

**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. Vanhaesebroeck** • 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. Bosca (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)

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. Imberty (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 (Vare)

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)

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. Smyth (Sheffield)

S. Spiegel (Richmond, VA)

S. Stack (Columbia, MO)

W. M. Stark (Glasgow)

H. Stenmark (Oslo)

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 Ltd on behalf of the Biochemical Society (the owner), and appears twice monthly (24 issues).
- **Editorial and publishing offices:** *Biochemical Journal*, Portland Press Ltd, 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 Beahes, Newcastle University.

● **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 unreferenced 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 Burnham Institute, 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 Ltd, 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 Ltd 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 Biotechnology 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 world	Euro price
One year (8 vols) Print and online	US\$3922	£1934	€3373
Online only	US\$3531	£1786	€3036
Single issues (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:email_sales@portland-services.com)).

● **Advertising** Enquiries about advertising should be addressed to: Mark Burgess, Editorial Department, Portland Press Ltd, 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).

## Reviews

**The emerging importance of group II PAKs***Published on the Internet 15 January 2010,**doi:10.1042/BJ20091173*

C.M. Wells and G.E. Jones

465–473

**Two-step and one-step secretion mechanisms in Gram-negative bacteria: contrasting the type IV secretion system and the chaperone-usheer pathway of pilus biogenesis***Published on the Internet 15 January 2010,**doi:10.1042/BJ20091518*

A.T. Rêgo, V. Chandran and G. Waksman



475–488

**Structure and function of the GINS complex, a key component of the eukaryotic replisome***Published on the Internet 15 January 2010,**doi:10.1042/BJ20091531*

S.A. MacNeill



489–500

**Taking the plunge: integrating structural, enzymatic and computational insights into a unified model for membrane-immersed rhomboid proteolysis***Published on the Internet 15 January 2010,**doi:10.1042/BJ20090861*

S. Urban



501–512

## Research Papers

Structural insights into the catalytic mechanism of *Trypanosoma cruzi* GPXI (glutathione peroxidase-like enzyme I)*Published as BJ Immediate Publication 3 November 2009,**doi:10.1042/BJ20091167*

S. Patel, S. Hussain, R. Harris, S. Sardival, J.M. Kelly, S.R. Wilkinson, P.C. Driscoll and S. Djordjevic



513–522

AR-C155858 is a potent inhibitor of monocarboxylate transporters MCT1 and MCT2 that binds to an intracellular site involving transmembrane helices 7–10

*Published as BJ Immediate Publication 20 November 2009,**doi:10.1042/BJ20091515*

M.J. Ovens, A.J. Davies, M.C. Wilson, C.M. Murray and A.P. Halestrap



523–530

Erybraedin C, a natural compound from the plant *Bituminaria bituminosa*, inhibits both the cleavage and religation activities of human topoisomerase I*Published as BJ Immediate Publication 3 November 2009,**doi:10.1042/BJ20091127*

C. Tesauro, P. Fiorani, I. D'Annessa, G. Chillemi, G. Turchi and A. Desideri



531–539

Activation of autophagy through modulation of 5'-AMP-activated protein kinase protects pancreatic  $\beta$ -cells from high glucose*Published as BJ Immediate Publication 11 November 2009,**doi:10.1042/BJ20090429*

D. Han, B. Yang, L.K. Olson, A. Greenstein, S.-H. Baek, K.J. Claycombe, J.L. Goudreau, S.-W. Yu and E.-K. Kim

541–551

PpoC from *Aspergillus nidulans* is a fusion protein with only one active haem*Published as BJ Immediate Publication 30 October 2009,**doi:10.1042/BJ20091096*

F. Brodhun, S. Schneider, C. Göbel, E. Hornung and I. Feussner



553–565

FLIM-FRET and FRAP reveal association of influenza virus haemagglutinin with membrane rafts

*Published as BJ Immediate Publication 4 November 2009,**doi:10.1042/BJ20091388*

S. Engel, S. Scolari, B. Thaa, N. Krebs, T. Korte, A. Herrmann and M. Veit

567–573

Androgen regulation of the prostatic tumour suppressor *NKX3.1* is mediated by its 3' untranslated region*Published as BJ Immediate Publication 3 November 2009,**doi:10.1042/BJ20091109*

