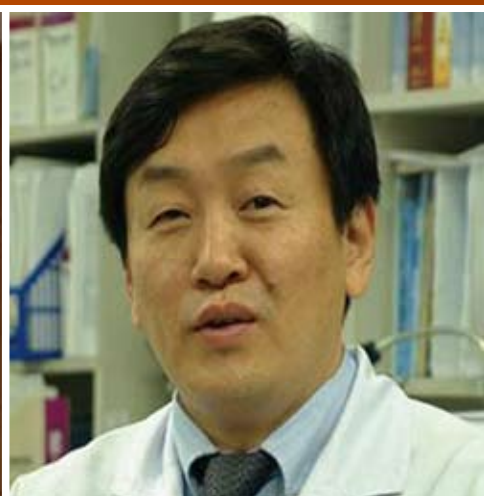
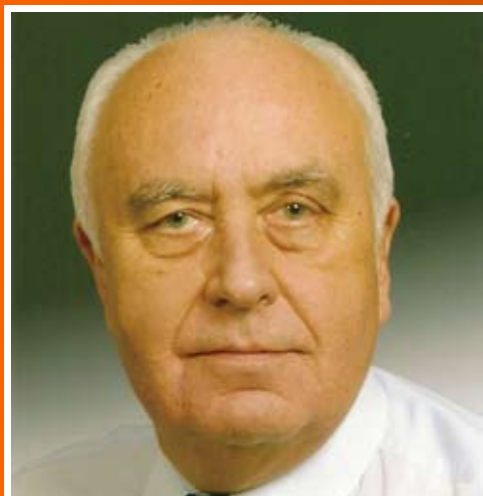
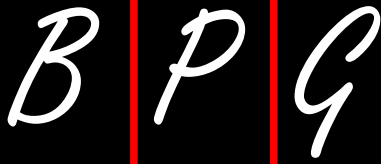


# World Journal of *Gastroenterology*





# Baishideng Publishing Group

Baishideng Home: <http://www.wjgnet.com/bpg>  
Baishideng Members: <http://www.wjgnet.com/bpg/edboard.htm>  
Express Submission and Peer-review System: <http://www.wjgnet.com/esps>

Baishideng Publishing Group Co., Limited  
bpgoffice@wjgnet.com  
© 2013 Baishideng. All rights reserved.

## ABOUT THE BPG

Baishideng Publishing Group Co., Limited (BPG), born of its predecessor on July 07, 2010, is a specialized publisher that mainly engages in editing, publishing, and distribution of World series medical journals. The earliest publication of the BPG dates back to January 15, 1993, when the “*Journal of New Digestology* (in Chinese)”, which was later renamed the “*World Chinese Journal of Digestology*” on January 15, 1999, was launched. On October 01, 1995, we launched the “*China National Journal of New Gastroenterology* (in English)”, which was renamed the “*World Journal of Gastroenterology (WJG)*” on January 15, 1995. To better edit and publish the two journals, we established the Baishideng BioMed Scientific Co., Ltd on December 11, 2006. BPG aims to guarantee the sustainable development of the company and publish top-quality journals following the international standards for publishing and editing practice.

As a publisher of high-quality basic and clinical medical journals, BPG currently publishes a total of 42 printed or online journals (including one in Chinese and 41 in English), of which 14 are included in PubMed Central, PubMed, Digital Object Identifier, and Directory of Open Access Journals. The high-quality articles published by the BPG’s journals included in PubMed Central accommodate approximately 5538 worldwide users daily.

The *WJG* is the BPG’s most important weekly journal which is included in the Science Citation Index Expanded and had an impact factor of 2.471 in 2011.

BPG adopts the open-access and peer-review publishing model. Our goals are to maximize the benefits to readers, authors and editors, and to provide an open platform for exchanging research findings among scientists as well as for exhibiting the latest scientific knowledge acquired by the public. Our journals cover a wide range of topics including virology, medical imaging, infectious

diseases, otorhinolaryngology, rheumatology, obstetrics and gynecology, respiratory, psychiatry, neurology, anesthesiology, urology, immunology, diabetes, dermatology, biochemistry and molecular biology, surgery, critical care medicine, gastroenterology and hepatology, pediatrics, cardiology, hematology, dentistry and stomatology, ophthalmology, pharmacology, experimental medicine, transplantation, medical genetics, orthopedics, oncology, translational medicine, nephrology, and methodology.

We look forward to your interactions with our journals.

Best regards,

Lian-Sheng Ma, President and Company Editor-in-Chief

### **Baishideng Publishing Group Co., Limited**

Room 1701, 17/F, Henan Building,  
No. 90 Jaffe Road, Wanchai,  
Hong Kong, China  
E-mail: [l.s.ma@wjgnet.com](mailto:l.s.ma@wjgnet.com)  
<http://www.wjgnet.com>

### **BPG PRODUCTION CENTER**

Beijing Baishideng BioMed Scientific Co., Limited  
Room 903, Building D, Ocean International Center,  
No. 62 Dongsihuan Zhonglu, Chaoyang District,  
Beijing 100025, China

### **BPG REPRESENTATIVE OFFICE**

USA Office  
8226 Regency Drive,  
Pleasanton, CA 94588, United States

## Introduction

*World Journal of Gastroenterology* (*World J Gastroenterol*, *WJG*, print ISSN 1007-9327, online ISSN 2219-2840, DOI: 10.3748) is a weekly, open-access, peer-reviewed journal supported by an editorial board of 1352 experts in gastroenterology from 64 countries.

## Aims and Scope

The primary task of *WJG* is to rapidly publish high-quality original articles, reviews, and commentaries in the fields of gastroenterology, hepatology, gastrointestinal endoscopy, gastrointestinal surgery, hepatobiliary surgery, gastrointestinal oncology, gastrointestinal radiation oncology, gastrointestinal imaging, gastrointestinal interventional therapy, gastrointestinal infectious diseases, gastrointestinal pharmacology, gastrointestinal pathophysiology, gastrointestinal pathology, evidence-based medicine in gastroenterology, pancreatology, gastrointestinal laboratory medicine, gastrointestinal molecular biology, gastrointestinal immunology, gastrointestinal microbiology, gastrointestinal genetics, gastrointestinal translational medicine, gastrointestinal diagnostics, and gastrointestinal therapeutics. *WJG* is dedicated to become an influential and prestigious journal in gastroenterology and hepatology, to promote the development of above disciplines, and to improve the diagnostic and therapeutic skill and expertise of clinicians.

## Editor-in-Chief

**Ferruccio Bonino, MD, PhD, Professor, Director** of Liver and Digestive Disease Division, Department of Internal Medicine, University of Pisa, Director of General Medicine 2 Unit University Hospital of Pisa, Via Roma 67, 56124 Pisa, Italy

**Myung-Hwan Kim, MD, PhD, Professor, Head**, Department of Gastroenterology, Director, Center for Biliary Diseases, University of Ulsan College of Medicine, Asan Medical Center, 388-1 Pungnap-2dong, Songpa-gu, Seoul 138-736, South Korea

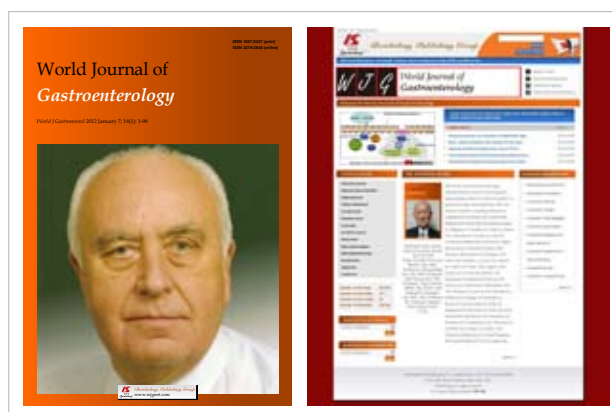
**Kjell Öberg, MD, PhD, Professor**, Department of Endocrine Oncology, Uppsala University Hospital, SE-751 85 Uppsala, Sweden

**Matt D Rutter, MBBS, MD, FRCP, Consultant Gastroenterologist, Senior Lecturer, Director**, Tees Bowel Cancer Screening Centre, University Hospital of North Tees, Durham University, Stockton-on-Tees, Cleveland TS19 8PE, United Kingdom

**Andrzej S Tarnawski, MD, PhD, DSc (Med), Professor** of Medicine, Chief Gastroenterology, VA Long Beach Health Care System, University of California, Irvine, CA, 5901 E. Seventh Str., Long Beach, CA 90822, United States

## Indexing/Abstracting

Current Contents®/Clinical Medicine, Science Citation Index Ex-



panded (also known as SciSearch®), Journal Citation Reports®, Index Medicus, MEDLINE, PubMed, PubMed Central, Digital Object Identifier, and Directory of Open Access Journals. ISI, Thomson Reuters, 2011 Impact Factor: 2.471 (32/74 Gastroenterology and Hepatology).

## Official Website

<http://www.wjgnet.com/1007-9327/index.htm>

## Editorial Board Members

<http://www.wjgnet.com/1007-9327/edboard.htm>

## Online Submission

<http://www.wjgnet.com/esps/>

## Frequency

Weekly

## Publisher

Baishideng Publishing Group Co., Limited  
Room 1701, 17/F, Henan Building,  
No. 90 Jaffe Road, Wanchai,  
Hong Kong, China  
E-mail: [bpgoffice@wjgnet.com](mailto:bpgoffice@wjgnet.com)  
<http://www.wjgnet.com>

## Contact Us

*World Journal of Gastroenterology* Editorial Department: Room 903, Building D, Ocean International Center, No. 62 Dongsihuan Zhonglu, Chaoyang District, Beijing 100025, China  
Telephone: +86-10-8538-1892  
Fax: +86-10-8538-1893  
E-mail: [wjg@wjgnet.com](mailto:wjg@wjgnet.com)  
<http://www.wjgnet.com>



## Editorial Board

2010-2013

The *World Journal of Gastroenterology* Editorial Board consists of 1352 members, representing a team of worldwide experts in gastroenterology and hepatology. They are from 64 countries, including Albania (1), Argentina (8), Australia (33), Austria (15), Belgium (14), Brazil (13), Brunei Darussalam (1), Bulgaria (2), Canada (21), Chile (3), China (82), Colombia (1), Croatia (2), Cuba (1), Czech (6), Denmark (9), Ecuador (1), Egypt (4), Estonia (2), Finland (8), France (29), Germany (87), Greece (22), Hungary (11), India (32), Indonesia (2), Iran (10), Ireland (6), Israel (13), Italy (124), Japan (140), Jordan (2), Kuwait (1), Lebanon (4), Lithuania (2), Malaysia (1), Mexico (11), Morocco (1), Moldova (1), Netherlands (32), New Zealand (2), Norway (13), Pakistan (2), Poland (11), Portugal (6), Romania (4), Russia (1), Saudi Arabia (3), Serbia (3), Singapore (11), Slovenia (1), South Africa (3), South Korea (46), Spain (43), Sri Lanka (1), Sweden (17), Switzerland (12), Thailand (1), Trinidad and Tobago (1), Turkey (30), United Arab Emirates (2), United Kingdom (95), United States (285), and Uruguay (1).

