

## Editorial Board

## Chair

**P. R. Shepherd** • Auckland

Vice Chair, The Americas

**G. Salvesen** • La Jolla, CA

Vice Chair, Asia-Pacific

**T. Xu** • Beijing

Vice Chair, Europe

**D. R. Alessi** • Dundee

Vice Chair Reviews

**A. Toker** • Boston, MA

## Deputy Chairs

**M. Blatt** • Glasgow**L. J. Goodyear** • Boston, MA**S. V. Graham** • Glasgow**D. Hoekstra** • Groningen**S. Huber** • Urbana, IL**J. Ladbury** • Houston, TX**M. A. Lemmon** • Philadelphia, PA**C. MacKintosh** • Dundee**K. H. Mayo** • Minneapolis, MN**M. Murphy** • Cambridge**S. Roberts** • Buffalo, NY**M. A. Schwartz** • Charlottesville, VA**D. Tosh** • Bath**B. Vanhaesbroeck** • London**H. M. Wallace** • Aberdeen

## Publisher

**P. J. Starley**

## Executive Editor

**M. R. Thorne**

## Production Manager

**M. D. Cunningham**

## Staff Editors

**L. Ball****M. Banerjee****C. L. Curtis****E. A. G. Elloway****J. W. Mockridge****H. F. Roberts**

## Editorial Assistant

**C. V. Hooley**

Administrative Editor, US Office

**S. Schendel**

- S. Akira (Osaka)  
 J. Ariño (Barcelona)  
 J. M. Backer (Bronx, NY)  
 B. M. Baker (Notre Dame, IN)  
 J. L. Blank (Cambridge, MA)  
 M. A. Bogoyevitch (Melbourne, VIC)  
 L. H. Boise (Atlanta, GA)  
 J. Bolaños (Salamanca)  
 P. J. Booth (Bristol)  
 L. Boscá (Madrid)  
 N. J. Buckley (London)  
 J. F. Cáceres (Edinburgh)  
 D. Carling (London)  
 M. Cascante (Barcelona)  
 Y.-G. Chen (Beijing)  
 L. Chernomordik (Bethesda)  
 A. C. Clark (Raleigh, NC)  
 V. Darley-Usmar (Birmingham, AL)  
 M. J. Davies (Sydney)  
 L. A. Devi (New York, NY)  
 I. Dikic (Frankfurt)  
 R. Docampo (Athens, GA)  
 D. Doyle (Dublin)  
 C. S. Duckett (Ann Arbor, MI)  
 A. F. Dulhunty (Canberra)  
 P. Fay (Rochester, NY)  
 R. Ferraris (Newark, NJ)  
 P. G. W. Gettins (Chicago, IL)  
 R. Golsteyn (Lethbridge, AB)  
 B. Halliwell (Singapore)  
 I. B. Holland (Orsay)  
 J. M. Horowitz (Raleigh, NC)  
 A. Imbert (Grenoble)
- D. A. Jans (Monash)  
 P.-S. Jayaraman (Birmingham)  
 D. Jordan (Peoria, IL)  
 M. G. Kazanietz (Philadelphia, PA)  
 D. W. Laird (London, Ont.)  
 J. H. Lakey (Newcastle upon Tyne)  
 K. Lingelbach (Marburg)  
 D. W. Litchfield (London, Ont.)  
 P. S. Lorenzo (Honolulu, HI)  
 E. Manser (Singapore)  
 M. McManus (Palmerston North)  
 J. Miernyk (Columbia, MO)  
 I. Morgan (Glasgow)  
 A. J. Morris (Lexington, KY)  
 M. Muckenthaler (Heidelberg)  
 B. Mulloy (South Mimms)  
 A. W. Munro (Manchester)  
 G. Murphy (Cambridge)  
 H. Y. Naim (Hannover)  
 W. Ogawa (Kobe)  
 G. Panayotou (Vari)  
 S. Patel (London)  
 G. Pavitt (Manchester)  
 N. D. Perkins (Bristol)  
 L. Persson (Lund)  
 P. F. Pilch (Boston, MA)  
 W. C. Plaxton (Kingston, Ont.)  
 R. Y. Poon (Hong Kong)  
 Z. Radic (La Jolla, CA)  
 D. R. Richardson (Sydney)  
 K. Rittinger (London)  
 M. F. Roberts (Boston, MA)  
 J. M. Sanchez-Ruiz (Granada)
- R. Sasisekharan (Cambridge, MA)  
 N. Savery (Bristol)  
 J. R. Sayers (Sheffield)  
 M. C. Seabra (London)  
 F. J. Sharom (Guelph, Ont.)  
 G. S. Shelness (Winston-Salem, NC)  
 E. Smythe (Sheffield)  
 S. Spiegel (Richmond, VA)  
 S. Stack (Columbia, MO)  
 W. M. Stark (Glasgow)  
 H. Stenmark (Oslo)  
 C. Tickle (Bath)  
 N. K. Tonks (Cold Spring Harbor, NY)  
 M. Torti (Pavia)  
 C. Tournier (Manchester)  
 C. Troy (New York, NY)  
 H. D. Ulrich (South Mimms)  
 D. M. F. van Aalten (Dundee)  
 M. van der Woude (York)  
 A. J. Vidal-Puig (Cambridge)  
 H. J. Vogel (Calgary)  
 M. Welham (Bath)  
 M. F. White (St Andrews)  
 S. Whitney (Canberra)  
 C. Winterbourn (Christchurch, NZ)  
 D. Withers (London)  
 D. Wu (Guangzhou)  
 A. Xu (Hong Kong)  
 H. Xue (Shanghai)  
 H. Yagisawa (Hyogo-Ken)  
 I. Zachary (London)  
 C. Zurzolo (Paris)

