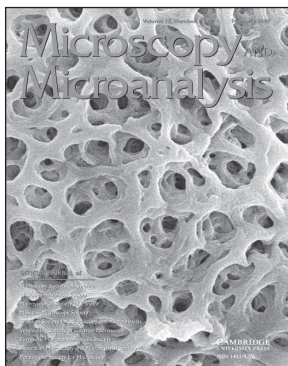


CAMBRIDGE

JOURNALS



Microscopy AND Microanalysis

Published for the Microscopy Society of America

Microscopy and Microanalysis
is available online at:
<http://journals.cambridge.org/mam>

**To subscribe contact
Customer Services**

in Cambridge:
Phone +44 (0)1223 326070
Fax +44 (0)1223 325150
Email journals@cambridge.org

in New York:
Phone +1(845) 353 7500
Fax +1 (845) 353 4141
Email
subscriptions_newyork@cambridge.org

Editor-in-Chief

Robert L. Price, University of South Carolina, USA

Microscopy and Microanalysis, a peer-reviewed bimonthly journal publishes original research papers in the fields of microscopy, imaging, and compositional analysis. The journal provides significant articles that describe new and existing techniques and instrumentation, as well as the applications of these to the imaging and analysis of microstructure.

Price information is available at:
<http://journals.cambridge.org/mam>

Free email alerts

Keep up-to-date with new material – sign up at
<http://journals.cambridge.org/alerts>

For free online content visit:
<http://journals.cambridge.org/mam>



**CAMBRIDGE
UNIVERSITY PRESS**

CAMBRIDGE

JOURNALS



Animal Health Research Reviews

Published in collaboration with the
Conference of Research Workers in Animal Diseases

Animal Health Research Reviews
is available online at
<http://journals.cambridge.org/ahr>

Editor-in-Chief

C. Gyles, University of Guelph, Canada

**To subscribe contact
Customer Services**

in Cambridge:
Phone +44 (0)1223 326070
Fax +44 (0)1223 325150
Email journals@cambridge.org

in New York:
Phone +1 (845) 353 7500
Fax +1 (845) 353 4141
Email
subscriptions_newyork@cambridge.org

Animal Health Research Reviews provides an international forum for the publication of reviews and commentaries on all aspects of animal health. The journal covers all facets of animal health and science, including but not limited to both infectious and non-infectious diseases in domestic and wild animals.

Price information is available at
<http://journals.cambridge.org/ahr>

Free email alerts

Keep up-to-date with new material – sign up at
<http://journals.cambridge.org/alerts>

For free online content visit
<http://journals.cambridge.org/ahr>

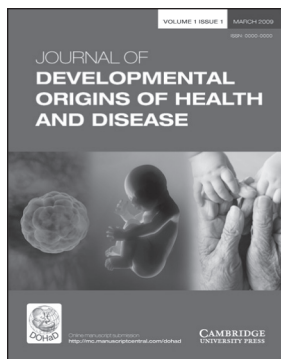


CAMBRIDGE
UNIVERSITY PRESS

CAMBRIDGE

JOURNALS

NEW FOR 2010



Journal of Developmental Origins of Health and Disease

Published in association with the International Society
for Developmental Origins of Health and Disease

***Journal of Developmental Origins
of Health and Disease***

is available online at
<http://journals.cambridge.org/doh>

**To subscribe contact
Customer Services**

in Cambridge:
Phone +44 (0)1223 326070
Fax +44 (0)1223 325150
Email journals@cambridge.org

in New York:
Phone +1 (845) 353 7500
Fax +1 (845) 353 4141
Email
subscriptions_newyork@cambridge.org

Editor-in-chief

Michael G Ross, Harbor-UCLA (University of California, Los Angeles) Medical Center, USA

A new multi-disciplinary journal linking basic science to applied science; focusing on how the environment during early animal and human development, and interactions between environmental and genetic factors, influence health and risk of disease in later life. The journal will publish original research articles, short communications, reviews, and regular themed issues with guest editors.

**Price information is available at
<http://journals.cambridge.org/doh>**

Free email alerts

Keep up-to-date with new material – sign up at
<http://journals.cambridge.org/alerts>

**For free online content visit
<http://journals.cambridge.org/doh>**



**CAMBRIDGE
UNIVERSITY PRESS**

CAMBRIDGE

JOURNALS



Parasitology

Parasitology

is available online at
<http://journals.cambridge.org/par>

To subscribe contact Customer Services

in Cambridge:
Phone +44 (0)1223 326070
Fax +44 (0)1223 325150
Email journals@cambridge.org

in New York:
Phone +1 (845) 353 7500
Fax +1 (845) 353 4141
Email
subscriptions_newyork@cambridge.org

Editors

R. S. Phillips, University of Glasgow, UK
R. B. Gasser, University of Melbourne, Australia
L. H. Chappell, University of Aberdeen, UK

Parasitology publishes original papers on all aspects of parasitology and host-parasite relationships, ranging from the latest discoveries in biochemical and molecular biology to ecology and epidemiology in the context of the medical, veterinary and biological sciences.