### HONORARY EDITORS-IN-CHIEF

James L Boyer, *New Haven*  
Ke-Ji Chen, *Beijing*  
Martin H Floch, *New Haven*  
Bo-Rong Pan, *Xi'an*  
Eamonn M Quigley, *Cork*  
Rafiq A Sheikh, *Sacramento*  
Nicholas J Talley, *Rochester*

### EDITOR-IN-CHIEF

Ferruccio Bonino, *Pisa*  
Myung-Hwan Kim, *Seoul*  
Kjell Öberg, *Uppsala*  
Matt Rutter, *Stockton-on-Tees*  
Andrzej S Tarnawski, *Long Beach*

### STRATEGY ASSOCIATE EDITORS-IN-CHIEF

You-Yong Lu, *Beijing*  
Peter Draganov, *Florida*  
Hugh J Freeman, *Vancouver*  
Maria Concepción Gutiérrez-Ruiz, *Mexico*  
Kazuhiro Hanazaki, *Kochi*  
Akio Inui, *Kagoshima*  
Kalpesh Jani, *Baroda*  
Javier San Martin, *Punta del Este*  
Natalia A Osna, *Omaha*  
Wei Tang, *Tokyo*  
Alan BR Thomson, *Edmonton*  
Harry Hua-Xiang Xia, *Livingston*  
John M Luk, *Hong Kong*  
Hiroshi Shimada, *Yokohama*

### GUEST EDITORIAL BOARD MEMBERS

Jiunn-Jong Wu, *Tainan*

Cheng-Shyong Wu, *Chia-Yi*  
Ta-Sen Yeh, *Taoyuan*  
Tsung-Hui Hu, *Kaohsiung*  
Chuah Seng-Kee, *Kaohsiung*  
I-Rue Lai, *Taipei*  
Jin-Town Wang, *Taipei*  
Ming-Shiang Wu, *Taipei*  
Teng-Yu Lee, *Taichung*  
Yang-Yuan Chen, *Changhua*  
Po-Shiuan Hsieh, *Taipei*  
Chao-Hung Hung, *Kaohsiung*  
Hon-Yi Shi, *Kaohsiung*  
Hui-kang Liu, *Taipei*  
Jen-Hwey Chiu, *Taipei*  
Chih-Chi Wang, *Kaohsiung*  
Wan-Long Chuang, *Kaohsiung*  
Wen-Hsin Huang, *Taichung*  
Hsu-Heng Yen, *Changhua*  
Ching Chung Lin, *Taipei*  
Chien-Jen Chen, *Taipei*  
Jaw-Ching Wu, *Taipei*  
Ming-Chih Hou, *Taipei*  
Kevin Cheng-Wen Hsiao, *Taipei*  
Chiun Hsu, *Taipei*  
Yu-Jen Chen, *Taipei*  
Chen Hsiu-Hsi Chen, *Taipei*  
Liang-Shun Wang, *Taipei*  
hun-Fa Yang, *Taichung*  
Min-Hsiung Pan, *Kaohsiung*  
Chun-Hung Lin, *Taipei*  
Ming-Whei Yu, *Taipei*  
Chuen Hsueh, *Taoyuan*  
Hsiu-Po Wang, *Taipei*  
Lein-Ray Mo, *Tainan*  
Ming-Lung Yu, *Kaohsiung*

### MEMBERS OF THE EDITORIAL BOARD



#### Albania

Bashkim Resuli, *Tirana*



#### Argentina

Julio H Carri, *Córdoba*  
Bernabe Matias Quesada, *Buenos Aires*  
Bernardo Frider, *Buenos Aires*  
Maria Ines Vaccaro, *Buenos Aires*  
Eduardo de Santibañes, *Buenos Aires*  
Adriana M Torres, *Rosario*  
Carlos J Pirola, *Buenos Aires*  
Silvia Sookoian, *Buenos Aires*



#### Australia

Finlay A Macrae, *Victoria*  
David Ian Watson, *Bedford Park*  
Jacob George, *Sydney*  
Leon Anton Adams, *Nedlands*  
Minoti V Apte, *Liverpool*  
Andrew V Biankin, *Sydney*  
Filip Braet, *Sydney*  
Guy D Eslick, *Sydney*  
Michael A Fink, *Melbourne*  
Mark D Gorrell, *Sydney*  
Michael Horowitz, *Adelaide*  
John E Kellow, *Sydney*  
Daniel Markovich, *Brisbane*

Phillip S Oates, *Perth*  
 Ross C Smith, *Sydney*  
 Kevin J Spring, *Brisbane*  
 Philip G Dinning, *Koagarah*  
 Christopher Christophi, *Melbourne*  
 Cuong D Tran, *North Adelaide*  
 Shan Rajendra, *Tasmania*  
 Rajvinder Singh, *Adelaide*  
 William Kemp, *Melbourne*  
 Phil Sutton, *Melbourne*  
 Richard Anderson, *Victoria*  
 Vance Matthews, *Melbourne*  
 Alexander G Heriot, *Melbourne*  
 Debbie Trinder, *Fremantle*  
 Ian C Lawrance, *Perth*  
 Adrian G Cummins, *Adelaide*  
 John K Olynyk, *Fremantle*  
 Alex Boussioutas, *Melbourne*  
 Emilia Prakoso, *Sydney*  
 Robert JL Fraser, *Daw Park*



### Austria

Wolfgang Mikulits, *Vienna*  
 Alfred Gangl, *Vienna*  
 Dietmar Öfner, *Salzburg*  
 Georg Roth, *Vienna*  
 Herwig R Cerwenka, *Graz*  
 Ashraf Dahaba, *Graz*  
 Markus Raderer, *Vienna*  
 Alexander M Hirschl, *Wien*  
 Thomas Wild, *Kapellerfeld*  
 Peter Ferenci, *Vienna*  
 Valentin Fuhrmann, *Vienna*  
 Kurt Lenz, *Linz*  
 Markus Peck-Radosavljevic, *Vienna*  
 Michael Trauner, *Vienna*  
 Stefan Riss, *Vienna*



### Belgium

Rudi Beyaert, *Gent*  
 Inge I Depoortere, *Leuven*  
 Olivier Detry, *Liège*  
 Benedicte Y De Winter, *Antwerp*  
 Etienne M Sokal, *Brussels*  
 Marc Peeters, *De Pintelaan*  
 Eddie Wisse, *Keerbergen*  
 Jean-Yves L Reginster, *Liège*  
 Mark De Ridder, *Brussel*  
 Freddy Penninckx, *Leuven*  
 Kristin Verbeke, *Leuven*  
 Lukas Van Oudenhove, *Leuven*  
 Leo van Grunsven, *Brussels*  
 Philip Meuleman, *Ghent*



### Brazil

Heitor Rosa, *Goiania*  
 Roberto J Carvalho-Filho, *Sao Paulo*  
 Damiao Carlos Moraes Santos, *Rio de Janeiro*  
 Marcelo Lima Ribeiro, *Braganca Paulista*  
 Eduardo Garcia Vilela, *Belo Horizonte*  
 Jaime Natan Eisig, *São Paulo*  
 Andre Castro Lyra, *Salvador*  
 José Liberato Ferreira Caboclo, *Brazil*  
 Yukie Sato-Kuwabara, *São Paulo*  
 Raquel Rocha, *Salvador*

Paolo R Salvalaggio, *Sao Paulo*  
 Ana Cristina Simões e Silva, *Belo Horizonte*  
 Joao Batista Teixeira Rocha, *Santa Maria*



### Brunei Darussalam

Vui Heng Chong, *Bandar Seri Begawan*



### Bulgaria

Zahariy Krastev, *Sofia*  
 Mihaela Petrova, *Sofia*



### Canada

Eldon Shaffer, *Calgary*  
 Nathalie Perreault, *Sherbrooke*  
 Philip H Gordon, *Montreal*  
 Ram Prakash Galwa, *Ottawa*  
 Baljinder Singh Salh, *Vancouver*  
 Claudia Zwingmann, *Montreal*  
 Alain Bitton, *Montreal*  
 Pingchang Yang, *Hamilton*  
 Michael F Byrne, *Vancouver*  
 Andrew L Mason, *Alberta*  
 John K Marshall, *Hamilton Ontario*  
 Kostas Pantopoulos, *Montreal*  
 Waliul Khan, *Ontario*  
 Eric M Yoshida, *Vancouver*  
 Geoffrey C Nguyen, *Toronto*  
 Devendra K Amre, *Montreal*  
 Tedros Bezabeh, *Winnipeg*  
 Wangxue Chen, *Ottawa*  
 Qiang Liu, *Saskatoon*



### Chile

De Aretxabala Xabier, *Santiago*  
 Marcelo A Beltran, *La Serena*  
 Silvana Zanlungo, *Santiago*



### China

Chi-Hin Cho, *Hong Kong*  
 Chun-Qing Zhang, *Jinan*  
 Ren Xiang Tan, *Nanjing*  
 Fei Li, *Beijing*  
 Hui-Jie Bian, *Xi'an*  
 Xiao-Peng Zhang, *Beijing*  
 Xing-Hua Lu, *Beijing*  
 Fu-Sheng Wang, *Beijing*  
 An-Gang Yang, *Xi'an*  
 Xiao-Ping Chen, *Wuhan*  
 Zong-Jie Cui, *Beijing*  
 Ming-Liang He, *Hong Kong*  
 Yuk-Tong Lee, *Hong Kong*  
 Qin Su, *Beijing*  
 Jian-Zhong Zhang, *Beijing*  
 Paul Kwong-Hang Tam, *Hong Kong*  
 Wen-Rong Xu, *Zhenjiang*  
 Chun-Yi Hao, *Beijing*  
 San-Jun Cai, *Shanghai*  
 Simon Law, *Hong Kong*  
 Yuk Him Tam, *Hong Kong*  
 De-Liang Fu, *Shanghai*  
 Eric WC Tse, *Hong Kong*

Justin CY Wu, *Hong Kong*  
 Nathalie Wong, *Hong Kong*  
 Jing Yuan Fang, *Shanghai*  
 Yi-Min Mao, *Shanghai*  
 Wei-Cheng You, *Beijing*  
 Xiang-Dong Wang, *Shanghai*  
 Xuan Zhang, *Beijing*  
 Zhao-Shen Li, *Shanghai*  
 Guang-Wen Cao, *Shanghai*  
 En-min Li, *Shantou*  
 Yu-Yuan Li, *Guangzhou*  
 Fook Hong Ng, *Hong Kong*  
 Hsiang-Fu Kung, *Hong Kong*  
 Wai Lun Law, *Hong Kong*  
 Eric CH Lai, *Hong Kong*  
 Jun Yu, *Hong Kong*  
 Ze-Guang Han, *Shanghai*  
 Bian zhao-xiang, *Hong Kong*  
 Wei-Dong Tong, *Chongqing*



### Colombia

Germán Campuzano-Maya, *Medellín*



### Croatia

Tamara Cacev, *Zagreb*  
 Marko Duvnjak, *Zagreb*



### Cuba

Damian C Rodriguez, *Havana*



### Czech

Milan Jirsa, *Praha*  
 Pavel Trunečka, *Prague*  
 Jan Bures, *Hradec Kralove*  
 Marcela Kopacova, *Hradec Kralove*  
 Ondrej Slaby, *Brno*  
 Radan Bruha, *Prague*



### Denmark

Asbjørn M Drewes, *Aalborg*  
 Leif Percival Andersen, *Copenhagen*  
 Jan Mollenhauer, *Odense C*  
 Morten Frisch, *Copenhagen S*  
 Jorgen Rask-Madsen, *Skodsborg*  
 Morten Hylander Møller, *Holte*  
 Søren Rafaelsen, *Vejle*  
 Vibeke Andersen, *Aabenraa*  
 Ole Haagen Nielsen, *Herlev*



### Ecuador

Fernando E Sempértogui, *Quito*



### Egypt

Zeinab Nabil Ahmed Said, *Cairo*  
 Hussein M Atta, *El-Minia*  
 Asmaa Gaber Abdou, *Shebein Elkom*

Maha Maher Shehata, *Mansoura*



### **Estonia**

Riina Salupere, *Tartu*  
Tamara Vorobjova, *Tartu*



### **Finland**

Saila Kauhanen, *Turku*  
Pauli Antero Puolakkainen, *Turku*  
Minna Nyström, *Helsinki*  
Juhani Sand, *Tampere*  
Jukka-Pekka Mecklin, *Jyväskylä*  
Lea Veijola, *Helsinki*  
Kaija-Leena Kolho, *Helsinki*  
Thomas Kietzmann, *Oulu*