- Journal compilation © 2010 Biochemical Society
- The *Biochemical Journal* (ISSN 0264-6021 for print/online journal; ISSN 1470-8728 for online only journal) is published and distributed by Portland Press Limited on behalf of the Biochemical Society (the owner), and appears twice monthly (24 issues).
- **Editorial and publishing offices:** *Biochemical Journal*, Portland Press Limited, Third Floor, Charles Darwin House, 12 Roger Street, London WC1N 2JL, U.K.
- **US agent:** c/o Mercury International, 365 Blair Road, Avenel, NJ 07001, U.S.A.
- **Subscriptions department:** Portland Customer Services, P.O. Box 32, Commerce Way, Colchester CO2 8HP, U.K.
- All rights reserved. Apart from any fair dealing for the purposes of research or private study, or criticism or review, as permitted under the Copyright, Designs and Patents Act, 1988, this publication may be reproduced, stored or transmitted, in any forms or by any means, only with the prior permission in writing of the publishers, or in the case of reprographic reproduction in accordance with the terms of permissions granted by copyright clearing houses such as the Copyright Licensing Agency (U.K.) or the Copyright Clearance Center (U.S.A.). The CCC item-fee code for this publication is 0264-6021/2010/\$50.00 + 0.00. Inquiries concerning reproduction outside those terms should be sent to the publishers at the above-mentioned address.
- Although, at the time of going to press, the information contained in this publication is believed to be correct, neither the authors nor the editors nor the publisher assume any responsibility for any errors or omissions herein contained. Opinions expressed in articles are not necessarily those of the editors, the publisher or the owner.
- Periodicals postage paid at Rahway, NJ, U.S.A.
- **Postmaster:** send address corrections to *Biochemical Journal*, c/o Mercury International, 365 Blair Road, Avenel, NJ 07001, U.S.A.
- **Cover design:** Angie Moyes ([www.fuz.co.uk](http://www.fuz.co.uk)).
- **Cover image credits:** Microbiology at Leeds, University of Leeds; Carmen A. Mannella Research and Technology Wadsworth Center, Albany, NY; Nottingham *Arabidopsis* Stock Centre (NASC); G. P. Côté, Kingston, Ont.; G. Salvesen, La Jolla; Dr Gordon Beales, Newcastle University.

## Instructions to Authors

**● General policy** The *Biochemical Journal* publishes papers in English in all fields of biochemistry and cellular and molecular biology, provided that they make a sufficient contribution to biochemical knowledge. Papers may include new results obtained experimentally, descriptions of new experimental methods of biochemical importance, or new interpretations of existing results. Novel theoretical contributions will be considered equally with papers dealing with experimental work. All work presented should have as its aim the development of biochemical concepts rather than the mere recording of facts. Preliminary, confirmatory or inconclusive work will not be published. The *Biochemical Journal* will not publish material that has been wholly or largely published elsewhere, even as a preliminary communication or in unrefereed symposium proceedings or on the World Wide Web (WWW); equally, fragmentation of research into the 'least publishable unit' is discouraged.

Submission of a paper implies that it has been approved by all the named authors, that all persons entitled to authorship have been so named, that it reports unpublished work that is not under consideration elsewhere, and that if the paper is accepted for publication the authors will transfer to the Biochemical Society the copyright in the paper, which will then not be published elsewhere in the same form, in any language, without the consent of the Society. Authors will be required to sign an undertaking to these effects.

Authors may suggest potential reviewers for their papers, but the journal is under no obligation to follow such suggestions. Authors may also specify the names of those they wish to be excluded from the review process, and such wishes are usually respected unless, in the opinion of the journal, such a request unreasonably excludes all the expertise available to it in that scientific area.

To allow the reviewers to assess possible overlap with previous work, all submitted papers must be accompanied by duplicate copies of the author's relevant published work, including that on the WWW, and of all related papers in press or under editorial consideration in this or other journals.

The following types of paper are included in the journal.

**Research Papers** are the normal form of publication, and may be of any length that is justified by their content. However, because of pressure for space in the journal, no paper, whatever its scientific merits, will be accepted if it exceeds the minimum length required for

precision in describing the experiments and clarity in interpreting them. As a guide, most Research Papers published in the *Biochemical Journal* are of between six and eight printed pages. A concise well-written paper tends to be published more rapidly.

