 1989. The symposia and the book review 3 major areas: the molecular biology of IL-2 and its receptor, cellular responses to IL-2 and the potential for IL-2 activated effector cells as mediators of antitumor immunity and the results to 1989 of some clinical trials using IL-2 alone or in combination. The contributors are an outstanding line-up and clearly up to the point of the meeting have summarized the knowledge in this area in a number of excellent contributions. Unfortunately, in a field moving at the rate that it is, and by necessity a small meeting with 16 contributions, the book ends up being more distinguished by its omissions than by the quality of its inclusions.

In the basic biology, there is really little mention of the regulation of IL-2 and IL-2R expression, particularly in review of its relevance to HTLV-I and H1V. Further, there is hardly any mention of HTLV-I or HIV in an area in which IL-2 and IL-2R clearly have substantial significance.

In the clinical area, the applications of IL-2 in infectious disease, such as hepatitis B and lepromatous leprosy, and the use of immunotoxins in the treatment of transplant rejection and autoimmune disease, are areas that clearly could be considered. With this in mind the book really would be more accurately considered to be the applications of IL-2 in cancer therapy.

There are substantial numbers of books and leading journal article reviews on cytokines, IL-2 and IL-2R in particular, as well as their application in the fields of TIL (tumor infiltrating lymphocyte) and LAK (lymphokine activated killer cells). Apart from being a useful reference for the 50 or so contributors and attendees, one thinks that other sources to review this field could be more fairly recommended to readers.

R. Penny

Chronic Myelogenous Leukemia — Molecular Approaches to Research and Therapy. Edited by ALBERT B. DIESEROTH and RALPH B. ARUNGAUS. Marcel Dekker Inc., New York, Basel, Hong Kong, 1991. ISBN 0-8247-8352-2, pp. xiv + 481, US$162.00.

This book is an excellent summary of the exciting decade of research in chronic myeloid leukemia, which culminated in an understanding of the basic genetic abnormalities associated with, and probably causative of, the disease. It is stuff which is now taught to medical students, and once that happens it tends to lose its mystique. Nevertheless it is important not to lose sight of all that went into this work, since a great deal remains to be learnt.

Chronic myeloid leukemia was the first malignant disorder in which a specific chromosome abnormality was found in hemopoietic cells from virtually all patients. Thought first to be a deleted Y chromosome, then a deleted 21, the Philadelphia chromosome was finally shown to be the result of a reciprocal translocation between chromosomes 9 and 22. Following this it was shown that the translocation produced a new fusion gene (bcr-abl) which coded for a new RNA transcript, which in turn translated into a new protein with tyrosine kinase activity.

From the masterly opening chapter by Clarkson and Strife to the chapters discussing bone marrow transplantation in chronic myeloid leukemia, this is an outstanding volume. It is well produced and, given the unavoidable delays in publishing a book of this quality, it is remarkably up to date. I can recommend it for practising hematologists and oncologists, for researchers in the field as an excellent reference source, and as essential reading for anyone embarking on research in the field. There are still many questions to be answered, and this book provides a platform from which the search can be launched.

P. C. Vincent

Standard Haematology Practice. Edited by BYRON ROBERTS on behalf of the British Committee for Standards in Haematology. Blackwell Scientific Publications, Paris, Oxford, Berlin, Vienna, Melbourne, 1991. ISBN 0-632-02623-2, pp. xi + 264, A$126.00.

This book will undoubtedly become an essential reference book for Australian hematology laboratories. Edited by Byron Roberts on behalf of the British Committee for Standards in Haematology (BCSH) it is, naturally, aimed primarily at British laboratory practice. It collects together guidelines on various topics produced since 1984 by the BCSH Task Forces in General Haematology, Clinical Haematology, Blood Transfusion and Hemostasis and Thrombosis. The topics covered include the role and need for blood films vis à vis automated cell counting, screening for abnormal hemoglobins and G6PD deficiency, and monitoring of oral anticoagulant and heparin therapy. There are 8 chapters dealing with and setting standards for transfusion, including important new developments such as autologous transfusion, surgical blood order schedules, and product liability. The final chapter on the clinical use of blood cell separators is timely and useful. There are useful appendices to each chapter, which are on standards and references at the end of the book. As mentioned, this book is aimed at British laboratory practice and some of the references used (eg, to the DHSS) might leave non-UK readers — especially those who have not watched "Yes Minister" — a little lost. The first chapter — on Good Laboratory Practice — is a good idea, but some important aspects such as chemical and radiation hazards are dealt with only by reference to Health and Safety Commission publications, which may not readily be available outside the UK. Under the heading “Administrative Responsibility” the authors offer the somewhat unusual definition of a job specification as “those requirements ... which best suit an individual for a given job” rather than the other way round.

Minor criticisms should not be allowed to detract however from the overall value of this book, which is considerable. “Standard Haematology Practice” will become a benchmark publication and should be available in all Australian hematology laboratories.

P. C. Vincent