### **France**

Boris Guiu, *Dijon*  
Baumert F Thomas, *Strasbourg*  
Alain L Servin, *Châtenay-Malabry*  
Patrick Marcellin, *Paris*  
Jean-Jacques Tuech, *Rouen*  
Francoise L Fabiani, *Angers*  
Jean-Luc Faucheron, *Grenoble*  
Philippe Lehours, *Bordeaux*  
Stephane Supiot, *Nantes*  
Lionel Bueno, *Toulouse*  
Flavio Maina, *Marseille*  
Paul Hofman, *Nice*  
Abdel-Majid Khatib, *Paris*  
Annie Schmid-Alliana, *Nice cedex 3*  
Frank Zerbib, *Bordeaux Cedex*  
Rene Gerolami Santandera, *Marseille*  
Sabine Colnot, *Paris*  
Catherine Daniel, *Lille Cedex*  
Thabut Dominique, *Paris*  
Laurent Huwart, *Paris*  
Alain Braillon, *Amiens*  
Bruno Bonaz, *Grenoble*  
Evelyne Schvoerer, *Strasbourg*  
M Coeffier, *Rouen*  
Mathias Chamailard, *Lille*  
Hang Nguyen, *Clermont-Ferrand*  
Veronique Vitton, *Marseille*  
Alexis Desmoulière, *Limoges*  
Juan Iovanna, *Marseille*



### **Germany**

Hans L Tillmann, *Leipzig*  
Stefan Kubicka, *Hannover*  
Elke Cario, *Essen*  
Hans Scherubl, *Berlin*  
Harald F Teutsch, *Ulm*  
Peter Konturek, *Erlangen*  
Thilo Hackert, *Heidelberg*  
Jurgen M Stein, *Frankfurt*  
Andrej Khandoga, *Munich*  
Karsten Schulmann, *Bochum*  
Jutta Elisabeth Lüttges, *Riegelsberg*  
Wolfgang Hagmann, *Heidelberg*  
Hubert Blum, *Freiburg*  
Thomas Bock, *Berlin*

Christa Buechler, *Regensburg*  
Christoph F Dietrich, *Bad Mergentheim*  
Ulrich R Fölsch, *Kiel*  
Nikolaus Gassler, *Aachen*  
Markus Gerhard, *Munich*  
Dieter Glebe, *Giessen*  
Klaus R Herrlinger, *Stuttgart*  
Eberhard Hildt, *Berlin*  
Joerg C Hoffmann, *Ludwigshafen*  
Joachim Labenz, *Siegen*  
Peter Malfertheiner, *Magdeburg*  
Sabine Mihm, *Göttingen*  
Markus Reiser, *Bochum*  
Steffen Rickes, *Magdeburg*  
Andreas G Schreyer, *Regensburg*  
Henning Schulze-Bergkamen, *Heidelberg*  
Ulrike S Stein, *Berlin*  
Wolfgang R Stremmel, *Heidelberg*  
Fritz von Weizsäcker, *Berlin*  
Stefan Wirth, *Wuppertal*  
Dean Bogoevski, *Hamburg*  
Bruno Christ, *Halle/Saale*  
Peter N Meier, *Hannover*  
Stephan Johannes Ott, *Kiel*  
Arndt Vogel, *Hannover*  
Dirk Haller, *Freising*  
Jens Standop, *Bonn*  
Jonas Mudter, *Erlangen*  
Jürgen Büning, *Lübeck*  
Matthias Ocker, *Erlangen*  
Joerg Trojan, *Frankfurt*  
Christian Trautwein, *Aachen*  
Jorg Kleeff, *Munich*  
Christian Rust, *Munich*  
Claus Hellerbrand, *Regensburg*  
Elke Roeb, *Giessen*  
Erwin Biecker, *Siegburg*  
Ingmar Königsrainer, *Tübingen*  
Jürgen Borlak, *Hannover*  
Axel M Gressner, *Aachen*  
Oliver Mann, *Hamburg*  
Marty Zdichavsky, *Tübingen*  
Christoph Reichel, *Bad Brückenau*  
Nils Habbe, *Marburg*  
Thomas Wex, *Magdeburg*  
Frank Ulrich Weiss, *Greifswald*  
Manfred V Singer, *Mannheim*  
Martin K Schilling, *Homburg*  
Philip D Hard, *Giessen*  
Michael Linnebacher, *Rostock*  
Ralph Graeser, *Freiburg*  
Rene Schmidt, *Freiburg*  
Robert Obermaier, *Freiburg*  
Sebastian Mueller, *Heidelberg*  
Andrea Hille, *Goettingen*  
Klaus Mönkemüller, *Bottrop*  
Elfriede Bollschweiler, *Köln*  
Siegfried Wagner, *Deggendorf*  
Dieter Schilling, *Mannheim*  
Joerg F Schlaak, *Essen*  
Michael Keese, *Frankfurt*  
Robert Grützmann, *Dresden*  
Ali Canbay, *Essen*  
Dirk Domagk, *Muenster*  
Jens Hoepfner, *Freiburg*  
Frank Tacke, *Aachen*  
Patrick Michl, *Marburg*  
Alfred A Königsrainer, *Tübingen*  
Kilian Weigand, *Heidelberg*  
Mohamed Hassan, *Duesseldorf*  
Gustav Paumgartner, *Munich*

Philippe N Khalil, *Munich*  
Martin Storr, *Munich*



### **Greece**

Andreas Larentzakis, *Athens*  
Tsianos Epameinondas, *Ioannina*  
Elias A Kouroumalis, *Heraklion*  
Helen Christopoulou-Aletra, *Thessaloniki*  
George Papatheodoridis, *Athens*  
Ioannis Kanellos, *Thessaloniki*  
Michael Koutsilieris, *Athens*  
T Choli-Papadopoulou, *Thessaloniki*  
Emanuel K Manesis, *Athens*  
Evangelos Tsiambas, *Ag Paraskevi Attiki*  
Konstantinos Mimidis, *Alexandroupolis*  
Spilios Manolakopoulos, *Athens*  
Spiros Sgouros, *Athens*  
Ioannis E Koutroubakis, *Heraklion*  
Stefanos Karagiannis, *Athens*  
Spiros Ladas, *Athens*  
Elena Vezali, *Athens*  
Dina G Tiniakos, *Athens*  
Ekaterini Chatzaki, *Alexandroupolis*  
Dimitrios Roukos, *Ioannina*  
George Sgourakis, *Athens*  
Maroulio Talieri, *Athens*



### **Hungary**

Peter L Lakatos, *Budapest*  
Yvette Mándi, *Szeged*  
Ferenc Sipos, *Budapest*  
György M Buzás, *Budapest*  
László Czákó, *Szeged*  
Peter Hegyi, *Szeged*  
Zoltan Rakonczay, *Szeged*  
Gyula Farkas, *Szeged*  
Zsuzsa Szondy, *Debrecen*  
Gabor Veres, *Budapest*  
Zsuzsa Schaff, *Budapest*



### **India**

Philip Abraham, *Mumbai*  
Sri P Misra, *Allahabad*  
Ramesh Roop Rai, *Jaipur*  
Nageshwar D Reddy, *Hyderabad*  
Rakesh Kumar Tandon, *New Delhi*  
Jai Dev Wig, *Chandigarh*  
Uday C Ghoshal, *Lucknow*  
Pramod Kumar Garg, *New Delhi*  
Barjesh Chander Sharma, *New Delhi*  
Gopal Nath, *Varanasi*  
Bhupendra Kumar Jain, *Delhi*  
Devinder Kumar Dhawan, *Chandigarh*  
Ashok Kumar, *Lucknow*  
Benjamin Perakath, *Tamil Nadu*  
Debidas Ghosh, *Midnapore*  
Pankaj Garg, *Panchkula*  
Samiran Nundy, *New Delhi*  
Virendra Singh, *Chandigarh*  
Bikash Medhi, *Chandigarh*  
Radha K Dhiman, *Chandigarh*  
Vandana Panda, *Mumbai*  
Vineet Ahuja, *New Delhi*  
SV Rana, *Chandigarh*

Deepak N Amarapurkar, *Mumbai*  
Abhijit Chowdhury, *Kolkata*  
Jasbir Singh, *Kurukshetra*  
B Mittal, *Lucknow*  
Sundeep Singh Saluja, *New Delhi*  
Pradyumna Kumar Mishra, *Mumbai*  
Runu Chakravarty, *Kolkata*  
Nagarajan Perumal, *New Delhi*



### Indonesia

David handoyo Muljono, *Jakarta*  
Andi Utama, *Tangerang*



### Iran

Seyed-Moayed Alavian, *Tehran*  
Reza Malekzadeh, *Tehran*  
Peyman Adibi, *Isfahan*  
Alireza Mani, *Tehran*  
Seyed Mohsen Dehghani, *Shiraz*  
Mohammad Abdollahi, *Tehran*  
Majid Assadi, *Bushehr*  
Arezoo Aghakhani, *Tehran*  
Marjan Mohammadi, *Tehran*  
Fariborz Mansour-Ghanaei, *Rasht*



### Ireland

Ross McManus, *Dublin*  
Billy Bourke, *Dublin*  
Catherine Greene, *Dublin*  
Ted Dinan, *Cork*  
Marion Rowland, *Dublin*



### Israel

Abraham R Eliakim, *Haifa*  
Simon Bar-Meir, *Tel Hashomer*  
Ami D Sperber, *Beer-Sheva*  
Boris Kirshtein, *Beer Sheva*  
Mark Pines, *Bet Dagan*  
Menachem Moshkowitz, *Tel-Aviv*  
Ron Shaoul, *Haifa*  
Shmuel Odes, *Beer Sheva*  
Sigal Fishman, *Tel Aviv*  
Alexander Becker, *Afula*  
Assy Nimer, *Safed*  
Eli Magen, *Ashdod*  
Amir Shlomain, *Tel-Aviv*



### Italy

Mauro Bortolotti, *Bologna*  
Gianlorenzo Dionigi, *Varese*  
Fiorucci Stefano, *Perugia*  
Roberto Berni Canani, *Naples*  
Ballarin Roberto, *Modena*  
Bruno Annibale, *Roma*  
Vincenzo Stanghellini, *Bologna*  
Giovanni B Gaeta, *Napoli*  
Claudio Bassi, *Verona*  
Mauro Bernardi, *Bologna*  
Giuseppe Chiarioni, *Valeggio*  
Michele Cicala, *Rome*

Dario Conte, *Milano*  
Francesco Costa, *Pisa*  
Giovanni D De Palma, *Naples*  
Giammarco Fava, *Ancona*  
Francesco Feo, *Sassari*  
Edoardo G Giannini, *Genoa*  
Fabio Grizzi, *Milan*  
Salvatore Gruttadauria, *Palermo*  
Pietro Invernizzi, *Milan*  
Ezio Laconi, *Cagliari*  
Giuseppe Montalto, *Palermo*  
Giovanni Musso, *Torino*  
Gerardo Nardone, *Napoli*  
Valerio Nobili, *Rome*  
Raffaele Pezzilli, *Bologna*  
Alberto Piperno, *Monza*  
Anna C Piscaglia, *Roma*  
Piero Portincasa, *Bari*  
Giovanni Tarantino, *Naples*  
Cesare Tosetti, *Porretta Terme*  
Alessandra Ferlini, *Ferrara*  
Alessandro Ferrero, *Torino*  
Donato F Altomare, *Bari*  
Giovanni Milito, *Rome*  
Giuseppe Sica, *Rome*  
Guglielmo Borgia, *Naples*  
Giovanni Latella, *L'Aquila*  
Salvatore Auricchio, *Naples*  
Alberto Biondi, *Rome*  
Alberto Tommasini, *Trieste*  
Antonio Basoli, *Roma*  
Giuliana Decorti, *Trieste*  
Marco Silano, *Roma*  
Michele Reni, *Milan*  
Pierpaolo Sileri, *Rome*  
Achille Iolascon, *Naples*  
Alessandro Granito, *Bologna*  
Angelo A Izzo, *Naples*  
Giuseppe Currò, *Messina*  
Pier Mannuccio Mannucci, *Milano*  
Marco Vivarelli, *Bologna*  
Massimo Levvero, *Rome*  
Massimo Ruggie, *Padova*  
Paolo Angeli, *Padova*  
Silvio Danese, *Milano*  
Antonello Trecca, *Rome*  
Antonio Gasbarrini, *Rome*  
Cesare Ruffolo, *Treviso*  
Massimo Falconi, *Verona*  
Fausto Catena, *Bologna*  
Francesco Manguso, *Napoli*  
Giancarlo Mansueto, *Verona*  
Luca Morelli, *Trento*  
Marco Scarpa, *Padova*  
Mario M D'Elis, *Florence*  
Francesco Luzzza, *Catanzaro*  
Franco Roviello, *Siena*  
Guido Torzilli, *Rozzano Milano*  
Luca Frulloni, *Verona*  
Lucia Malaguarnera, *Catania*  
Lucia Ricci Vitiani, *Rome*  
Mara Massimi, *L'Aquila*  
Mario Pescatori, *Rome*  
Mario Rizzetto, *Torino*  
Mirko D'Onofrio, *Verona*  
Nadia Peparini, *Rome*  
Paola De Nardi, *Milan*  
Paolo Aurelio, *Rome*  
Piero Amodio, *Padova*  
Riccardo Nascimbeni, *Brescia*