**Accelerated Publications (APs)** are short (normally four printed pages) papers bringing particularly novel and significant findings to the attention of the research community. It is intended that a decision on acceptance or rejection will be made within 10 working days of receipt, and publication of accepted APs in an issue will follow within 2 months. APs receive full but accelerated reviewing. The criteria of 'novelty and significance' are strictly enforced, and papers may be rejected solely on the grounds of lack of novelty and significance. APs are not a path to accelerated publication of sound but non-urgent material. Authors must include in their letter of submission a brief statement of why they believe their AP merits accelerated treatment. Colour figures will be published free of charge in APs, provided the use of colour is deemed scientifically necessary by the reviewers.

**Reviews** will usually be solicited, although unsolicited reviews will be considered for publication. Prospective writers of reviews should first consult the Reviews Editor, via the editorial office, and should enclose a short (one page) summary of the area they propose to cover.

**● Procedure for submission** These instructions do not replace the official *Biochemical Journal* Instructions to Authors (<http://www.BiochemJ.org>). Authors are encouraged to refer to these for overall guidelines on submitting a paper. Before preparing papers for the journal, authors should consult a current issue to make themselves familiar with the general format, such as the use of cross-headings, layout of tables and figures and citation of references. A full page of text in the *Biochemical Journal* contains approximately 1200 words; when calculating the printed length of papers, allowance must be made for the space occupied by tables and figures and the number of text words reduced accordingly.

The numerical system of references must be used. A reference to 'unpublished work' must be accompanied by the names of all persons concerned: a reference to a 'personal communication' must be supported by written permission for the quotation from the person or persons concerned; both of these types of citation are permitted in the text only, not in the list of references.

**● Submit manuscripts online** Authors should submit manuscripts electronically using the Online Submission and Review System available at <http://www.BiochemJ.org/submit/>

**● Immediate Publications** Manuscripts are published online in PDF format as soon as they are accepted, unless on submission the author requests that this not be done. Immediate Publications are listed in and accessible through Medline, and are freely available to anyone with Internet access.

**● Opt2Pay** Choose to make your paper freely available. For more information see [www.biochemj.org](http://www.biochemj.org).

**● Queries and correspondence** Authors in the Americas should address all queries and correspondence about their submission to: Dr Sharon Schendel, BJ USA, The Sanford-Burnham Institute for Medical Research, 10901 N. Torrey Pines Road, La Jolla, CA 92037, U.S.A. (telephone +1 858 795 5283; fax +1 858 795 5284; email [editorial@biochemjusa.org](mailto:editorial@biochemjusa.org)). Authors in the U.K., the rest of Europe, Japan and the rest of the world should contact: The Publisher, *Biochemical Journal*, Portland Press Limited, Third Floor, Charles Darwin House, 12 Roger Street, London WC1N 2JL, U.K. (telephone +44 20 7685 2410; fax +44 20 7685 2469; email [editorial@portlandpress.com](mailto:editorial@portlandpress.com)).

**● Colour figures** Colour figures are published free of charge provided that the corresponding author on the published paper has been a member of the Biochemical Society for at least 2 years and that the use of colour is deemed scientifically necessary by the reviewers. Otherwise the charges are £550 for the first colour figure and £300 for each subsequent colour figure.

**● Multimedia adjuncts** The *Biochemical Journal* Online offers authors the opportunity to enhance their papers with multimedia adjuncts (e.g. time-lapse movies, three-dimensional structures, animated schemes). These will be submitted to peer review alongside the manuscript. To submit a paper with a multimedia adjunct, please attach the file when you submit your manuscript electronically. Preferred formats are QuickTime for time-lapse movies, PDB for structures and Flash for animated schemes. There is no extra charge associated with the publication of a multimedia adjunct online.

**● COPE** The *Biochemical Journal* is a member of the Committee on Publication Ethics and endorses its guidelines, which are available at <http://publicationethics.org.uk>

## Other information

The *Biochemical Journal* is published and distributed by Portland Press Limited on behalf of the Biochemical Society. It is published twice monthly; in 2010 volumes 425–432 (three parts each) will appear. The subscription also includes an author and key-word index.

**● Abstracted by/indexed in:** BIOBASE, BIOSIS, CAB International, Chemical Abstracts Service, Current Contents, EMBASE, International Food Information Service, Medline/Index Medicus, Proquest Information & Learning, Science Citation Index.

