

GENETICS RESEARCH

The International Journal for Genetics
and Genomics Research



journals.cambridge.org/grh

CAMBRIDGE
UNIVERSITY PRESS

Genetics Research

EXECUTIVE EDITORS

David J. Finnegan

William G. Hill

School of Biological Sciences,
The University of Edinburgh, West Mains Road,
Edinburgh EH9 3JT, UK
Fax: +44 (0)131 650 6564
Email: Genet.Res@ed.ac.uk

Trudy F. C. Mackay

Department of Genetics, Box 7614,
North Carolina State University,
Raleigh, NC 27695, USA
Fax: +1 919 515 3355
Email: Trudy_Mackay@ncsu.edu

EDITORIAL BOARD

Hiroshi Akashi

Department of Population Genetics, National Institute of Genetics,
Yata-1111, Mishima, Shizuoka-ken, 411-8540, Japan

Leif Andersson

Department of Medical Biochemistry and Microbiology,
Uppsala University, Uppsala, Biomedical Centre, Box 597,
SE – 751 24, Uppsala, Sweden

Robert R. H. Anholt

W.M. Keck Center for Behavioral Biology, Department of Zoology,
Box 7617, North Carolina State University, Raleigh, NC 27695-7617, USA

Nick H. Barton

Institute of Science and Technology, Am Campus 1, 3400 Klosterneuburg,
Austria

Rebecca W. Doerge

Department of Statistics, 150 North University Street, Purdue University,
West Lafayette, IN 47904-1399, USA

Mike E. Goddard

Land and Food Resources, University of Melbourne, Royal Parade,
Parkville, 3010, Melbourne, Australia

Greg Gibson

School of Integrative Biology, University of Queensland, Brisbane,
Queensland 4072, Australia

Sergey Nuzhdin

Section of Evolution & Ecology, University of California,
One Shields Avenue, Davis, CA 95616-8755, USA

Linda Partridge

Department of Biology, University College London, Darwin Building,
Gower Street, London WC1E 6BT, UK

Shizhong Xu

Department of Botany and Plant Sciences,
University of California, Riverside
Riverside, CA 9252, USA
Fax: +1 951 827 7335
E-mail: shxu@ucr.edu

Patrick Phillips

Biology Department, 1210 University of Oregon, Eugene,
OR 97403-1210, USA

Daven Presgraves

University of Rochester, Department of Biology, River Campus
Box 270211, Rochester, New York 14627-0211, USA

Helen Sang

Roslin Institute, Roslin BioCentre, Midlothian, EH25 9PS, UK

David Threadgill

North Carolina State University, Room 5062, Genetic Medicine Building,
CB# 7264, UNC-Chapel Hill, Chapel Hill, NC 27599-7264, USA

Peter M. Visscher

Queensland Institute of Medical Research, The Bancroft Centre,
Royal Brisbane Hospital, Queensland 4029, Australia

J. Bruce Walsh

Department of Ecology and Evolutionary Biology, University of Arizona,
Tucson AZ 85721, USA

Bruce S. Weir

Department of Biostatistics, University of Washington, Seattle,
WA 98195-7232, USA

Michael Whitlock

Department of Zoology, University of British Columbia,
6270 University Blvd., Vancouver BC V6T 1Z4, Canada

John Willis

Duke University, Department of Biology, Box 90338,
Durham NC 27708, USA

Nengjun Yi

Department of Biostatistics, Ryals Public Health Bldg, 317F,
University of Alabama at Birmingham, Birmingham, AL 35294, USA

FOUNDING EDITOR Eric C. R. Reeve

Genetics Research (ISSN 0016-6723) is published bimonthly in February, April, June, August, October and December. The subscription price (excluding VAT) of volume 93, 2011, which includes print and electronic access, is £589.00 (in USA, Canada and Mexico US \$1136.00). Single parts £102.00 net (in USA, Canada and Mexico US \$185.00), plus postage. The electronic-only price available to institutional subscribers is £497.00 (US \$919.00 in USA, Canada and Mexico). EU subscribers (outside the UK) who are not registered for VAT should add VAT at their country's rate. VAT registered subscribers should provide their VAT registration number. Prices include delivery by air.

Periodicals postage paid at New York, NY, and at additional mailing offices. POSTMASTER: send address changes in USA, Canada and Mexico to *Genetics Research*, Cambridge University Press, 100 Brook Hill Drive, West Nyack, New York 10994-2133.

Orders which must be accompanied by payment, should be sent to a bookseller, subscription agent, or to the publishers, Cambridge University Press, The Edinburgh Building, Shaftesbury Road, Cambridge CB2 8RU, UK and, in the USA, Canada and Mexico, Journals Fulfillment Department, 100 Brook Hill Drive, West Nyack, New York 10994-2133. Japanese prices for institutions are

available from Kinokuniya Company Ltd, P.O. Box 55, Chitose, Tokyo 156, Japan.

Copying: This journal is registered with the Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923, USA. Organizations in the USA who are also registered with the 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 \$16.00. This consent does not extend to multiple copying for promotional or commercial purposes. Code 0016-6723/2011 \$16.00. Organizations authorized by the Copyright Licensing Agency may also copy material subject to the usual conditions.

ISI Tear Sheet Service, 3501 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.

Internet Access: This journal is included in the Cambridge Journals Online service which can be found at <http://journals.cambridge.org/>. For further information on other Press titles access <http://www.cambridge.org/>