Vincenzo Villanacci, *Brescia*  
Vittorio Ricci, *Pavia*  
Silvia Fargion, *Milan*  
Luigi Bonavina, *Milano*  
Oliviero Riggio, *Rome*  
Fabio Pace, *Milano*  
Gabrio Bassotti, *Perugia*  
Giulio Marchesini, *Bologna*  
Roberto de Franchis, *Milano*  
Giovanni Monteleone, *Rome*  
C armelo Scarpignato, *Parma*  
Luca VC Valenti, *Milan*  
Urgesi Riccardo, *Rome*  
Marcello Persico, *Naples*  
Antonio Moschetta, *Bari*  
Luigi Muratori, *Bologna*  
Angelo Zullo, *Roma*  
Vito Annese, *Florence*  
Simone Lanini, *Rome*  
Alessandro Grasso, *Savona*  
Giovanni Targher, *Verona*  
Domenico Girelli, *Verona*  
Alessandro Cucchetti, *Bologna*  
Fabio Marra, *Florence*  
Michele Milella, *Rome*  
Francesco Franceschi, *Rome*  
Giuseppina De Petro, *Brescia*  
Salvatore Leonardi, *Catania*  
Cristiano Simone, *Santa Maria Imbaro*  
Bernardino Rampone, *Salerno*  
Francesco Crea, *Pisa*  
Walter Fries, *Messina*  
Antonio Craxi, *Palermo*  
Gerardo Rosati, *Potenza*  
Mario Guslandi, *Milano*  
Gianluigi Giannelli, *Bari*  
Paola Loria, *Modena*  
Paolo Sorrentino, *Avellino*  
Armando Santoro, *Rozzano*  
Gabriele Grassi, *Trieste*  
Antonio Orlicchio, *Rome*



### Japan

Tsuneo Kitamura, *Chiba*  
Katsutoshi Yoshizato, *Higashihiroshima*  
Masahiro Arai, *Tokyo*  
Shinji Tanaka, *Hiroshima*  
Keiji Hirata, *Kitakyushu*  
Yoshio Shirai, *Niigata*  
Susumu Ohmada, *Maebashi*  
Kenichi Ikejima, *Tokyo*  
Masatoshi Kudo, *Osaka*  
Yoshiaki Murakami, *Hiroshima*  
Masahiro Tajika, *Nagoya*  
Kentaro Yoshika, *Toyoake*  
Kyoichi Adachi, *Izumo*  
Yasushi Adachi, *Sapporo*  
Takafumi Ando, *Nagoya*  
Akira Andoh, *Otsu*  
Hitoshi Asakura, *Tokyo*  
Mitsuhiro Fujishiro, *Tokyo*  
Toru Hiyama, *Higashihiroshima*  
Yutaka Inagaki, *Kanagawa*  
Hiromi Ishibashi, *Nagasaki*  
Shunji Ishihara, *Izumo*  
Toru Ishikawa, *Niigata*  
Yoshiaki Iwasaki, *Okayama*  
Terumi Kamisawa, *Tokyo*



Norihiko Kokudo, *Tokyo*  
 Shin Maeda, *Tokyo*  
 Yasushi Matsuzaki, *Ibaraki*  
 Kenji Miki, *Tokyo*  
 Hiroto Miwa, *Hyogo*  
 Yoshiharu Motoo, *Kanazawa*  
 Kunihiko Murase, *Tusima*  
 Atsushi Nakajima, *Yokohama*  
 Yuji Naito, *Kyoto*  
 Hisato Nakajima, *Tokyo*  
 Hiroki Nakamura, *Yamaguchi*  
 Shotaro Nakamura, *Fukuoka*  
 Mikio Nishioka, *Niihama*  
 Hirohide Ohnishi, *Akita*  
 Kazuichi Okazaki, *Osaka*  
 Morikazu Onji, *Ehime*  
 Satoshi Osawa, *Hamamatsu*  
 Hidetsugu Saito, *Tokyo*  
 Yutaka Saito, *Tokyo*  
 Yasushi Sano, *Kobe*  
 Tomohiko Shimatani, *Kure*  
 Yukihiko Shimizu, *Toyama*  
 Shinji Shimoda, *Fukuoka*  
 Masayuki Sho, *Nara*  
 Hidekazu Suzuki, *Tokyo*  
 Shinji Togo, *Yokohama*  
 Satoshi Yamagiwa, *Niigata*  
 Takayuki Yamamoto, *Yokkaichi*  
 Hiroshi Yoshida, *Tokyo*  
 Norimasa Yoshida, *Kyoto*  
 Akihito Nagahara, *Tokyo*  
 Hiroaki Takeuchi, *Kochi*  
 Keiji Ogura, *Tokyo*  
 Kotaro Miyake, *Tokushima*  
 Mitsunori Yamakawa, *Yamagata*  
 Naoaki Sakata, *Sendai*  
 Naoya Kato, *Tokyo*  
 Satoshi Mamori, *Hyogo*  
 Shogo Kikuchi, *Aichi*  
 Shoichiro Sumi, *Kyoto*  
 Susumu Ikehara, *Osaka*  
 Taketo Yamaguchi, *Chiba*  
 Tokihiko Sawada, *Tochigi*  
 Tomoharu Yoshizumi, *Fukuoka*  
 Toshiyuki Ishiwata, *Tokyo*  
 Yasuhiro Fujino, *Akashi*  
 Yasuhiro Koga, *Isehara city*  
 Yoshihisa Takahashi, *Tokyo*  
 Yoshitaka Takuma, *Okayama*  
 Yutaka Yata, *Maebashi-city*  
 Itaru Endo, *Yokohama*  
 Kazuo Chijiwa, *Miyazaki*  
 Kouhei Fukushima, *Sendai*  
 Masahiro Iizuka, *Akita*  
 Mitsuyoshi Urashima, *Tokyo*  
 Munechika Enjoji, *Fukuoka*  
 Takashi Kojima, *Sapporo*  
 Takumi Kawaguchi, *Kurume*  
 Yoshiyuki Ueno, *Sendai*  
 Yuichiro Eguchi, *Saga*  
 Akihiro Tamori, *Osaka*  
 Atsushi Masamune, *Sendai*  
 Atsushi Tanaka, *Tokyo*  
 Hitoshi Tsuda, *Tokyo*  
 Takashi Kobayashi, *Tokyo*  
 Akimasa Nakao, *Nagoya*  
 Hiroyuki Uehara, *Osaka*  
 Masahito Uemura, *Kashihara*  
 Satoshi Tanno, *Sapporo*  
 Toshinari Takamura, *Kanazawa*  
 Yohei Kida, *Kainan*

Masanori Hatakeyama, *Tokyo*  
 Satoru Kakizaki, *Gunma*  
 Shuhei Nishiguchi, *Hyogo*  
 Yuichi Yoshida, *Osaka*  
 Manabu Morimoto, *Japan*  
 Mototsugu Kato, *Sapporo*  
 Naoki Ishii, *Tokyo*  
 Noriko Nakajima, *Tokyo*  
 Nobuhiro Ohkohchi, *Tsukuba*  
 Takanori Kanai, *Tokyo*  
 Kenichi Goda, *Tokyo*  
 Mitsugi Shimoda, *Mibu*  
 Zenichi Morise, *Nagoya*  
 Hitoshi Yoshiji, *Kashihara*  
 Takahiro Nakazawa, *Nagoya*  
 Utaroh Motosugi, *Yamanashi*  
 Nobuyuki Matsuhashi, *Tokyo*  
 Yasuhiro Kodera, *Nagoya*  
 Takayoshi Ito, *Tokyo*  
 Yasuhito Tanaka, *Nagoya*  
 Haruhiko Sugimura, *Hamamatsu*  
 Hiroki Yamaue, *Wakayama*  
 Masao Ichinose, *Wakayama*  
 Takaaki Arigami, *Kagoshima*  
 Nobuhiro Zaima, *Nara*  
 Naoki Tanaka, *Matsumoto*  
 Satoru Motoyama, *Akita*  
 Tomoyuki Shibata, *Toyoake*  
 Tatsuya Ide, *Kurume*  
 Tsutomu Fujii, *Nagoya*  
 Osamu Kanauchi, *Tokyo*  
 Atsushi Irisawa, *Aizuwakamatsu*  
 Hikaru Nagahara, *Tokyo*  
 Keiji Hanada, *Onomichi*  
 Keiichi Mitsuyama, *Fukuoka*  
 Shin Maeda, *Yokohama*  
 Takuya Watanabe, *Niigata*  
 Toshihiro Mitaka, *Sapporo*  
 Yoshiki Murakami, *Kyoto*  
 Tadashi Shimoyama, *Hirosaki*



#### Jordan

Ismail Matalka, *Irbid*  
 Khaled Jadallah, *Irbid*



#### Kuwait

Islam Khan, *Safat*



#### Lebanon

Bassam N Abboud, *Beirut*  
 Rami Moucari, *Beirut*  
 Ala I Sharara, *Beirut*  
 Rita Slim, *Beirut*



#### Lithuania

Giedrius Barauskas, *Kaunas*  
 Limas Kupcinskas, *Kaunas*



#### Malaysia

Andrew Seng Boon Chua, *Ipoh*



#### Mexico

Saúl Villa-Trevio, *Mexico*  
 Omar Vergara-Fernandez, *Mexico*  
 Diego Garcia-Compean, *Monterrey*  
 Arturo Panduro, *Jalisco*  
 Miguel Angel Mercado, *Distrito Federal*  
 Richard A Awad, *Mexico*  
 Aldo Torre Delgadillo, *Mexico*  
 Paulino Martínez Hernández Magro, *Celaya*  
 Carlos A Aguilar-Salinas, *Mexico*  
 Jesus K Yamamoto-Furusho, *Mexico*



#### Morocco

Samir Ahboucha, *Khoubribga*



#### Moldova

Igor Mishin, *Kishinev*



#### Netherlands

Ulrich Beuers, *Amsterdam*  
 Albert Frederik Pull ter Gunne, *Tilburg*  
 Jantine van Baal, *Heidelberglaan*  
 Wendy Wilhelmina Johanna de Leng, *Utrecht*  
 Gerrit A Meijer, *Amsterdam*  
 Lee Bouwman, *Leiden*  
 J Bart A Crusius, *Amsterdam*  
 Frank Hoentjen, *Haarlem*  
 Servaas Morré, *Amsterdam*  
 Chris JJ Mulder, *Amsterdam*  
 Paul E Sijens, *Groningen*  
 Karel van Erpecum, *Utrecht*  
 BW Marcel Spanier, *Arnhem*  
 Misha Luyer, *Sittard*  
 Pieter JF de Jonge, *Rotterdam*  
 Robert Christiaan Verdonk, *Groningen*  
 John Plukker, *Groningen*  
 Maarten Tushuizen, *Amsterdam*  
 Wouter de Herder, *Rotterdam*  
 Erwin G Zoetendal, *Wageningen*  
 Robert J de Negt, *Rotterdam*  
 Albert J Bredenoord, *Nieuwegein*  
 Annemarie de Vries, *Rotterdam*  
 Astrid van der Velde, *Ede*  
 Lodewijk AA Brosens, *Utrecht*  
 James CH Hardwick, *Leiden*  
 Loes van Keimpema, *Nijmegen*  
 WJ de Jonge, *Amsterdam*  
 Zuzana Zelinkova, *Rotterdam*  
 LN van Steenberghe, *Eindhoven*  
 Frank G Schaap, *Amsterdam*  
 Jeroen Maljaars, *Leiden*