**● Subscription rates** Institutional subscription rates for 2010 are shown below. Subscribers to the *Biochemical Journal* can subscribe additionally to *Biochemical Society Transactions* and *Bio-technology and Applied Biochemistry* on a joint subscription at a reduced rate (see [www.portlandpress.com](http://www.portlandpress.com) for further details). Terms are cash with order (US\$ in N. America, £ sterling for rest of the world, or US\$ equivalent at current rate of exchange; subscribers in the EU may pay in £ sterling or Euros), or against pro forma invoice. Orders should

be sent to the address shown, to your usual agent or purchased online at [www.portlandpress.com](http://www.portlandpress.com).

| N.                                    | America    | Rest of<br>world | Euro<br>price |
|---------------------------------------|------------|------------------|---------------|
| One year (8 vols)<br>Print and online | US\$3922   | £1934            | €3373         |
| Online only                           | US\$3531   | £1786            | €3036         |
| Single issues<br>(print only)         | US\$180.50 | £91              | €155          |

Overseas rates include airfreight delivery. Airspeeded delivery is available at an additional cost of £80/€101.

Value Added Tax (VAT) on online-only and 'combined' subscriptions is due on supplies to subscribers within the UK, and to non-registered subscribers elsewhere in the EU. If in the EU please state your VAT number otherwise VAT may be charged at the appropriate national rate.

**● Electronic back archive** This is freely available to all users with Internet access.

**● Microfiche and back issues** Volumes 102–408 of the *Biochemical Journal* are available

on microfiche. Back issues are also available. Further details may be obtained from the address below.

### ● Subscription Department

Portland Customer Services  
P.O. Box 32, Commerce Way  
Colchester CO2 8HP, Essex, U.K.  
(telephone 01206 796351; fax 01206 799331;  
email [sales@portland-services.com](mailto:sales@portland-services.com)).

**● Advertising** Enquiries about advertising should be addressed to: Mark Burgess, Editorial Department, Portland Press Limited Third Floor, Charles Darwin House, 12 Roger Street, London WC1N 2JL, U.K., tel.: +44 (0)20 7685 2410; fax: +44 (0)20 7685 2469; email: [editorial@portlandpress.com](mailto:editorial@portlandpress.com)

**● The paper and cover-boards used in this journal are sourced from sustainable, managed and renewed commercial forests, and are fully recyclable. The bleaching process used for the pulp is 100% ECF (elemental chlorine free).**

**Review****Mechanisms involved in the developmental programming of adulthood disease**

Published on the Internet 14 April 2010,  
doi:10.1042/BJ20091861

M.J. Warner and S.E. Ozanne

333–347

**Online Commentary**

## Molecular insights into mechanisms of intramembrane proteolysis through signal peptide peptidase (SPP)

Published on the Internet 14 April 2010, doi:10.1042/BJ20100391  
(see accompanying paper, pp. 523–534)

B. Schröder and P. Saftig

e1–e3

**Research Papers**

## The pseudophosphatase MK-STYX interacts with G3BP and decreases stress granule formation

Published as BJ Immediate Publication 24 February 2010,  
doi:10.1042/BJ20091383

S.D. Hinton, M.P. Myers, V.R. Roggero, L.A. Allison and N.K. Tonks

349–357

Proteolytic processing of an *Arabidopsis* membrane-bound NAC transcription factor is triggered by cold-induced changes in membrane fluidity

Published as BJ Immediate Publication 16 February 2010,  
doi:10.1042/BJ20091762

P.J. Seo, M.J. Kim, J.-S. Song, Y.-S. Kim, H.-J. Kim and C.-M. Park

359–367

## Isolation and characterization of selective and potent human Fab inhibitors directed to the active-site region of the two-component NS2B–NS3 proteinase of West Nile virus

Published as BJ Immediate Publication 16 February 2010,  
doi:10.1042/BJ20100074

S.A. Shiryaev, I.A. Radichev, B.I. Ratnikov, A.E. Aleshin, K. Gawlik, B. Stec, C. Frisch, A. Knappik and A.Y. Strongin

369–376



## Genomic organization and regulation of the human orexin (hypocretin) receptor 2 gene: identification of alternative promoters

Published as BJ Immediate Publication 15 February 2010,  
doi:10.1042/BJ20091755

J. Chen and H.S. Randeva

377–390



## MMP28 gene expression is regulated by Sp1 transcription factor acetylation

Published as BJ Immediate Publication 9 February 2010,  
doi:10.1042/BJ20091798

T.E. Swingler, L. Kevorkian, K.L. Culley, S.A. Illman, D.A. Young, A.E. Parker, J. Lohi and I.M. Clark

391–400

## Phosphorylation and membrane dissociation of the ARF exchange factor GBF1 in mitosis

Published as BJ Immediate Publication 23 February 2010,  
doi:10.1042/BJ20091681

Y. Morohashi, Z. Balklava, M. Ball, H. Hughes and M. Lowe

401–412



## SHP (small heterodimer partner) suppresses the transcriptional activity and nuclear localization of Hedgehog signalling protein Gli1

