## **SAMJ** FORUM



## **BOOK REVIEW**

## Molecular Medicine for Clinicians

Edited by B Mendelow, M Ramsay, N Chetty. Pp. x+516. Illustrated. Wits University Press. 2009. ISBN 978-1-86814-465-5

Recently, a third-year medical student asked me: 'Are CRP and PCR the same?' She was no doubt struggling to integrate the new information that her introduction to the medical wards had exposed her to. Today, the routine practice of clinical medicine and the world of molecular biology have become inextricably linked. Since the 1990s there has been an explosion in the molecular sciences.

Molecular Medicine for Clinicians, written by experts from the University of the Witwatersrand, working in diverse biological science fields, gives an excellent overview of modern molecular biology applicable to basic cellular mechanisms, pathology, diagnosis and therapy. The chapters are well-structured, the text is easy to read and there are particularly good end-of-chapter summaries emphasising core knowledge. Diagrams are imaginative, easy to understand and complementary to the text. Some chapters give both detailed explanations of important current molecular techniques, e.g. polymerase chain reaction (PCR), while others give disease-specific examples of

where and how these techniques are employed for diagnosis and therapy. The six keynote essays are particular highlights, placing molecular medicine into the context of the 21st century; they give readers historical context, discuss controversial ethical issues, illustrate the wider biological and evolutionary understanding that molecular techniques offer, and illustrate the future of targeted molecular and personalised therapy ... that the 'extraordinary potentials of the current biological sciences become available for the better treatment of our patients.

There are only minor criticisms; there could have been a greater emphasis placed on where and how to access molecular medicine information not only from a basic science perspective (this is covered briefly in the bioinformatics chapter) but from a clinical perspective by referencing summaries and reviews; a few sections on how to interpret, integrate and apply molecular science research and techniques to patients at the bedside, particularly in resource-limited settings, would have been useful; the index lacked adequate detail and consequently easily looking up different topics proved difficult – this might be refined in future editions.

*Molecular Medicine for Clinicians* is an excellent book serving as an essential introduction for anyone aspiring to be a 21st century clinician.

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1. Weatherall DJ. Clin Med 2009; 9: 104-107.

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