#### New Zealand

Andrew S Day, *Christchurch*  
 Max S Petrov, *Auckland*



#### Norway

Espen Melum, *Oslo*



Trine Olsen, *Tromsø*  
 Eyvind J Paulssen, *Tromsø*  
 Rasmus Goll, *Tromsø*  
 Asle W Medhus, *Oslo*  
 Jon Arne Søreide, *Stavanger*  
 Kjetil Soreide, *Stavanger*  
 Reidar Fossmark, *Trondheim*  
 Trond Peder Flaten, *Trondheim*  
 Olav Dalgard, *Oslo*  
 Ole Høie, *Arendal*  
 Magdy El-Salhy, *Bergen*  
 Jørgen Valeur, *Oslo*



#### Pakistan

Shahab Abid, *Karachi*  
 Syed MW Jafri, *Karachi*



#### Poland

Beata Jolanta Jabłońska, *Katowice*  
 Halina Cichoż-Lach, *Lublin*  
 Tomasz Brzozowski, *Cracow*  
 Hanna Gregorek, *Warsaw*  
 Marek Hartleb, *Katowice*  
 Stanislaw J Konturek, *Krakow*  
 Andrzej Dabrowski, *Bialystok*  
 Jan Kulig, *Kraków*  
 Julian Swierczynski, *Gdansk*  
 Marek Bebenek, *Wroclaw*  
 Dariusz M Lebensztejn, *Bialystok*



#### Portugal

Ricardo Marcos, *Porto*  
 Guida Portela-Gomes, *Estoril*  
 Ana Isabel Lopes, *Lisboa Codex*  
 Raquel Almeida, *Porto*  
 Rui Tato Marinho, *Lisbon*  
 Ceu Figueiredo, *Porto*



#### Romania

Dan L Dumitrascu, *Cluj*  
 Adrian Saftoiu, *Craiova*  
 Andrada Seicean, *Cluj-Napoca*  
 Anca Trifan, *Iasi*



#### Russia

Vasiliy I Reshetnyak, *Moscow*



#### Saudi Arabia

Ibrahim A Al Mofleh, *Riyadh*  
 Abdul-Wahed Meshikhes, *Qatif*  
 Faisal Sanai, *Riyadh*



#### Serbia

Tamara M Alempijevic, *Belgrade*  
 Dusan M Jovanovic, *Sremska Kamenica*  
 Zoran Krivokapic, *Belgrade*



#### Singapore

Brian Kim Poh Goh, *Singapore*  
 Khek-Yu Ho, *Singapore*  
 Fock Kwong Ming, *Singapore*  
 Francis Seow-Choen, *Singapore*  
 Kok Sun Ho, *Singapore*  
 Kong Weng Eu, *Singapore*  
 Madhav Bhatia, *Singapore*  
 London Lucien Ooi, *Singapore*  
 Wei Ning Chen, *Singapore*  
 Richie Soong, *Singapore*  
 Kok Ann Gwee, *Singapore*



#### Slovenia

Matjaz Homan, *Ljubljana*



#### South Africa

Rosemary Joyce Burnett, *Pretoria*  
 Michael Kew, *Cape Town*  
 Roland Ndip, *Alice*



#### South Korea

Byung Chul Yoo, *Seoul*  
 Jae J Kim, *Seoul*  
 Jin-Hong Kim, *Suwon*  
 Marie Yeo, *Suwon*  
 Jeong Min Lee, *Seoul*  
 Eun-Yi Moon, *Seoul*  
 Joong-Won Park, *Goyang*  
 Hoon Jai Chun, *Seoul*  
 Myung-Gyu Choi, *Seoul*  
 Sang Kil Lee, *Seoul*  
 Sang Yeoup Lee, *Gyeongsangnam-do*  
 Won Ho Kim, *Seoul*  
 Dae-Yeul Yu, *Daejeon*  
 Donghee Kim, *Seoul*  
 Sang Geon Kim, *Seoul*  
 Sun Pyo Hong, *Geonggi-do*  
 Sung-Gil Chi, *Seoul*  
 Yeun-Jun Chung, *Seoul*  
 Ki-Baik Hahm, *Incheon*  
 Ji Kon Ryu, *Seoul*  
 Kyu Taek Lee, *Seoul*  
 Yong Chan Lee, *Seoul*  
 Seong Gyu Hwang, *Seongnam*  
 Seung Woon Paik, *Seoul*  
 Sung Kim, *Seoul*  
 Hong Joo Kim, *Seoul*  
 Hyoung-Chul Oh, *Seoul*  
 Nayoung Kim, *Seongnam-si*  
 Sang Hoon Ahn, *Seoul*  
 Seon Hahn Kim, *Seoul*  
 Si Young Song, *Seoul*  
 Young-Hwa Chung, *Seoul*  
 Hyo-Cheol Kim, *Seoul*  
 Kwang Jae Lee, *Swon*  
 Sang Min Park, *Seoul*  
 Young Chul Kim, *Seoul*  
 Do Hyun Park, *Seoul*  
 Dae Won Jun, *Seoul*  
 Dong Wan Seo, *Seoul*  
 Soon-Sun Hong, *Incheon*

Hoguen Kim, *Seoul*  
 Ho-Young Song, *Seoul*  
 Joo-Ho Lee, *Seoul*  
 Jung Eun Lee, *Seoul*  
 Jong H Moon, *Bucheon*



#### Spain

Eva Vaquero, *Barcelona*  
 Andres Cardenas, *Barcelona*  
 Laureano Fernández-Cruz, *Barcelona*  
 Antoni Farré, *Spain*  
 Maria-Angeles Aller, *Madrid*  
 Raul J Andrade, *Málaga*  
 Fernando Azpiroz, *Barcelona*  
 Josep M Bordas, *Barcelona*  
 Antoni Castells, *Barcelona*  
 Vicente Felipo, *Valencia*  
 Isabel Fabregat, *Barcelona*  
 Angel Lanas, *Zaragoza*  
 Juan-Ramón Larrubia, *Guadalajara*  
 María IT López, *Jaén*  
 Jesús M Prieto, *Pamplona*  
 Mireia Miquel, *Sabadell*  
 Ramon Bataller, *Barcelona*  
 Fernando J Corrales, *Pamplona*  
 Julio Mayol, *Madrid*  
 Matias A Avila, *Pamplona*  
 Juan Macías, *Seville*  
 Juan Carlos Laguna Egea, *Barcelona*  
 Juli Busquets, *Barcelona*  
 Belén Beltrán, *Valencia*  
 José Manuel Martin-Villa, *Madrid*  
 Lisardo Boscá, *Madrid*  
 Luis Grande, *Barcelona*  
 Pedro Lorenzo Majano Rodriguez, *Madrid*  
 Adolfo Benages, *Valencia*  
 Domínguez-Muñoz JE, *Santiago de Compostela*  
 Gloria González Aseguinolaza, *Navarra*  
 Javier Martin, *Granada*  
 Luis Bujanda, *San Sebastián*  
 Matilde Bustos, *Pamplona*  
 Luis Aparisi, *Valencia*  
 José Julián calvo Andrés, *Salamanca*  
 Benito Velayos, *Valladolid*  
 Javier Gonzalez-Gallego, *León*  
 Ruben Ciria, *Córdoba*  
 Francisco Rodriguez-Frias, *Barcelona*  
 Manuel Romero-Gómez, *Sevilla*  
 Albert Parés, *Barcelona*  
 Joan Roselló-Catafau, *Barcelona*



#### Sri Lanka

Arjuna De Silva, *Kelaniya*



#### Sweden

Stefan G Pierzynowski, *Lund*  
 Hanns-Ulrich Marschall, *Stockholm*  
 Lars A Pahlman, *Uppsala*  
 Helena Nordenstedt, *Stockholm*  
 Bobby Tingstedt, *Lund*  
 Evangelos Kalaitzakis, *Gothenburg*  
 Lars Erik Agréus, *Huddinge*  
 Annika Lindblom, *Stockholm*

Roland Andersson, *Lund*  
 Zongli Zheng, *Stockholm*  
 Mauro D'Amato, *Huddinge*  
 Greger Lindberg, *Stockholm*  
 Pär Erik Myrelið, *Linköping*  
 Sara Lindén, *Göteborg*  
 Sara Regné, *Malmö*  
 Åke Nilsson, *Lund*



### Switzerland

Jean L Frossard, *Geneva*  
 Andreas Geier, *Zürich*  
 Bruno Stieger, *Zürich*  
 Pascal Gervaz, *Geneva*  
 Paul M Schneider, *Zurich*  
 Felix Stickel, *Berne*  
 Fabrizio Montecucco, *Geneva*  
 Inti Zlobec, *Basel*  
 Michelangelo Foti, *Geneva*  
 Pascal Bucher, *Geneva*  
 Andrea De Gottardi, *Berne*  
 Christian Toso, *Geneva*



### Thailand

Weekitt Kittisupamongkol, *Bangkok*



### Trinidad and Tobago

Shivananda Nayak, *Mount Hope*



### Turkey

Tarkan Karakan, *Ankara*  
 Yusuf Bayraktar, *Ankara*  
 Ahmet Tekin, *Mersin*  
 Aydin Karabacakoglu, *Konya*  
 Osman C Ozdogan, *Istanbul*  
 Özlem Yilmaz, *Izmir*  
 Bülent Salman, *Ankara*  
 Can GONEN, *Kutahya*  
 Cuneyt Kayaalp, *Malatya*  
 Ekmel Tezel, *Ankara*  
 Eren Ersoy, *Ankara*  
 Hayrullah Derici, *Balıkesir*  
 Mehmet Refik Mas, *Etilik-Ankara*  
 Sinan Akay, *Tekirdag*  
 A Mithat Bozdayi, *Ankara*  
 Metin Basaranoglu, *Istanbul*  
 Mesut Tez, *Ankara*  
 Orhan Sezgin, *Mersin*  
 Mukaddes Esrefoglu, *Malatya*  
 Ilker Tasci, *Ankara*  
 Kemal Kismet, *Ankara*  
 Selin Kapan, *Istanbul*  
 Seyfettin Köklü, *Ankara*  
 Murat Sayan, *Kocaeli*  
 Sabahattin Kaymakoglu, *Istanbul*  
 Yucel Ustundag, *Zonguldak*  
 Can Gonen, *Istanbul*  
 Yusuf Yilmaz, *Istanbul*  
 Müge Tecder-Ünal, *Ankara*  
 İlhami Yüksel, *Ankara*



### United Arab Emirates

Fikri M Abu-Zidan, *Al-Ain*  
 Sherif M Karam, *Al-Ain*



### United Kingdom

Anastasios Koulaouzidis, *Edinburgh*  
 Sylvia LF Pender, *Southampton*  
 Hong-Xiang Liu, *Cambridge*  
 William Dickey, *Londonderry*  
 Simon D Taylor-Robinson, *London*  
 James Neuberger, *Birmingham*  
 Frank I Tovey, *London*  
 Kevin Robertson, *Glasgow*  
 Chew Thean Soon, *Manchester*  
 Geoffrey Burnstock, *London*  
 Vamsi R Velchuru, *United Kingdom*  
 Simon Afford, *Birmingham*  
 Navneet K Ahluwalia, *Stockport*  
 Lesley A Anderson, *Belfast*  
 Anthony TR Axon, *Leeds*  
 Jim D Bell, *London*  
 Alastair D Burt, *Newcastle*  
 Tatjana Crnogorac-Jurcevic, *London*  
 Daniel R Gaya, *Edinburgh*  
 William Greenhalf, *Liverpool*  
 Indra N Guha, *Southampton*  
 Stefan G Hübscher, *Birmingham*  
 Robin Hughes, *London*  
 Pali Hungin, *Stockton*  
 Janusz AZ Jankowski, *Oxford*  
 Peter Karayiannis, *London*  
 Patricia F Lalor, *Birmingham*  
 Giorgina Mieli-Vergani, *London*  
 D Mark Pritchard, *Liverpool*  
 Marco Senzolo, *Padova*  
 Roger Williams, *London*  
 M H Ahmed, *Southampton*  
 Christos Paraskeva, *Bristol*  
 Emad M El-Omar, *Aberdeen*  
 A M El-Tawil, *Birmingham*  
 Anne McCune, *Bristol*  
 Charles B Ferguson, *Belfast*  
 Chin Wee Ang, *Liverpool*  
 Clement W Imrie, *Glasgow*  
 Dileep N Lobo, *Nottingham*  
 Graham MacKay, *Glasgow*  
 Guy Fairbairn Nash, *Poole*  
 Ian Lindsey, *Oxford*  
 Jason CB Goh, *Birmingham*  
 Jeremy FL Cobbold, *London*  
 Julian RF Walters, *London*  
 Jamie Murphy, *London*  
 John Beynon, *Swansea*  
 John B Schofield, *Kent*  
 Anil George, *London*  
 Aravind Suppiah, *East Yorkshire*  
 Basil Ammori, *Salford*  
 Catherine Walter, *Cheltenham*  
 Chris Briggs, *Sheffield*  
 Jeff Butterworth, *Shrewsbury*  
 Nawfal Hussein, *Nottingham*  
 Patrick O'Dwyer, *Glasgow*  
 Rob Glynne-Jones, *Northwood*  
 Sharad Karandikar, *Birmingham*  
 Venkatesh Shanmugam, *Derby*