Published as BJ Immediate Publication 23 February 2010,  
doi:10.1042/BJ20091445

K. Kim, K.H. Kim, H.K. Cho, H.Y. Kim, H.H. Kim and J. Cheong

413–422



## Direct repression of Sonic Hedgehog expression in the stomach by Cdx2 leads to intestinal transformation

Published as BJ Immediate Publication 4 March 2010,  
doi:10.1042/BJ20091177

H. Mutoh, H. Hayakawa, M. Sashikawa, H. Sakamoto and K. Sugano

423–434

## Contents

|  |  |  |         |
|--|--|--|---------|
| Induced, selective proteolysis of MLK3 negatively regulates MLK3/JNK signalling<br><i>Published as BJ Immediate Publication 16 February 2010,<br/>doi:10.1042/BJ20091077</i>   | G.-Y. Liou, H. Zhang, E.M. Miller, S.A. Seibold, W. Chen and K.A. Gallo  | <br>online data   | 435–443 |
| VDAC1 cysteine residues: topology and function in channel activity and apoptosis<br><i>Published as BJ Immediate Publication 1 March 2010,<br/>doi:10.1042/BJ20091690</i>  | L. Aram, S. Geula, N. Arbel and V. Shoshan-Barmatz   |  | 445–454 |
| Glutamate–haem ester bond formation is disfavoured in flavocytochrome P450 BM3: characterization of glutamate substitution mutants at the haem site of P450 BM3<br><i>Published as BJ Immediate Publication 24 February 2010,<br/>doi:10.1042/BJ20091603</i> | H.M. Girvan, C.W. Levy, P. Williams, K. Fisher, M.R. Cheesman, S.E.J. Rigby, D. Leys and A.W. Munro                      | <br>online data   | 455–466 |
| Transglutaminase-2: a new endostatin partner in the extracellular matrix of endothelial cells<br><i>Published as BJ Immediate Publication 15 February 2010,<br/>doi:10.1042/BJ20091594</i>   | C. Faye, A. Inforzato, M. Bignon, D.J. Hartmann, L. Muller, L. Ballut, B.R. Olsen, A.J. Day and S. Ricard-Blum           | <br>online data   | 467–475 |
| Lipopolysaccharide interaction is decisive for the activity of the antimicrobial peptide NK-2 against <i>Escherichia coli</i> and <i>Proteus mirabilis</i><br><i>Published as BJ Immediate Publication 26 February 2010,<br/>doi:10.1042/BJ20091607</i>      | M.U. Hammer, A. Brauser, C. Olak, G. Brezesinski, T. Goldmann, T. Gutsmann and J. Andrä                                  |  | 477–488 |
| The DNA-binding activity of mouse DNA methyltransferase 1 is regulated by phosphorylation with casein kinase 1 $\delta/\epsilon$<br><i>Published as BJ Immediate Publication 1 March 2010,<br/>doi:10.1042/BJ20091856</i>                                    | Y. Sugiyama, N. Hatano, N. Sueyoshi, I. Suetake, S. Tajima, E. Kinoshita, E. Kinoshita-Kikuta, T. Koike and I. Kameshita |  | 489–497 |
| Structural and functional analysis of amino-terminal enhancer of split in androgen-receptor-driven transcription<br><i>Published as BJ Immediate Publication 17 February 2010,<br/>doi:10.1042/BJ20091631</i>  | Y. Zhang, S. Gao and Z. Wang   |  | 499–511 |
| Disulfide formation in plant storage vacuoles permits assembly of a multimeric lectin<br><i>Published as BJ Immediate Publication 24 February 2010,<br/>doi:10.1042/BJ20091878</i>   | R.S. Marshall, L. Frigerio and L.M. Roberts  |  | 513–521 |
| Signal peptide peptidase (SPP) assembles with substrates and misfolded membrane proteins into distinct oligomeric complexes<br><i>Published as BJ Immediate Publication 3 March 2010,<br/>doi:10.1042/BJ20091005</i>   | B. Schrul, K. Kapp, I. Sinning and B. Dobberstein  | <br>online data | 523–534 |
| Co-segregation of AMPA receptors with G <sub>M1</sub> ganglioside in synaptosomal membrane subfractions<br><i>Published as BJ Immediate Publication 11 February 2010,<br/>doi:10.1042/BJ20091344</i>   | A.A. Cole, A. Dosemeci and T.S. Reese  | <br>commentary  | 535–540 |
| ZEB1 and CtBP form a repressive complex at a distal promoter element of the BCL6 locus<br><i>Published as BJ Immediate Publication 23 February 2010,<br/>doi:10.1042/BJ20091578</i>  | V. Papadopoulou, A. Postigo, E. Sánchez-Tilló, A.C.G. Porter and S.D. Wagner   | <br>online data | 541–550 |
| <b>Correction</b><br>Crystal structure of an Aurora-A mutant that mimics Aurora-B bound to MLN8054: insights into selectivity and drug design  | C.A. Dodson, M. Kosmopoulos, M.W. Richards, B. Atrash, V. Bavetsias, J. Blagg and R. Bayliss                             |  | 551     |

