# Health & Medical Information

### **CD-ROM**

ONE STOP MAIL ORDER SERVICE for Health & Medical CD-ROMs

CD-ROM has quickly become a major vehicle for the transfer of medical knowledge with new titles being published every week. Healthworks can now provide you with a one-stop mail order service for medical CD-ROMs and other electronic publications.

The CD-ROM catalogue covers such subject areas as:

AIDS, Allergies, Anatomy, Anaesthesia, Dermatology, Gastroenterology, Genetics, Haematology, Health & Safety, Imaging, Immunology, Infectious Diseases, Nephrology, Neurology, Nursing, Obstetrics, Oncology, Opthalmology, Pathology, Pharmacology, Paediatrics, Radiology, Rheumatology, Surgery and many more.

For your **free** copy of the Healthworks CD-ROM catalogue for both IBM PC compatibles and Apple Macintosh computers. contact us now on:

Tel: 0113 243 9899 Fax: 0113 247782 E-mail: sales@d-access.demon.co.uk

## Healthworks

FOR FURTHER INFORMATION ABOUT HEALTHWORKS MEDICAL INFORMATION SERVICES & PRODUCTS LOOK AT OUR INTERNET SITE AT:

http://www.healthworks.co.uk

#### HEALTH ON THE INTERNET

The Internet carries huge amounts of health related information but how do you find exactly what you want? **Health on the Internet** is a new publication that helps to solve some of the many problems encountered in locating health and medical information on the Internet. **Health on the Internet** is essential reading for medical professionals who are interested in utilising this powerful new medium for communication, research, or simply keeping up-to-date with the latest developments. Each issue includes details of:

sources of health news, medical software and images, new world wide web, ftp and gopher sites, newsgroups and mailing lists, health publications and businesses on the Internet. Plus, each issue also covers a particular area of medicine in depth. Health on the Internet is published monthly in

two formats:

1. In HTML format e-mailed directly to your desktop computer, with clickable hypertext links to the referenced resources.

2. The printed version, complete with 'hotlist' of all the referenced resources.

To see a sample copy of the newsletter visit the Healthworks Internet site at: http://www.healthworks.co.uk

The E-mail version costs £26/\$45 worldwide. The Print version costs: UK & EC member countries - £36/\$54. Rest of World - £60/\$90Please make cheques/money orders payable to "Healthworks Limited" and send to:

Healthworks, (Dept. CUP1) 30-38 Dock Street, Leeds LS10 1JF, England

## Leading the way in the study of all aspects of infection of man and animals ... Epidemiology and Infection

#### **Aims and Scope**

**Epidemiology and Infection** presents reports of research and original findings in all subjects related to infectious diseases. It gives particular emphasis to the epidemiology, prevention and control of such diseases, but the field covered is broad and includes microbiology, virology, immunology, sanitary bacteriology, food hygiene, statistics and the clinical, diagnostic and social aspects of infectious diseases. Papers cover both the medical and veterinary field and come from scientists worldwide.

#### **Editorial Policy**

Epidemiology and Infection started life as the 'Journal of Hygiene' and is now the longest established journal in the field of microbiology. Epidemiology and Infection has contained many important and seminal papers on such topics as scarlet fever, typhoid, pathogenic microbes in milk, bacteriological examination of water and the like.

It is still the home for important papers on these topics but also has become the key periodical in which to find the latest reports on recently discovered infections and new technology. In the new title, used since 1987, the word 'Infection' reflects the broadly based nature of the journal and 'Epidemiology' the particular slant of the journal since it was founded. The editors' overriding policy is to publish high quality articles in the shortest possible time (some articles are published in as little as 4 months). The success of this policy is shown by the very high submission rate from authors and the journal's high impact factor and long cited half life (SCI Journal Citation Report).

#### Why You Should Subscribe

- high-quality articles
- international coverage
- rapid publication
- regular review articles
- covers wide subject area
- book reviews
- high quality & accurate production
- colour illustrations where this enhances understanding
- no page charges and free offprints for authors
- wide audience

#### Subscription Information

Six issues a year in 2 volumes. Volumes 116 & 117 in 1996. £190; £97 for members of the Society for Infectious Diseases and British Society for the Study of Infection. Airmail £36 per year extra. ISSN 0950-2688.

Take a closer look - FREE!