Yeng S Ang, *Wigan*  
 Alberto Quaglia, *London*  
 Andrew Fowell, *Southampton*  
 Gianpiero Gravante, *Leicester*  
 Piers Gatenby, *London*  
 Kondragunta Rajendra Prasad, *Leeds*  
 Sunil Dolwani, *Cardiff*  
 Andrew McCulloch Veitch, *Wolverhampton*  
 Brian Green, *Belfast*  
 Noriko Suzuki, *Middlesex*  
 Richard Parker, *North Staffordshire*  
 Shahid A Khan, *London*  
 Akhilesh B Reddy, *Cambridge*  
 Jean E Crabtree, *Leeds*  
 John S Leeds, *Sheffield*  
 Paul Sharp, *London*  
 Sumita Verma, *Brighton*  
 Thamara Perera, *Birmingham*  
 Donald Campbell McMillan, *Glasgow*  
 Kathleen B Bamford, *London*  
 Helen Coleman, *Belfast*  
 Eyad Elkord, *Manchester*  
 Mohammad Ilyas, *Nottingham*  
 Simon R Carding, *Norwich*  
 Ian Chau, *Sutton*  
 Claudio Nicoletti, *Norwich*  
 Hendrik-Tobias Arkenau, *London*  
 Muhammad Imran Aslam, *Leicester*  
 Giuseppe Orlando, *Oxford*  
 John S Leeds, *Aberdeen*  
 S Madhusudan, *Nottingham*  
 Amin Ibrahim Amin, *Dunfermline*  
 David C Hay, *Edinburgh*  
 Alan Burns, *London*



### United States

Tauseef Ali, *Oklahoma City*  
 George Y Wu, *Farmington*  
 Josef E Fischer, *Boston*  
 Thomas Clancy, *Boston*  
 John Morton, *Stanford*  
 Luca Stocchi, *Cleveland*  
 Kevin Michael Reavis, *Orange*  
 Shiu-Ming Kuo, *Buffalo*  
 Gary R Lichtenstein, *Philadelphia*  
 Natalie J Torok, *Sacramento*  
 Scott A Waldman, *Philadelphia*  
 Georgios Papachristou, *Pittsburgh*  
 Carla W Brady, *Durham*  
 Robert CG Martin, *Louisville*  
 Eugene P Ceppa, *Durham*  
 Shashi Bala, *Worcester*  
 Imran Hassan, *Springfield*  
 Klaus Thaler, *Columbia*  
 Andreas M Kaiser, *Los Angeles*  
 Shawn D Safford, *Norfolk*  
 Massimo Raimondo, *Jacksonville*  
 Kazuaki Takabe, *Richmond VA*  
 Stephen M Kavic, *Baltimore*  
 T Clark Gamblin, *Pittsburgh*  
 BS Anand, *Houston*  
 Ananthanarayanan M, *New York*  
 Anthony J Bauer, *Pittsburgh*  
 Edmund J Bini, *New York*  
 Xian-Ming Chen, *Omaha*  
 Ramsey Chi-man Cheung, *Palo Alto*  
 Parimal Chowdhury, *Arkansas*  
 Mark J Czaja, *New York*

Conor P Delaney, *Cleveland*  
Sharon DeMorrow, *Temple*  
Bijan Eghtesad, *Cleveland*  
Alessandro Fichera, *Chicago*  
Glenn T Furuta, *Aurora*  
Jean-Francois Geschwind, *Baltimore*  
Shannon S Glaser, *Temple*  
Ajay Goel, *Dallas*  
James H Grendell, *New York*  
Anna S Gukovskaya, *Los Angeles*  
Jamal A Ibdah, *Columbia*  
Atif Iqbal, *Omaha*  
Hajime Isomoto, *Rochester*  
Hartmut Jaeschke, *Kansas*  
Leonard R Johnson, *Memphis*  
Rashmi Kaul, *Tulsa*  
Ali Keshavarzian, *Chicago*  
Miran Kim, *Providence*  
Burton I Korelitz, *New York*  
Richard A Kozarek, *Seattle*  
Alyssa M Krasinskas, *Pittsburgh*  
Ming Li, *New Orleans*  
Zhiping Li, *Baltimore*  
Chen Liu, *Gainesville*  
Michael R Lucey, *Madison*  
James D Luketich, *Pittsburgh*  
Patrick M Lynch, *Houston*  
Willis C Maddrey, *Dallas*  
Mercedes Susan Mandell, *Aurora*  
Wendy M Mars, *Pittsburgh*  
Laura E Matarese, *Pittsburgh*  
Lynne V McFarland, *Washington*  
Stephan Menne, *New York*  
Didier Merlin, *Atlanta*  
George Michalopoulos, *Pittsburgh*  
James M Millis, *Chicago*  
Pramod K Mistry, *New Haven*  
Emiko Mizoguchi, *Boston*  
Peter L Moses, *Burlington*  
Masaki Nagaya, *Boston*  
Robert D Odze, *Boston*  
Stephen JD O'Keefe, *Pittsburgh*  
Zhiheng Pei, *New York*  
Raymund R Razonable, *Minnesota*  
Basil Rigas, *New York*  
Richard A Rippe, *Chapel Hill*  
Philip Rosenthal, *San Francisco*  
Stuart Sherman, *Indianapolis*  
Christina Surawicz, *Seattle*  
Wing-Kin Syn, *Durham*  
Yvette Taché, *Los Angeles*  
K-M Tchou-Wong, *New York*  
George Triadafilopoulos, *Stanford*  
Chung-Jyi Tsai, *Lexington*  
Andrew Ukleja, *Florida*  
Arnold Wald, *Wisconsin*  
Irving Waxman, *Chicago*  
Steven D Wexner, *Weston*  
Jackie Wood, *Ohio*  
Jian Wu, *Sacramento*  
Zobair M Younossi, *Virginia*  
Liqing Yu, *Winston-Salem*  
Ruben Zamora, *Pittsburgh*  
Michael E Zenilman, *New York*  
Michael A Zimmerman, *Colorado*  
Beat Schnüriger, *California*  
Clifford S Cho, *Madison*

R Mark Ghobrial, *Texas*  
Anthony T Yeung, *Philadelphia*  
Chang Kim, *West Lafayette*  
Balamurugan N Appakalai, *Minneapolis*  
Aejaz Nasir, *Tampa*  
Ashkan Farhadi, *Irvine*  
Kevin E Behrns, *Gainesville*  
Joseph J Cullen, *Iowa City*  
David J McGee, *Shreveport*  
Anthony J Demetris, *Pittsburgh*  
Dimitrios V Avgerinos, *New York*  
Dong-Hui Li, *Houston*  
Eric S Hungness, *Chicago*  
Giuseppe Orlando, *Winston Salem*  
Hai-Yong Han, *Phoenix*  
Huanbiao Mo, *Denton*  
Jong Park, *Tampa*  
Justin MM Cates, *Nashville*  
Charles P Heise, *Madison*  
Craig D Logsdon, *Houston*  
Ece A Mutlu, *Chicago*  
Jessica A Davila, *Houston*  
Rabih M Salloum, *Rochester*  
Amir Maqbul Khan, *Marshall*  
Bruce E Sands, *Boston*  
Chakshu Gupta, *Saint Joseph*  
Ricardo Alberto Cruciani, *New York*  
Mariana D Dabeva, *Bronx*  
Edward L Bradley III, *Sarasota*  
Martín E Fernández-Zapico, *Rochester*  
Henry J Binder, *New Haven*  
John R Grider, *Richmond*  
Ronnie Fass, *Tucson*  
Dinesh Vyas, *Washington*  
Wael El-Rifai, *Nashville*  
Craig J McClain, *Louisville*  
Christopher Mantyh, *Durham*  
Daniel S Straus, *Riverside*  
David A Brenner, *San Diego*  
Eileen F Grady, *San Francisco*  
Ekihiro Seki, *La Jolla*  
Fang Yan, *Nashville*  
Fritz Francois, *New York*  
Giamila Fantuzzi, *Chicago*  
Guang-Yin Xu, *Galveston*  
Jianyuan Chai, *Long Beach*  
JingXuan Kang, *Charlestown*  
Le Shen, *Chicago*  
Lin Zhang, *Pittsburgh*  
Mitchell L Shiffman, *Richmond*  
Douglas K Rex, *Indianapolis*  
Bo Shen, *Cleveland*  
Edward J Ciaccio, *New York*  
Jean S Wang, *Saint Louis*  
Bao-Ting Zhu, *Kansas*  
Tamir Miloh, *Phoenix*  
Eric R Kallwitz, *Chicago*  
Yujin Hoshida, *Cambridge*  
C Chris Yun, *Atlanta*  
Alan C Moss, *Boston*  
Oliver Grundmann, *Gainesville*  
Linda A Feagins, *Dallas*  
Chanjuan Shi, *Nashville*  
Xiaonan Han, *Cincinnati*  
William R Brugge, *Boston*  
Richard W McCallum, *El Paso*  
Lisa Ganley-Leal, *Boston*  
Lin-Feng Chen, *Urbana*

Elaine Y Lin, *New York*  
Julian Abrams, *New York*  
Arun Swaminath, *New York*  
Huiping Zhou, *Richmond*  
Korkut Uygun, *Boston*  
Anupam Bishayee, *Signal Hill*  
C Bart Rountree, *Hershey*  
Avinash Kambadakone, *Boston*  
Courtney W Houchen, *Oklahoma*  
Joshua R Friedman, *Philadelphia*  
Justin H Nguyen, *Jacksonville*  
Sophoclis Alexopoulos, *Los Angeles*  
Suryakanth R Gurudu, *Scottsdale*  
Wei Jia, *Kannapolis*  
Yoon-Young Jang, *Baltimore*  
Ourania M Andrisani, *West Lafayette*  
Roderick M Quiros, *Bethlehem*  
Timothy R Koch, *Washington*  
Adam S Cheifetz, *Boston*  
Lifang Hou, *Chicago*  
Thiru vengadam Muniraj, *Pittsburgh*  
Dhiraj Yadav, *Pittsburgh*  
Ying Gao, *Rockville*  
John F Gibbs, *Buffalo*  
Aaron Vinik, *Norfolk*  
Charles Thomas, *Oregon*  
Robert Jensen, *Bethesda*  
John W Wiley, *Ann Arbor*  
Jonathan Strosberg, *Tampa*  
Randeep Singh Kashyap, *New York*  
Kaye M Reid Lombardo, *Rochester*  
Lygia Stewart, *San Francisco*  
Martin D Zielinski, *Rochester*  
Matthew James Schuchert, *Pittsburgh*  
Michelle Lai, *Boston*  
Million Mulugeta, *Los Angeles*  
Patricia Sylla, *Boston*  
Pete Muscarella, *Columbus*  
Raul J Rosenthal, *Weston*  
Robert V Rege, *Dallas*  
Roberto Bergamaschi, *New York*  
Ronald S Chamberlain, *Livingston*  
Alexander S Rosemurgy, *Tampa*  
Run Yu, *Los Angeles*  
Samuel B Ho, *San Diego*  
Sami R Achem, *Florida*  
Sandeep Mukherjee, *Omaha*  
Santhi Swaroop Vege, *Rochester*  
Scott Steele, *Fort Lewis*  
Steven Hochwald, *Gainesville*  
Udayakumar Navaneethan, *Cincinnati*  
Radha Krishna Yellapu, *New York*  
Rupjyoti Talukdar, *Rochester*  
Shi-Ying Cai, *New Haven*  
Thérèse Tuohy, *Salt Lake City*  
Tor C Savidge, *Galveston*  
William R Parker, *Durham*  
Xiaofa Qin, *Newark*  
Zhang-Xu Liu, *Los Angeles*  
Adeel A Butt, *Pittsburgh*  
Dean Y Kim, *Detroit*  
Denesh Chitkara, *East Brunswick*  
Mohamad A Eloubeidi, *Alabama*  
JiPing Wang, *Boston*  
Oscar Joe Hines, *Los Angeles*  
Jon C Gould, *Madison*  
Kirk Ludwig, *Wisconsin*  
Mansour A Parsi, *Cleveland*