M.A. Thomas, D.M. Preece and J.M. Bentel

575–583

## Contents

---

Kinetic and chemical characterization of aldehyde oxidation by fungal aryl-alcohol oxidase  
*Published as BJ Immediate Publication 5 November 2009,*  
*doi:10.1042/BJ20091499*

P. Ferreira, A. Hernández-Ortega, B. Herguedas,  
J. Rencoret, A. Gutiérrez, M.J. Martínez,  
J. Jiménez-Barbero, M. Medina and Á.T. Martínez



**585–593**

MSK1 regulates the transcription of IL-1ra in response to TLR activation in macrophages  
*Published as BJ Immediate Publication 19 November 2009,*  
*doi:10.1042/BJ20091062*

J. Darragh, O. Ananieva, A. Courtney, S. Elcombe and  
J.S.C. Arthur

**595–602**

GDP-mannose pyrophosphorylase is essential in the bloodstream form of *Trypanosoma brucei*  
*Published as BJ Immediate Publication 18 November 2009,*  
*doi:10.1042/BJ20090896*

H. Denton, S. Fyffe and T.K. Smith



**603–614**

---

## Index of Authors

	PAGE		PAGE		PAGE		PAGE
Ananieva, O.	595	Ferreira, P.	585	Kelly, J. M.	513	Schneider, S.	553
Arthur, J. S. C.	595	Feussner, I.	553	Kim, E.-K.	541	Scolari, S.	567
Baek, S.-H.	541	Fiorani, P.	531	Korte, T.	567	Smith, T. K.	603
Bentel, J. M.	575	Fyffe, S.	603	Krebs, N.	567		
Brodhun, F.	553	Göbel, C.	553	MacNeill, S. A.	489	Tesauro, C.	531
Chandran, V.	475	Goudreau, J. L.	541	Martínez, Á. T.	585	Thaa, B.	567
Chillemi, G.	531	Greenstein, A.	541	Martínez, M. J.	585	Thomas, M. A.	575
Claycombe, K. J.	541	Gutiérrez, A.	585	Medina, M.	585	Turchi, G.	531
Courtney, A.	595	Halestrap, A. P.	523	Murray, C. M.	523	Urban, S.	501
D'Annessa, I.	531	Han, D.	541	Olson, L. K.	541	Veit, M.	567
Darragh, J.	595	Harris, R.	513	Ovens, M. J.	523		
Davies, A. J.	523	Herguedas, B.	585	Patel, S.	513	Waksman, G.	475
Denton, H.	603	Hernández-Ortega, A.	585	Preece, D. M.	575	Wells, C. M.	465
Desideri, A.	531	Herrmann, A.	567	Rêgo, A. T.	475	Wilkinson, S. R.	513
Djordjevic, S.	513	Hornung, E.	553	Rencoret, J.	585	Wilson, M. C.	523
Driscoll, P. C.	513	Hussain, S.	513	Sardiwal, S.	513	Yang, B.	541
Elcombe, S.	595	Jiménez-Barbero, J.	585			Yu, S.-W.	541
Engel, S.	567	Jones, G. E.	465				

