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Book reviews

Internet for the Molecular Biologist. Simon R. Swindell, R. Russell Miller and Garry S.A. Myers (eds). Horizon Scientific Press, Wymondham. 1996. Pp.187. Price £19.99, paperback. ISBN 1 898486 02 6.

With the internet being the darling of the media nowadays a plethora of dubious titles claiming to instruct the general populace on the joys of the internet abound. Thus it was with some trepidation that I approached this book.

What should a volume claiming to be for the molecular biologist do? It must inform the newcomer as to what the internet does and how to get on it. Having excited the novice the book then needs to act as a reference to some of the more important sites on the internet. In these two areas the book certainly succeeds.

The book effectively splits itself into two parts, one giving information on the internet and what types of service are available and the second a reference section detailing important internet sites.

The introductory chapters explain what the internet is and its rather bizarre nomenclature. The authors are realistic; they inform the reader enough to remove the mystery, while recognising that techno-babble can turn users off. The different types of access to the internet are covered, e.g. e-mail, WWW and gopher. The detail given is enough to allow the user to either access the services themselves (e.g. mailing lists) or to go to their network manager armed with knowledge of what they require. For many users the ability to explain what they want to their computing colleagues may well justify the purchase of the book.

Once connected the next two chapters take the reader through some of the remote software tools available for sequence retrieval and analysis and computational gene identification. Anyone who has not used a remote analysis system will find this an enormous boon. To use these programs the user e-mails a request (usually containing a sequence) to the server which merrily does its magic and e-mails the results. This means that even if the only networking available is email the most powerful machines around the world can be accessed. In fact an incredible amount of the real work of the internet is done in just this way. Several different servers and the programs they run are detailed along with how to get help on them. This is important because in a small book it is not possible to detail all the options available. Rather like a large-scale map marked with the tourist information offices, this book gives a good guide to how to get there and where to go to get more detail.

The final five chapters are pure reference, consisting of listings of internet resources for human and mouse (27 pages), fungi (6 pages), invertebrates (6 pages), plants (6 pages) and microbiology (7 pages). Obviously World Wide Web sites predominate but all the major FTP sites, news groups and servers are covered. For those who already are connected these five chapters are the justification for buying the book. The coverage is sufficient to ensure that they remain useful for some time.

I heartily recommend this volume for anyone who uses or wishes to use the internet.

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PCR Strategies. Michael A. Innis, David H. Gelfand and John J. Sninsky (eds). Academic Press, San Diego. 1995. Pp. 373. Price $39.95, spiralbound paperback. ISBN 0 12 372183 0.

As a follow up to Academic Press' *PCR Protocols*, the current volume aims to be a laboratory manual that equips researchers to exploit new techniques in PCR. In the Foreword Melvin Simon suggests that 'a series of "cookbooks" are required to keep up with the latest innovations and detailed applications'. Well, my idea of a good cookbook is one that I can dip into either for inspiration or for detailed descriptions of how to realise an idea I have. In both these respects *PCR Strategies* worked for me. With a large number of mostly short and concise chapters it contains a wide enough spread of new and novel applications to draw interest, whilst providing enough practical or reference detail to follow this up. The book focusses on investigative and procedural strategies that extend the established methods of PCR in new and different ways, for example *in situ* PCR, quantitative PCR and long PCR. To this end the editors have set up, and set out, the contributions in four main sections. Firstly, 'Key concepts for PCR' provides the theoretical background, to allow more effective troubleshooting, on such issues as cosolvents, different thermostable polymerases and their fidelity, RT-PCR and quantitative aspects of PCR. Next, 'Analysis of PCR products' gives some alternative strategies to product analysis, including heteroduplex assays, HPLC, covalent reverse dot blot hybridisation, and SSCP. The largest section, 'Research applications', gives specific examples of the practical use of PCR-based approaches, ranging across site-specific mutagenesis, quantification of copy numbers, genomic subtraction, screening of YACs, and DNA and RNA fingerprinting using AP-PCR (RAPD), among others. The

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