Perry Shen, *Winston-Salem*  
Piero Marco Fisichella, *Maywood*  
Marco Giuseppe Patti, *Chicago*  
Michael Leitman, *New York*  
Parviz M Pour, *Omaha*  
Florencia Georgina Que, *Rochester*  
Richard Hu, *Los Angeles*  
Robert E Schoen, *Pittsburgh*  
Valentina Medici, *Sacramento*  
Wojciech Blonski, *Philadelphia*  
Yuan-Ping Han, *Los Angeles*  
Grigoriy E Gurvits, *New York*  
Robert C Moesinger, *Ogden*  
Mark Bloomston, *Columbus*

Bronislaw L Slomiany, *Newark*  
Laurie DeLeve, *Los Angeles*  
Michel M Murr, *Tampa*  
John Marshall, *Columbia*  
Wilfred M Weinstein, *Los Angeles*  
Jonathan D Kaunitz, *Los Angeles*  
Josh Korzenik, *Boston*  
Kareem M Abu-Elmagd, *Pittsburgh*  
Michael L Schilsky, *New Haven*  
John David Christein, *Birmingham*  
Mark A Zern, *Sacramento*  
Ana J Coito, *Los Angeles*  
Golo Ahlenstiel, *Bethesda*  
Smruti R Mohanty, *Chicago*

Victor E Reyes, *Galveston*  
CS Pitchumoni, *New Brunswick*  
Yoshio Yamaoka, *Houston*  
Sukru H Emre, *New Haven*  
Branko Stefanovic, *Tallahassee*  
Jack R Wands, *Providence*  
Wen Xie, *Pittsburgh*  
Robert Todd Striker, *Madison*  
Shivendra Shukla, *Columbia*  
Laura E Nagy, *Cleveland*  
Fei Chen, *Morgantown*  
Kusum K Kharbanda, *Omaha*  
Pal Pacher, *Rockville*  
Pietro Valdastrì, *Nashville*

**GENERAL INFORMATION**

*World Journal of Gastroenterology* (*World J Gastroenterol*, *WJG*, print ISSN 1007-9327, online ISSN 2219-2840, DOI: 10.3748) is a peer-reviewed open access (OA) academic journal that aims to guide clinical practice and improve diagnostic and therapeutic skills of clinicians.

**Aim and scope**

The primary task of *WJG* is to rapidly publish high-quality original articles, reviews, and commentaries in the fields of gastroenterology, hepatology, gastrointestinal endoscopy, gastrointestinal surgery, hepatobiliary surgery, gastrointestinal oncology, gastrointestinal radiation oncology, gastrointestinal imaging, gastrointestinal interventional therapy, gastrointestinal infectious diseases, gastrointestinal pharmacology, gastrointestinal pathophysiology, gastrointestinal pathology, evidence-based medicine in gastroenterology, pancreatology, gastrointestinal laboratory medicine, gastrointestinal molecular biology, gastrointestinal immunology, gastrointestinal microbiology, gastrointestinal genetics, gastrointestinal translational medicine, gastrointestinal diagnostics, and gastrointestinal therapeutics. *WJG* is dedicated to become an influential and prestigious journal in gastroenterology and hepatology, to promote the development of above disciplines, and to improve the diagnostic and therapeutic skill and expertise of clinicians.

We encourage authors to submit their manuscripts to *WJG*. We will give priority to manuscripts that are supported by major national and international foundations and those that are of great basic and clinical significance.

*WJG* is edited and published by Baishideng Publishing Group (BPG). BPG has a strong professional editorial team composed of science editors, language editors and electronic editors. BPG currently publishes 42 OA clinical medical journals, including 41 in English, has a total of 15 471 editorial board members or peer reviewers, and is a world first-class publisher.

**Columns**

The columns in the issues of *WJG* will include: (1) Editorial: The editorial board members are invited to make comments on an important topic in their field in terms of its current research status and future directions to lead the development of this discipline; (2) Frontier: The editorial board members are invited to select a highly cited cutting-edge original paper of his/her own to summarize major findings, the problems that have been resolved and remain to be resolved, and future research directions to help readers understand his/her important academic point of view and future research directions in the field; (3) Diagnostic Advances: The editorial board members are invited to write high-quality diagnostic advances in their field to improve the diagnostic skills of readers. The topic covers general clinical diagnosis, differential diagnosis, pathological diagnosis, laboratory diagnosis, imaging diagnosis, endoscopic diagnosis, biotechnological diagnosis, functional diagnosis, and physical diagnosis; (4) Therapeutics Advances: The editorial board members are invited to write high-quality therapeutic advances in their field to help improve the therapeutic skills of readers. The topic covers medication therapy, psychotherapy, physical therapy, replacement therapy, interventional therapy, minimally invasive therapy, endoscopic therapy, transplantation therapy, and surgical therapy; (5) Field of Vision: The editorial board members are invited to write commentaries on classic articles, hot topic articles, or latest articles to keep readers at the forefront of research and increase their levels

of clinical research. Classic articles refer to papers that are included in Web of Knowledge and have received a large number of citations (ranking in the top 1%) after being published for more than years, reflecting the quality and impact of papers. Hot topic articles refer to papers that are included in Web of Knowledge and have received a large number of citations after being published for no more than 2 years, reflecting cutting-edge trends in scientific research. Latest articles refer to the latest published high-quality papers that are included in PubMed, reflecting the latest research trends. These commentary articles should focus on the status quo of research, the most important research topics, the problems that have now been resolved and remain to be resolved, and future research directions. Basic information about the article to be commented (including authors, article title, journal name, year, volume, and inclusive page numbers); (6) Minireviews: The editorial board members are invited to write short reviews on recent advances and trends in research of molecular biology, genomics, and related cutting-edge technologies to provide readers with the latest knowledge and help improve their diagnostic and therapeutic skills; (7) Review: To make a systematic review to focus on the status quo of research, the most important research topics, the problems that have now been resolved and remain to be resolved, and future research directions; (8) Topic Highlight: The editorial board members are invited to write a series of articles (7-10 articles) to comment and discuss a hot topic to help improve the diagnostic and therapeutic skills of readers; (9) Medical Ethics: The editorial board members are invited to write articles about medical ethics to increase readers' knowledge of medical ethics. The topic covers international ethics guidelines, animal studies, clinical trials, organ transplantation, etc; (10) Clinical Case Conference or Clinicopathological Conference: The editorial board members are invited to contribute high-quality clinical case conference; (11) Original Articles: To report innovative and original findings in gastroenterology; (12) Brief Articles: To briefly report the novel and innovative findings in gastroenterology; (13) Meta-Analysis: To evaluate the clinical effectiveness in gastroenterology by using data from two or more randomised control trials; (14) Case Report: To report a rare or typical case; (15) Letters to the Editor: To discuss and make reply to the contributions published in *WJG*, or to introduce and comment on a controversial issue of general interest; (16) Book Reviews: To introduce and comment on quality monographs of gastroenterology; and (17) Autobiography: The editorial board members are invited to write their autobiography to provide readers with stories of success or failure in their scientific research career. The topic covers their basic personal information and information about when they started doing research work, where and how they did research work, what they have achieved, and their lessons from success or failure.

**Name of journal**

*World Journal of Gastroenterology*

**ISSN**

ISSN 1007-9327 (print) ISSN 2219-2840 (online)

**Launch date**

October 1, 1995

**Frequency**

Weekly

## Instructions to authors

### **Editor-in-Chief**

**Ferruccio Bonino, MD, PhD, Professor, Director** of Liver and Digestive Disease Division, Department of Internal Medicine, University of Pisa, Director of General Medicine 2 Unit University Hospital of Pisa, Via Roma 67, 56124 Pisa, Italy

**Myung-Hwan Kim, MD, PhD, Professor, Head,** Department of Gastroenterology, Director, Center for Biliary Diseases, University of Ulsan College of Medicine, Asan Medical Center, 388-1 Pungnap-2dong, Songpa-gu, Seoul 138-736, South Korea

**Kjell Öberg, MD, PhD, Professor,** Department of Endocrine Oncology, Uppsala University Hospital, SE-751 85 Uppsala, Sweden

**Matt D Rutter, MBBS, MD, FRCP, Consultant Gastroenterologist, Senior Lecturer, Director,** Tees Bowel Cancer Screening Centre, University Hospital of North Tees, Durham University, Stockton-on-Tees, Cleveland TS19 8PE, United Kingdom

**Andrzej S Tarnawski, MD, PhD, DSc (Med), Professor** of Medicine, Chief Gastroenterology, VA Long Beach Health Care System, University of California, Irvine, CA, 5901 E. Seventh Str., Long Beach, CA 90822, United States

### **Editorial office**

Jin-Lei Wang, Director

Xiu-Xia Song, Vice Director

*World Journal of Gastroenterology*

Room 903, Building D, Ocean International Center,

No. 62 Dongsihuan Zhonglu, Chaoyang District,

Beijing 100025, China

Telephone: +86-10-59080039

Fax: +86-10-85381893

E-mail: [wjg@wjgnet.com](mailto:wjg@wjgnet.com)

<http://www.wjgnet.com>

### **Publisher**

Baishideng Publishing Group Co., Limited

Room 1701, 17/F, Henan Building,

No. 90 Jaffe Road, Wanchai, Hong Kong, China

Telephone: +852-58042046

Fax: +852-31158812

E-mail: [bpgoffice@wjgnet.com](mailto:bpgoffice@wjgnet.com)

<http://www.wjgnet.com>

### **Production center**

Beijing Baishideng BioMed Scientific Co., Limited

Room 903, Building D, Ocean International Center,

No. 62 Dongsihuan Zhonglu, Chaoyang District,

Beijing 100025, China

Telephone: +86-10-85381892

Fax: +86-10-85381893

### **Representative office**

USA Office

8226 Regency Drive,

Pleasanton, CA 94588-3144, United States

### **Instructions to authors**

Full instructions are available online at [http://www.wjgnet.com/1007-9327/g\\_info\\_20100315215714.htm](http://www.wjgnet.com/1007-9327/g_info_20100315215714.htm).

### **Indexed and Abstracted in**

Current Contents®/Clinical Medicine, Science Citation Index Expanded (also known as SciSearch®), Journal Citation Reports®, Index Medicus, MEDLINE, PubMed, PubMed Central, Digital Object Identifier, and Directory of Open Access Journals. ISI, Thomson Reuters, 2011 Impact Factor: 2.471 (32/74 Gastroenterology and Hepatology).

## SPECIAL STATEMENT

All articles published in this journal represent the viewpoints of the authors except where indicated otherwise.

### **Biostatistical editing**

Statistical review is performed after peer review. We invite an expert in Biomedical Statistics to evaluate the statistical method used in the paper, including *t*-test (group or paired comparisons), chi-squared test, Ridit, probit, logit, regression (linear, curvilinear, or stepwise), correlation, analysis of variance, analysis of covariance, etc. The reviewing points include: (1) Statistical methods should be described when they are used to verify the results; (2) Whether the statistical techniques are suitable or correct; (3) Only homogeneous data can be averaged. Standard deviations are preferred to standard errors. Give the number of observations and subjects (*n*). Losses in observations, such as drop-outs from the study should be reported; (4) Values such as ED50, LD50, IC50 should have their 95% confidence limits calculated and compared by weighted probit analysis (Bliss and Finney); and (5) The word 'significantly' should be replaced by its synonyms (if it indicates extent) or the *P* value (if it indicates statistical significance).