# Index of Authors

## Volume 425, 2010

	PAGE		PAGE		PAGE		PAGE
Akai, R.	117	Esser, J.	265	Kohno, K.	117	Prasad, M. K.	435
Akira, S.	361			Konno, H.	85	Preece, D. M.	575
Akutsu, H.	85			Korte, T.	567	Pribat, A.	1
Alberge, B.	149	Ferreira, P.	585	Kozielski, F.	55	Price, N. C.	353
Alderliesten, M. C.	225	Fessas, D.	413	Krebs, N.	567	Provost, P.	265
Althaus, N.	195	Feussner, I.	553	Kudo, I.	361		
Amyere, M.	127	Fiorani, P.	531			Qi, C.	435
Ananieva, O.	595	Fischer, L.	265	Lamas-Maceiras, M.	235		
Arthur, J. S. C.	595	Frankenberg-Dinkel, N.	425	Lambert, H.	245		
Assfalg, M.	413	Frazzon, J.	207	Landry, J.	245	Rådmark, O.	265
Au, W.-S.	215	Friedman, J. E.	215	Lebrasseur, N. K.	71	Rahman, S. M.	215
		Frohman, M. A.	179	Lee, C. K.	353	Rakonjac, M.	265
		Fuchs, M.	245	Lill, R.	207	Recino, A.	303
Baek, S.-H.	541	Futaki, S.	445	Lim, C. P.	95	Rêgo, A. T.	475
Bascunana, C.	149	Fyffe, S.	603	Lin, B. H.	95	Rencoret, J.	585
Belkina, A.	71			Liu, F.	41	Riemer, J.	195
Bender, K. W.	27			Liu, H.	71	Rochford, J. J.	215
Benovic, J. L.	169	Gannoun-Zaki, L.	149	Liu, M.	41	Rösch, P.	373
Bentel, J. M.	575	Giavalisco, P.	389	Lohmann, A.	389	Roth, D.	195
Bill, E.	207	Gisk, B.	425	Longhi, R.	413	Ruppelt, A.	381
Birss, A. J.	257	Gleghorn, L. J.	275	Lowe, C. E.	215		
Blanton, W. P.	71	Göbel, C.	553	Luo, J.	169		
Boltshauser, E.	127	González-Siso, I.	235	Lygren, B.	381	Samuelsson, B.	265
Bréhélin, C.	389	Goudreau, J. L.	541	Lynes, E.	195	Sardiwal, S.	513
Briesen, I.	389	Greenstein, A.	541			Sarnataro, D.	341
Brodhun, F.	553	Gringeri, E.	401	MacNeill, S. A.	489	Sasaki, Y.	361
Brunati, A. M.	401	Gross, J.	207	Maghzal, G. J.	285	Schneider, G.	265
Bulleid, N. J.	275	Guariento, M.	413	Majima, M.	361	Schneider, S.	553
Burgoyne, R. D.	159	Gutiérrez, A.	585	Malouitre, S.	137	Schwenkert, S.	207
Byrne, D. P.	257			Mancon, M.	401	Scolari, S.	567
		Hackney, D. D.	55	Martins, B. M.	373	Seguin, S. J.	245
Campana, V.	341	Halestrap, A. P.	523	Martínez, Á. T.	585	Selwood, D.	137
Cantley, L. C.	445	Hampton, M. B.	313	Martínez, M. J.	585	Sherwood, V.	303
Cao, X.	95	Han, D.	541	McCallion, A. S.	435	Shiga, K.	445
Caputo, A.	341	Hansen, H. G.	195	McCollum, A. K.	e1	Simmen, T.	195
Carneiro, I.	235	Hanson, A. D.	1	Medina, M.	585	Smalley, J. W.	257
Carra, S.	245	Hara, S.	361	Meurer, J.	207	Smith, T. K.	603
Carraro, A.	401	Harris, R.	513	Mojsin, M.	107	Snedden, W. A.	27
Carvou, N.	179	Haynes, L. P.	159	Molinari, H.	413	Soengas, P.	235
Casagrande, G.	e1	Herguedas, B.	585	Monk, C. R.	353	Sorgato, M. C.	341
Castro-Prego, R.	235	Hernández-Ortega, A.	585	Mosenden, R.	381	Steinhilber, D.	265
Cerdan, R.	149	Herrmann, A.	567	Mukai, H.	445	Stevanovic, M.	107
Cerdán, M. E.	235	Hirst, J.	327	Murakami, M.	361	Stokka, A. J.	381