---

## Index of Authors

|                 | PAGE |                      | PAGE |                  | PAGE |                     | PAGE |
|-----------------|------|----------------------|------|------------------|------|---------------------|------|
| Aleshin, A. E.  | 369  | Frigerio, L.         | 513  | Koike, T.        | 489  | Roggero, V. R.      | 349  |
| Allison, L. A.  | 349  | Frisch, C.           | 369  | Kosmopoulou, M.  | 551  | Saftig, P.          | e1   |
| Andrä, J.       | 477  | Gallo, K. A.         | 435  | Levy, C. W.      | 455  | Sakamoto, H.        | 423  |
| Aram, L.        | 445  | Gao, S.              | 499  | Leys, D.         | 455  | Sánchez-Tilló, E.   | 541  |
| Arbel, N.       | 445  | Gawlik, K.           | 369  | Liou, G.-Y.      | 435  | Sashikawa, M.       | 423  |
| Atrash, B.      | 551  | Geula, S.            | 445  | Lohi, J.         | 391  | Schröder, B.        | e1   |
| Balklava, Z.    | 401  | Girvan, H. M.        | 455  | Lowe, M.         | 401  | Schrul, B.          | 523  |
| Ball, M.        | 401  | Goldmann, T.         | 477  | Marshall, R. S.  | 513  | Seibold, S. A.      | 435  |
| Ballut, L.      | 467  | Gutsmann, T.         | 477  | Miller, E. M.    | 435  | Seo, P. J.          | 359  |
| Bavetsias, V.   | 551  | Hammer, M. U.        | 477  | Morohashi, Y.    | 401  | Shiryaev, S. A.     | 369  |
| Bayliss, R.     | 551  | Hartmann, D. J.      | 467  | Muller, L.       | 467  | Shoshan-Barmatz, V. | 445  |
| Bignon, M.      | 467  | Hatano, N.           | 489  | Munro, A. W.     | 455  | Sinning, I.         | 523  |
| Blagg, J.       | 551  | Hayakawa, H.         | 423  | Mutoh, H.        | 423  | Song, J.-S.         | 359  |
| Brauser, A.     | 477  | Hinton, S. D.        | 349  | Myers, M. P.     | 349  | Stec, B.            | 369  |
| Brezesinski, G. | 477  | Hughes, H.           | 401  | Olak, C.         | 477  | Strongin, A. Y.     | 369  |
| Cheesman, M. R. | 455  | Illman, S. A.        | 391  | Olsen, B. R.     | 467  | Suetake, I.         | 489  |
| Chen, J.        | 377  | Inforzato, A.        | 467  | Ozanne, S. E.    | 333  | Sueyoshi, N.        | 489  |
| Chen, W.        | 435  |                      |      |                  |      | Sugano, K.          | 423  |
| Cheong, J.      | 413  | Kameshita, I.        | 489  | Papadopoulou, V. | 541  | Sugiyama, Y.        | 489  |
| Cho, H. K.      | 413  | Kapp, K.             | 523  | Park, C.-M.      | 359  | Swingler, T. E.     | 391  |
| Clark, I. M.    | 391  | Kevorkian, L.        | 391  | Parker, A. E.    | 391  | Tajima, S.          | 489  |
| Cole, A. A.     | 535  | Kim, H. H.           | 413  | Porter, A. C. G. | 541  | Tonks, N. K.        | 349  |
| Culley, K. L.   | 391  | Kim, H.-J.           | 359  | Postigo, A.      | 541  | Wagner, S. D.       | 541  |
| Day, A. J.      | 467  | Kim, H. Y.           | 413  | Radichev, I. A.  | 369  | Wang, Z.            | 499  |
| Dobberstein, B. | 523  | Kim, K.              | 413  | Randeva, H. S.   | 377  | Warner, M. J.       | 333  |
| Dodson, C. A.   | 551  | Kim, K. H.           | 413  | Ratnikov, B. I.  | 369  | Williams, P.        | 455  |
| Dosemeci, A.    | 535  | Kim, M. J.           | 359  | Reese, T. S.     | 535  |                     |      |
|                 |      | Kim, Y.-S.           | 359  | Ricard-Blum, S.  | 467  | Young, D. A.        | 391  |
| Faye, C.        | 467  | Kinoshita, E.        | 489  | Richards, M. W.  | 551  | Zhang, H.           | 435  |
| Fisher, K.      | 455  | Kinoshita-Kikuta, E. | 489  | Rigby, S. E. J.  | 455  | Zhang, Y.           | 499  |
|                 |      | Knappik, A.          | 369  | Roberts, L. M.   | 513  |                     |      |