Two specially commissioned issues with important topics in parasitology, including the proceedings of the symposia of the British Society for Parasitology, are included in the annual subscription.

**Price information is available at
<http://journals.cambridge.org/par>**

Free email alerts

Keep up-to-date with new material – sign up at
<http://journals.cambridge.org/alerts>

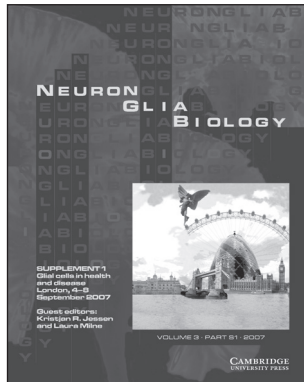
**For free online content visit
<http://journals.cambridge.org/par>**



**CAMBRIDGE
UNIVERSITY PRESS**

CAMBRIDGE

JOURNALS



Neuron Glia Biology

Neuron Glia Biology

available online at:

<http://journals.cambridge.org/ngb>

To subscribe contact Customer Services

in Cambridge:

Phone +44 (0)1223 326070

Fax +44 (0)1223 325150

Email journals@cambridge.org

in New York:

Phone +1 (845) 353 7500

Fax +1 (845) 353 4141

Email

subscriptions_newyork@cambridge.org

Editor-in-Chief

R. Douglas Fields,

National Institutes of Health, Bethesda, USA

Stimulated by recent advances in neuroscience, *Neuron Glia Biology* serves the expanding need for a scientific journal recognizing that two-way communication between neurons and glia is essential for nervous system function. In focusing on cell-cell interactions in the nervous system, this journal offers an expanded scope that bridges what have traditionally been regarded as separate scientific disciplines.

Price information is available at:
<http://journals.cambridge.org/ngb>

Free email alerts

Keep up-to-date with new material – sign up at

<http://journals.cambridge.org/alerts>

For free online content visit:
<http://journals.cambridge.org/ngb>



CAMBRIDGE
UNIVERSITY PRESS

Genetics Research

INSTRUCTIONS FOR CONTRIBUTORS

Genetics Research publishes papers on all aspects of the genetics of complex traits. Excellent papers in other areas of genetics are also welcome. Specifically, the journal publishes empirical and theoretical studies on evolutionary and population genetics, quantitative and statistical genetics, genomics and systems genetics, and molecular and developmental genetics. On the empirical side papers reporting studies that have broad implications using a range of organisms, from well-established genetic model organisms (flies, *C. elegans*, mice, yeast, Arabidopsis); agricultural species (cows, pigs, sheep, chickens, rice, maize, wheat) to humans are encouraged. In addition to research articles the journal welcomes reviews that deal with any field within its scope.

Contributions are welcomed from scientists of all nationalities but must be written in English. Submission of a paper will be taken to imply that it is unpublished and is not being considered for publication elsewhere. Papers should be as concise as clarity permits, and illustrations should be restricted to the *minimum needed*. *Short Papers* are designed for concisely written reports of work for which rapid publication is considered desirable. Such papers will normally be published within three months of receipt in acceptable form. They should not exceed 4 pages of print in length, and should include a summary.

Submissions These should be made via the journal's online submission system at <http://www.editorialmanager.com/genetics>. They should be typed in font size 12 and double-spaced. The title should ordinarily identify the organism. The address of the laboratory at which the work was carried out will be printed with the authors' names at the head of the paper, and changes of address may be added in footnotes. A footnote to the title page should also give the name and address to whom reprint requests may be made. Sources of financial support should be included with other acknowledgements at the end of the text. The title page of the typescript should include a short title for running headlines (limited to 50 letters and spaces), and the name and address of the author (or his proxy) to whom the proofs are to be sent, under the heading: *Proofs to be sent to . . .* Main headings should be typed in capitals and (except summary and references) numbered consecutively. Subheadings should be typed in lower case, and italicized except for those words and symbols which would be italicized in the text. Subheadings should be numbered (i), (ii), etc., within each main heading. There are no page charges for this journal.

Summary The summary will be printed at the beginning of the paper. It should give a concise abstract of the significant content and conclusions of the paper, in a form suitable for abstracting journals to use, and should not exceed 250 words.