- Please send me a free sample copy of
- Epydemiology and Infection

Please send me further information

Send this coupon to: Journals Marketing Department, Cambridge University Press, FREEPOST\*, The Edinburgh Building, Cambridge CB2 IBR, UK Td: +44 (0) 1223 325806 Fax: +44 (0) 1223 315052 (\*no postage stamp neccessary if posted in the UK)

In USA, Canada & Mexico, write to: Cambridge University Press, 40 West 20th Street, New York, NY 10011-4211, USA



#### Parasitology

**Back volumes**. Vols. 1–71: Inquiries should be addressed to Wm. Dawson & Sons Ltd, Cannon House, Folkestone, Kent. Vols. 72 onwards: quotations for parts still in print may be obtained from Cambridge or the American Branch of Cambridge University Press.

**Copying**. This journal is registered with the Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923. Organizations in the USA who are also registered with C.C.C. may therefore copy material (beyond the limits permitted by sections 107 and 108 of US copyright law) subject to payment to C.C.C. of the per-copy fee of \$11.00. This consent does not extend to multiple copying for promotional or commercial purposes. Code 0031–1820/96 \$11.00 + .10.

Organizations authorized by the Copyright Licensing Agency may also copy material subject to the usual conditions.

**ISI Tear Sheet Service**. 3051 Market Street, Philadelphia, Pennsylvania 19104, USA, is authorized to supply single copies of separate articles for private use only.

For all other use, permission should be sought from Cambridge or the American Branch of Cambridge University Press.

Claims for missing issues can only be considered if made immediately after receipt of the subsequent issue.

Advertising. Details of advertising in *Parasitology* may be obtained from the publisher.

© Cambridge University Press 1996

The Pitt Building, Trumpington Street, Cambridge CB2 1RP 40 West 20th Street, New York, NY 10011–4211, USA 10 Stamford Road, Oakleigh, Melbourne 3166, Australia

Printed in Great Britain by the University Press, Cambridge

VOLUME 113 PART 2 AUGUST 1996

# Parasitology

#### CONTENTS

말했는 왜 잘 안 봐요? 그 것 같은 것 것 같아. 것 같아. 같아. 같아. 같아. 않는 것 같아.	PAGE
Lefcort, H. and Durden, L. A. The effect of infection with Lyme	
disease spirochetes (Borrelia burgdorferi) on the phototaxis,	
activity, and questing height of the tick vector <i>lxodes scapularis</i>	97
Koella, J. C. and Packer, M. J. Malaria parasites enhance blood-	
feeding of their naturally infected vector Anopheles punctulatus	105
Wen, H., New, R. R. C., Muhmut, M., Wang, J. H., Wang, Y. H.,	
Zhang, J. H., Shao, Y. M. and Craig, P. S. Pharmacology and	
efficacy of liposome-entrapped albendazole in experimental	
secondary alveolar echinococcosis and effect of co-administration	
with cimetidine	111
Bumann, D. and Puls, G. Infestation with larvae of the sea anemone	
Edwardsia lineata affects nutrition and growth of the ctenophore	
Mnemiopsis leidyi	123
Tchuem Tchuenté, LA., Morand, S., Imbert-Establet, D., Delay, B.	120
and Jourdane, J. Competitive exclusion in human	
schistosomes: the restricted distribution of <i>Schistosoma</i>	
intercalatum	129
Redman, C. A. and Kusel, J. R. Distribution and biophysical	125
properties of fluorescent lipids on the surface of adult	
Schistosoma mansoni	137
Bisoffi, M. and Betschart, B. Identification and sequence comparison of	137
a cuticular collagen of <i>Brugia pahangi</i>	145
	149
Austin, D. J. and Anderson, R. M. Immunodominance, competition	
and evolution in immunological responses to helminth parasite	157
antigens	157
Masson, S. D., McKay, D. M., Stead, R. H., Agro, A., Stanisz, A. and	
Perdue, M. H. Nippostrongylus brasiliensis infection evokes	
neuronal abnormalities and alterations in neurally regulated	173
electrolyte transport in rat jejunum	1/3
Stuart, R. J., Lewis, E. E. and Gaugler, R. Selection alters the	
pattern of emergence from the host cadaver in the	100
entomopathogenic nematode, <i>Steinernema glaseri</i>	183
Robertson, A. P. and Martin, R. J. Effects of pH on a high	
conductance Ca-dependent chloride channel: a patch-clamp study	
in Ascaris suum	191
Lampo, M. and Bayliss, P. The impact of ticks on <i>Bufo marinus</i> from	100
native habitats	199

CAMBRIDGE UNIVERSITY PRESS

https://doi.org/10.1017/S0031182000066324