# Index of Authors

## Volume 427, 2010

|                  | PAGE    |                     | PAGE |                      | PAGE    |
|------------------|---------|---------------------|------|----------------------|---------|
| Aguiló, F.       | 255     | Frisch, C.          | 369  | Kim, M. J.           | 359     |
| Akaike, F.       | 171     | Fu, X.              | 313  | Kim, N.-H.           | 179     |
| Akanho, E.       | 225     | Fujioka, H.         | 105  | Kim, S.-M.           | 179     |
| Aleshin, A. E.   | 369     | Fujita, J.          | 57   | Kim, Y.-S.           | 359     |
| Allison, L. A.   | 349     | Funatsu, T.         | 247  | King, E. M.          | 113     |
| Andrà, J.        | 477     |                     |      | Kinoshita, E.        | 489     |
| Apraiz, A.       | 265     | Gallo, K. A.        | 435  | Kinoshita-Kikuta, E. | 489     |
| Arai, H.         | 161     | Gao, S.             | 499  | Kitamura, T.         | 171     |
| Aram, L.         | 445     | Gawlik, K.          | 369  | Knappik, A.          | 369     |
| Arbel, N.        | 445     | Geula, S.           | 445  | Ko, J.-K.            | 125     |
| Asumendi, A.     | 265     | Girvan, H. M.       | 455  | Koike, T.            | 489     |
| Atrash, B.       | 19, 551 | Goldmann, T.        | 477  | Kosmopoulou, M.      | 19, 551 |
|                  |         | Gong, W.            | 113  | Kozai, M.            | 161     |
| Balklava, Z.     | 401     | Gout, E.            | 323  | Kraveka, J. M.       | 265     |
| Ball, M.         | 401     | Gutsmann, T.        | 477  | Kumar, Y.            | 91      |
| Ball, S. G.      | 29      |                     |      |                      |         |
| Ballut, L.       | 467     | Hallberg, B.        | 217  | Lee, E. H.           | 125     |
| Bavetsias, V.    | 19, 551 | Hammer, M. U.       | 477  | Lee, Y.-C.           | 179     |
| Bayley, C.       | 29      | Hannun, Y. A.       | 265  | Levy, C. W.          | 455     |
| Bayliss, R.      | 19, 551 | Haro, D.            | 255  | Leys, D.             | 455     |
| Bergmann, M. W.  | 113     | Hartl, M. J.        | 197  | Li, L.               | 265     |
| Bernlohr, D. A.  | 143     | Hartmann, D. J.     | 467  | Li, W.               | 79      |
| Bick, I.         | 151     | Hata, Y.            | 237  | Liou, G.-Y.          | 435     |
| Bignon, M.       | 467     | Hatano, N.          | 489  | Liron, T.            | 305     |
| Billon-Grand, G. | 323     | Hauser, A. R.       | 217  | Lohi, J.             | 391     |
| Blagg, J.        | 19, 551 | Hayakawa, H.        | 423  | Lowe, M.             | 401     |
| Bligny, R.       | 323     | Henselmann, C.      | 205  | Ma, J.               | 125     |
| Bodem, J.        | 197     | Hess, B.            | 205  | Machesky, L. M.      | 41      |
| Boehm, N.        | 151     | Heuner, K.          | 57   | MacKintosh, C.       | 69      |
| Brauser, A.      | 477     | Higa, F.            | 57   | MacLagan, K.         | 225     |
| Brezesinski, G.  | 477     | Hinton, S. D.       | 349  | Maeta, K.            | 275     |
| Brosch, C.       | 151     | Hirata, Y.          | 171  | Marks, D. L.         | 143     |
| Bui, T. T.       | 225     | Hirayama, J.        | 237  | Marrero, P. F.       | 255     |
|                  |         | Holden, N. S.       | 113  | Marshall, R. S.      | 513     |
| Camarero, N.     | 255     | Holicky, E. L.      | 143  | Masuda, M.           | 161     |
| Campbell, D. G.  | 69      | Hoppel, C. L.       | 105  | Masuda, T.           | 313     |
| Chang, Y.-C.     | 179     | Hoshino, M.         | 297  | McKie, A. T.         | 289     |
| Cheesman, M. R.  | 455     | Houleberghs, H.     | 225  | Merabet, A.          | 225     |
| Chen, J.         | 377     | Huang, S.-H.        | 79   | Messing, R. O.       | 189     |
| Chen, W.         | 435     | Hughes, H.          | 401  | Miller, E. M.        | 435     |
| Cheng, Z.-J.     | 143     | Hwang, J.-H.        | 125  | Min, K.-S.           | 179     |
| Cheong, J.       | 413     | Hwang, S.           | 179  | Minami, Y.           | 237     |
| Chi, F.          | 79      | Idkowiak-Baldys, J. | 265  | Miura, S.            | 171     |
| Cho, H. K.       | 413     | Iizuka, R.          | 247  | Miyamoto, K.-i.      | 161     |
| Clark, I. M.     | 391     | Illman, S. A.       | 391  | Mori, N.             | 57      |
| Clarke, C. J.    | 265     | Im, G.-S.           | 179  | Morohashi, Y.        | 401     |
| Cole, A. A.      | 535     | Inforzato, A.       | 467  | Muller, L.           | 467     |
| Cotton, P.       | 323     | Ingledew, W. J.     | 49   | Munro, A. W.         | 455     |
| Crowther, S.     | 69      | Inoue, Y.           | 275  | Mutoh, H.            | 423     |
| Culley, K. L.    | 391     | Iqbal, T. H.        | 289  | Myers, M. P.         | 349     |
|                  |         | Ishiguro, M.        | 161  |                      |         |
| Davies, S. L.    | 135     | Ishikawa, C.        | 57   | Nahari, T.           | 305     |
| Day, A. J.       | 467     | Izawa, S.           | 275  | Nakagawa, K.         | 237     |
| Deng, J.         | 313     | Jelinska, C.        | 49   | Naples, C. J.        | 105     |
| Díaz Castro, J.  | 289     | Jin, U.-H.          | 179  | Neumann, D.          | 305     |
| Díaz, M. H.      | 217     | Johnson, C.         | 69   | Newton, P. M.        | 189     |
| Dieker, K.       | 151     | Jong, T. D.         | 79   | Newton, R.           | 113     |
| Dobberstein, B.  | 523     | Kajihara, H.        | 237  | Nickelsen, J.        | 205     |
| Dodson, C. A.    | 19, 551 | Kamei, Y.           | 171  | Nikolova, P. V.      | 225     |
| Dorn, K. V.      | 205     | Kameshita, I.       | 489  | Nishina, H.          | 237     |
| Dosemeci, A.     | 535     | Kanai, S.           | 171  | Nishino, I.          | 171     |
| Drake, A. F.     | 225     | Kang, Y.-J.         | 179  | Nomura, W.           | 275     |
| Dulermo, T.      | 323     | Kapp, K.            | 523  | O'Toole, J. F.       | 105     |
|                  |         | Katada, T.          | 237  | Obrdlik, P.          | 151     |
| Ezaki, O.        | 171     | Keipert, C.         | 151  | Ogawa, Y.            | 171     |
|                  |         | Kelety, B.          | 151  | Ohdate, T.           | 275     |
|                  |         | Kevorkian, L.       | 391  | Ohta, Y.             | 237     |
|                  |         | Kielty, C. M.       | 29   | Olak, C.             | 477     |
| Faye, C.         | 467     | Kim, C.-H.          | 179  | Olsen, B. R.         | 467     |
| Fisher, K.       | 455     | Kim, D. H.          | 125  | Ottmann, C.          | 217     |
| Flashman, E.     | 135     | Kim, H. H.          | 413  | Ouyang, Y.           | 79      |
| Ford, S. J.      | 289     | Kim, H.-J.          | 359  | Ozanee, S. E.        | 333     |
| Francis, M. S.   | 217     | Kim, H. Y.          | 413  | Pagano, B.           | 225     |
| Fraternali, F.   | 225     | Kim, J.-H.          | 179  | Pagano, R. E.        | 143     |
| Friedrich, T.    | 205     | Kim, K.             | 413  |                      |         |
| Frigerio, L.     | 513     | Kim, K. H.          | 413  |                      |         |