Illustrations Colour illustrations are now published free of charge for this journal – for both the online and printed versions. All illustrations, including photographs, diagrams, graphs etc. are to be labelled consecutively Figure 1, 2 . . . according to their relative positions in the text. Each figure should have a legend to be printed underneath it. Photographs should also be supplied by

post as unmounted glossy prints, with a sketch or separate set to show the arrangement required when several photographs are to form one figure. The names of the authors and the orientation of the figure should be indicated on the back of each photograph. *Diagrams* should be about twice the size of the printed figure, but not larger than 305×203 mm (12×8 inches), unless exceptionally complicated, and the thickness of lines and size of points should be determined accordingly.

Tables Each table should be typed on a separate sheet of paper and its approximate position in the text indicated on the typescript. Each should be numbered and carry an appropriate title. The table should be designed, whenever possible, to be printed in the normal orientation of the text. The data should be grouped so as to make the use of rules unnecessary, for they will only be included at the Editor's discretion. Table footnotes should ordinarily employ the symbols *, †, ‡, §, ||, ¶, **, etc., in that order.

Symbols Gene and mathematical symbols should generally be printed in italics, matrices in boldface. Note that '+' as the symbol for a wild-type allele should not be italicized.

Nomenclature Wherever possible, standardized nomenclature should be employed. The author should refer to the following publications for guidance: Novick *et al.* (*Bacteriological Reviews* **40**, 168–189) for plasmids; O'Brien (Ed.), *Genetic Maps* **6**, Cold Spring Harbor 1993, for information on most species and recent gene lists.

References should follow the normal usage in the journal. In the list of references at the end of the paper, *both titles of articles and names of periodicals* should be written out in full.

Distribution of Reagents and Deposition of Sequences Manuscripts will only be accepted for publication in *Genetics Research* on the understanding that protein and nucleic acid sequence data is deposited in a suitable public database, and polymorphism data is deposited in HGBASE. The corresponding accession numbers must be included in the paper. Authors must also be willing to distribute freely, for academic research, any new strains, clones or antibodies that they describe.

Proofs Authors will be advised by email when to download their proofs from the Cambridge University Press website. These proofs, after correction, should be returned to the Executive Editor. Excessive alterations, other than corrections of printers' errors, may be disallowed or charged to the author. Corrections should be made using the symbols in British Standard 1219: 1958, or its shortened version B.S. 1219C: 1958.

Offprints Authors will be provided with a free pdf of their article and offprints may be ordered in using form sent out with proofs, provided this is returned within fourteen days of receipt.

This journal issue has been printed on FSC-certified paper and cover board. FSC is an independent, non-governmental, not-for-profit organization established to promote the responsible management of the world's forests. Please see www.fsc.org for information.

Cambridge University Press

The Edinburgh Building, Cambridge CB2 8RU, United Kingdom
32 Avenue of the Americas, New York, NY 10013–2473, USA
477 Williamstown Road, Port Melbourne, VIC 3207, Australia
C/ Casp, 79, 7a. planta 08013, Barcelona, Spain

Lower Ground Floor, Nautica Building, The Water Club, Beach Road, Granger Bay, 8005, Cape Town, South Africa

Printed in the United Kingdom at the University Press, Cambridge

GENETICS RESEARCH

CONTENTS

RESEARCH PAPERS

A quantitative genetic study of starvation resistance at different geographic scales in natural populations of *Drosophila melanogaster*

Julieta Goenaga, Juan José Fanara & Esteban Hasson 253

Maternal impairment of transposon regulation in *Drosophila melanogaster* by mutations in the genes *aubergine*, *piwi* and *Suppressor of variegation 205*

Michael J. Simmons, Michael W. Thorp, Jared T. Buschette, Katherine Peterson, Eric W. Cross & Erika L. Bjorklund 261

Mapping quantitative trait loci in a wild population using linkage and linkage disequilibrium analyses

Hernández-Sánchez, J., Chatzjpli, A., Beraldi, D., Gratten, J., Pilkington, J.G. & Pemberton, J.M. 273

An investigation of the power for separating closely linked QTL in experimental populations

Chen-Hung Kao & Miao-Hui Zeng 283

Semi-parametric genomic-enabled prediction of genetic values using reproducing kernel Hilbert spaces methods

Gustavo de los Campos, Daniel Gianola, Guilherme J.M. Rosa, Kent A. Weigel & José Crossa 295

Testing temporal changes in allele frequencies: a simulation approach

Edson Sandoval-Castellanos 309

ERRATUM 321

BOOK REVIEWS 323

BOOKS RECEIVED 327