Chalmers, A. D.	303	Hisabori, T.	85	Murakami-Fuse, T.	85		
Chandran, V.	475	Hofmann, B.	265	Murray, C. M.	523		
Charette, S. J.	245	Hornung, E.	553			Takayama, K.	445
Chillemi, G.	531	Hosoda, A.	117			Taskén, K.	381
Chvanov, M.	159	Hu, L.	435	Nakatani, Y.	361	Taylor, C. W.	61
Cillo, U.	401	Hussain, S.	513	Nassogne, M.-C.	127	Teleman, A. A.	13
Claycombe, K. J.	541	Hutti, J. E.	445	Negro, A.	341	Tepikin, A. V.	159
Cockcroft, S.	179			Netz, D. J. A.	207	Tesauro, C.	531
Cohen, P.	53	Ikeguchi, M.	85	Ng, D. C. H.	95	Thaa, B.	567
Collard, F.	127	Ishii, T.	361	Nidetzky, B.	455	Thomas, M. A.	575
Costanzo, M.	341	Ishikawa, Y.	361	Noel, G.	127	Tibaldi, E.	401
Costanzo, M.	595	Isu, A.	85			Tokuda, M.	117
Courtney, A.	127	Iwawaki, T.	117	Octave, J.-N.	127	Toninello, A.	401
Courtroy, P. J.	127			Olson, L. K.	541	Tran Van Ba, C.	149
Cowling, V. H.	295	Jaworska, A.	257	Ono, Y.	445	Trump, D.	275
Cox, A. G.	313	Jeffries, A.	303	O'Rahilly, S.	215	Turchi, G.	531
Crompton, M.	137	Jia, Y.	435	Oroguchi, T.	85	Turner, R.	285
		Jiménez-Barbero, J.	585	Oudshoorn, M. L.	353	Tyteca, D.	127
		Jones, G. E.	465	Ovens, M. J.	523		
D'Amico, F. E.	401					Ueki, K.	445
D'Annessa, I.	531	Kaan, H. Y. K.	55	Pagano, M. A.	401	Uematsu, S.	361
Daniel, R. M.	353	Kamei, D.	361	Pantazaka, E.	61	Ulaganathan, V.	55
Danson, M. J.	353	Kanwischer, M.	389	Parameswaran, N.	169	Urban, S.	501
Darragh, J.	595	Kato, Y.	285	Patel, S.	513		
Davies, A. J.	523	Kelly, J. M.	513	Patial, S.	169	van Blitterswijk, W. J.	225
de Crécy-Lagard, V.	1	Kelly, S. M.	353	Payne, V. A.	215	van der Luit, A. H.	225
DeFalco, T. A.	27	Kessler, F.	389	Petersen, O. H.	159	van Lummel, M.	225
Denis, G. V.	71	Kettle, A. J.	285	Peterson, M. E.	353	Van Schaffingen, E.	127
Denton, H.	603	Kim, E.-K.	541	Pierik, A. J.	207	Veit, M.	567
Desideri, A.	531	Klarenbeek, J. B.	225	Pierrot, N.	127	Verheij, M.	225
Desmedt, J.	127	Klimacek, M.	455	Poirier, D. J.	245	Vial, H.	149
Djordjevic, S.	513	Kohchi, T.	425	Porfirova, S.	389	Vidi, P.-A.	389
Djormann, P.	389	Kohn, E. C.	e1	Porter, K. J.	169	Vikkula, M.	127
Driscoll, P. C.	513			Potempa, J.	257		
Dube, H.	137						
Elcombe, S.	595						
Ellgaard, L.	195						
Engel, S.	567						

## Volume Author Index (continued)

---

	PAGE		PAGE		PAGE		PAGE
Vincent, M.-F.	127	Wawrzonek, K.	257	Wöhrl, B. M.	373	Yu, S.-W.	541
Vio, C.	401	Weinberg, C. S.	353				
		Wells, C. M.	465	Ximenes, V. F.	285	Zanzoni, S.	413
Waksman, G.	475	Wenzel, S.	373			Zbierzak, A. M.	389
Waller, J. C.	1	Wiame, E.	127	Yagi, H.	85	Zhang, T.	95
Walsh, C. M.	159	Wilkinson, S. R.	513	Yanase, Y.	179	Zhu, Y. T.	435
Wang, F.	71	Wille, C.	389	Yang, B.	541	Zhu, Y.-J.	435
Ward, A.	303	Wilson, M. C.	523	Yasui, Y.	425	Zurzolo, C.	341
		Winterbourn, C. C.	285, 313				