**Volume Author Index (continued)**

|                    | PAGE |                | PAGE |                 | PAGE |               | PAGE |
|--------------------|------|----------------|------|-----------------|------|---------------|------|
| Teruya, H.         | 57   | Veyel, D.      | 205  | Watzke, N.      | 151  | Yamazoe, S.   | 297  |
| Tonks, N. K.       | 349  | Vidal-Puig, A. | 1    | Weisleder, N.   | 125  | Yang, B.-S.   | 179  |
| Toth, R.           | 69   | Visegrády, B.  | 41   | Wheatley, C. L. | 143  | Yang, H.      | 313  |
| Troen, B. R.       | 171  | Vogel, W.      | 289  | White, M. F.    | 49   | Yasmin, L.    | 217  |
| Tselepis, C.       | 289  | Volknandt, W.  | 151  | Williams, P.    | 455  | Yeoh, K. K.   | 135  |
| Tsujimoto, T.      | 297  |                |      | Willmund, F.    | 205  | Yoshihara, T. | 313  |
|                    |      |                |      | Woo, J. S.      | 125  | Young, D. A.  | 391  |
| Ueno, T.           | 247  | Wagner, S. D.  | 541  | Wu, C.          | 79   |               |      |
| Uesugi, M.         | 297  | Wang, L.       | 79   | Wöhrl, B. M.    | 197  | Zhang, H.     | 435  |
| Usadel, B.         | 205  | Wang, T.-k.    | 143  |                 |      | Zhang, Y.     | 499  |
|                    |      | Wang, Z.       | 499  | Yamamoto, H.    | 161  | Zhao, G.      | 313  |
|                    |      | Ward, D. G.    | 289  | Yamamoto, K.    | 57   | Zoller, H.    | 289  |
|                    |      | Warner, M. J.  | 333  | Yamasaki, T.    | 237  |               |      |
| Veesenmeyer, J. L. | 217  | Watanabe, T.   | 237  | Yamazaki, Y.    | 171  |               |      |