### **Conflict-of-interest statement**

In the interests of transparency and to help reviewers assess any potential bias, *WJG* requires authors of all papers to declare any competing commercial, personal, political, intellectual, or religious interests in relation to the submitted work. Referees are also asked to indicate any potential conflict they might have reviewing a particular paper. Before submitting, authors are suggested to read "Uniform Requirements for Manuscripts Submitted to Biomedical Journals: Ethical Considerations in the Conduct and Reporting of Research: Conflicts of Interest" from International Committee of Medical Journal Editors (ICMJE), which is available at: [http://www.icmje.org/ethical\\_4conflicts.html](http://www.icmje.org/ethical_4conflicts.html).

Sample wording: [Name of individual] has received fees for serving as a speaker, a consultant and an advisory board member for [names of organizations], and has received research funding from [names of organization]. [Name of individual] is an employee of [name of organization]. [Name of individual] owns stocks and shares in [name of organization]. [Name of individual] owns patent [patent identification and brief description].

### **Statement of informed consent**

Manuscripts should contain a statement to the effect that all human studies have been reviewed by the appropriate ethics committee or it should be stated clearly in the text that all persons gave their informed consent prior to their inclusion in the study. Details that might disclose the identity of the subjects under study should be omitted. Authors should also draw attention to the Code of Ethics of the World Medical Association (Declaration of Helsinki, 1964, as revised in 2004).

### **Statement of human and animal rights**

When reporting the results from experiments, authors should follow the highest standards and the trial should conform to Good Clinical Practice (for example, US Food and Drug Administration Good Clinical Practice in FDA-Regulated Clinical Trials; UK Medicines Research Council Guidelines for Good Clinical Practice in Clinical Trials) and/or the World Medical Association Declaration of Helsinki. Generally, we suggest authors follow the lead investigator's national standard. If doubt exists whether the research was conducted in accordance with the above standards, the authors must explain the rationale for their approach and demonstrate that the institutional review body explicitly approved the doubtful aspects of the study.

Before submitting, authors should make their study approved by the relevant research ethics committee or institutional review board. If human participants were involved, manuscripts must be accompanied by a statement that the experiments were undertaken with the understanding and appropriate informed consent of each. Any personal item or information will not be published without explicit consents from the involved patients. If experimental animals were used,



the materials and methods (experimental procedures) section must clearly indicate that appropriate measures were taken to minimize pain or discomfort, and details of animal care should be provided.

## SUBMISSION OF MANUSCRIPTS

Manuscripts should be typed in 1.5 line spacing and 12 pt. Book Antiqua with ample margins. Number all pages consecutively, and start each of the following sections on a new page: Title Page, Abstract, Introduction, Materials and Methods, Results, Discussion, Acknowledgements, References, Tables, Figures, and Figure Legends. Neither the editors nor the publisher are responsible for the opinions expressed by contributors. Manuscripts formally accepted for publication become the permanent property of Baishideng Publishing Group Co., Limited, and may not be reproduced by any means, in whole or in part, without the written permission of both the authors and the publisher. We reserve the right to copy-edit and put onto our website accepted manuscripts. Authors should follow the relevant guidelines for the care and use of laboratory animals of their institution or national animal welfare committee. For the sake of transparency in regard to the performance and reporting of clinical trials, we endorse the policy of the ICMJE to refuse to publish papers on clinical trial results if the trial was not recorded in a publicly-accessible registry at its outset. The only register now available, to our knowledge, is <http://www.clinicaltrials.gov> sponsored by the United States National Library of Medicine and we encourage all potential contributors to register with it. However, in the case that other registers become available you will be duly notified. A letter of recommendation from each author's organization should be provided with the contributed article to ensure the privacy and secrecy of research is protected.

Authors should retain one copy of the text, tables, photographs and illustrations because rejected manuscripts will not be returned to the author(s) and the editors will not be responsible for loss or damage to photographs and illustrations sustained during mailing.

### Online submissions

Manuscripts should be submitted through the Online Submission System at: <http://www.wjgnet.com/esps/>. Authors are highly recommended to consult the ONLINE INSTRUCTIONS TO AUTHORS ([http://www.wjgnet.com/1007-9327/g\\_info\\_20100315215714.htm](http://www.wjgnet.com/1007-9327/g_info_20100315215714.htm)) before attempting to submit online. For assistance, authors encountering problems with the Online Submission System may send an email describing the problem to [wjg@wjgnet.com](mailto:wjg@wjgnet.com), or by telephone: +86-10-85381892. If you submit your manuscript online, do not make a postal contribution. Repeated online submission for the same manuscript is strictly prohibited.

## MANUSCRIPT PREPARATION

All contributions should be written in English. All articles must be submitted using word-processing software. All submissions must be typed in 1.5 line spacing and 12 pt. Book Antiqua with ample margins. Style should conform to our house format. Required information for each of the manuscript sections is as follows:

### Title page

**Title:** Title should be less than 12 words.

**Running title:** A short running title of less than 6 words should be provided.

**Authorship:** Authorship credit should be in accordance with the standard proposed by ICMJE, based on (1) substantial contributions to conception and design, acquisition of data, or analysis and interpretation of data; (2) drafting the article or revising it critically for important intellectual content; and (3) final approval of the version to be published. Authors should meet conditions 1, 2, and 3.

**Institution:** Author names should be given first, then the complete

name of institution, city, province and postcode. For example, Xu-Chen Zhang, Li-Xin Mei, Department of Pathology, Chengde Medical College, Chengde 067000, Hebei Province, China. One author may be represented from two institutions, for example, George Sgourakis, Department of General, Visceral, and Transplantation Surgery, Essen 45122, Germany; George Sgourakis, 2nd Surgical Department, Korgialenio-Benakio Red Cross Hospital, Athens 15451, Greece

**Author contributions:** The format of this section should be: Author contributions: Wang CL and Liang L contributed equally to this work; Wang CL, Liang L, Fu JF, Zou CC, Hong F and Wu XM designed the research; Wang CL, Zou CC, Hong F and Wu XM performed the research; Xue JZ and Lu JR contributed new reagents/analytic tools; Wang CL, Liang L and Fu JF analyzed the data; and Wang CL, Liang L and Fu JF wrote the paper.

**Supportive foundations:** The complete name and number of supportive foundations should be provided, e.g., Supported by National Natural Science Foundation of China, No. 30224801

**Correspondence to:** Only one corresponding address should be provided. Author names should be given first, then author title, affiliation, the complete name of institution, city, postcode, province, country, and email. All the letters in the email should be in lower case. A space interval should be inserted between country name and email address. For example, Montgomery Bissell, MD, Professor of Medicine, Chief, Liver Center, Gastroenterology Division, University of California, Box 0538, San Francisco, CA 94143, United States. [montgomery.bissell@ucsf.edu](mailto:montgomery.bissell@ucsf.edu)

**Telephone and fax:** Telephone and fax should consist of +, country number, district number and telephone or fax number, e.g., Telephone: +86-10-85381892 Fax: +86-10-85381893

**Peer reviewers:** All articles received are subject to peer review. Normally, three experts are invited for each article. Decision on acceptance is made only when at least two experts recommend publication of an article. All peer-reviewers are acknowledged on Express Submission and Peer-review System website.

### Abstract

There are unstructured abstracts (no less than 200 words) and structured abstracts. The specific requirements for structured abstracts are as follows:

An informative, structured abstract should accompany each manuscript. Abstracts of original contributions should be structured into the following sections: AIM (no more than 20 words; Only the purpose of the study should be included. Please write the Aim in the form of "To investigate/study/..."), METHODS (no less than 140 words for Original Articles; and no less than 80 words for Brief Articles), RESULTS (no less than 150 words for Original Articles and no less than 120 words for Brief Articles; You should present *P* values where appropriate and must provide relevant data to illustrate how they were obtained, e.g.,  $6.92 \pm 3.86$  vs  $3.61 \pm 1.67$ ,  $P < 0.001$ ), and CONCLUSION (no more than 26 words).

### Key words

Please list 5-10 key words, selected mainly from *Index Medicus*, which reflect the content of the study.

### Core tip

Please write a summary of less than 100 words to outline the most innovative and important arguments and core contents in your paper to attract readers.

### Text

For articles of these sections, original articles and brief articles, the main text should be structured into the following sections: INTRODUCTION, MATERIALS AND METHODS, RESULTS and

## Instructions to authors

DISCUSSION, and should include appropriate Figures and Tables. Data should be presented in the main text or in Figures and Tables, but not in both.

### Illustrations

Figures should be numbered as 1, 2, 3, *etc.*, and mentioned clearly in the main text. Provide a brief title for each figure on a separate page. Detailed legends should not be provided under the figures. This part should be added into the text where the figures are applicable. Keeping all elements compiled is necessary in line-art image. Scale bars should be used rather than magnification factors, with the length of the bar defined in the legend rather than on the bar itself. File names should identify the figure and panel. Avoid layering type directly over shaded or textured areas. Please use uniform legends for the same subjects. For example: Figure 1 Pathological changes in atrophic gastritis after treatment. A: ...; B: ...; C: ...; D: ...; E: ...; F: ...; G: ...*etc.* It is our principle to publish high resolution-figures for the E-versions.

### Tables

Three-line tables should be numbered 1, 2, 3, *etc.*, and mentioned clearly in the main text. Provide a brief title for each table. Detailed legends should not be included under tables, but rather added into the text where applicable. The information should complement, but not duplicate the text. Use one horizontal line under the title, a second under column heads, and a third below the Table, above any footnotes. Vertical and italic lines should be omitted.

### Notes in tables and illustrations

Data that are not statistically significant should not be noted. <sup>a</sup>*P* < 0.05, <sup>b</sup>*P* < 0.01 should be noted (*P* > 0.05 should not be noted). If there are other series of *P* values, <sup>c</sup>*P* < 0.05 and <sup>d</sup>*P* < 0.01 are used. A third series of *P* values can be expressed as <sup>e</sup>*P* < 0.05 and <sup>f</sup>*P* < 0.01. Other notes in tables or under illustrations should be expressed as <sup>1</sup>F, <sup>2</sup>F, <sup>3</sup>F; or sometimes as other symbols with a superscript (Arabic numerals) in the upper left corner. In a multi-curve illustration, each curve should be labeled with ●, ○, ■, □, ▲, △, *etc.*, in a certain sequence.

### Acknowledgments

Brief acknowledgments of persons who have made genuine contributions to the manuscript and who endorse the data and conclusions should be included. Authors are responsible for obtaining written permission to use any copyrighted text and/or illustrations.

## REFERENCES

### Coding system

The author should number the references in Arabic numerals according to the citation order in the text. Put reference numbers in square brackets in superscript at the end of citation content or after the cited author's name. For citation content which is part of the narration, the coding number and square brackets should be typeset normally. For example, "Crohn's disease (CD) is associated with increased intestinal permeability<sup>[1,2]</sup>". If references are cited directly in the text, they should be put together within the text, for example, "From references<sup>[19,22-24]</sup>, we know that..."

When the authors write the references, please ensure that the order in text is the same as in the references section, and also ensure the spelling accuracy of the first author's name. Do not list the same citation twice.

### PMID and DOI

Please provide PubMed citation numbers to the reference list, *e.g.*, PMID and DOI, which can be found at <http://www.ncbi.nlm.nih.gov/sites/entrez?db=pubmed> and <http://www.crossref.org/SimpleTextQuery/>, respectively. The numbers will be used in E-version of this journal.

### Style for journal references

Authors: the name of the first author should be typed in bold-faced letters. The family name of all authors should be typed with the initial letter capitalized, followed by their abbreviated first and middle

initials. (For example, Lian-Sheng Ma is abbreviated as Ma LS, Bo-Rong Pan as Pan BR). The title of the cited article and italicized journal title (journal title should be in its abbreviated form as shown in PubMed), publication date, volume number (in black), start page, and end page [PMID: 11819634 DOI: 10.3748/wjg.13.5396].

### Style for book references

Authors: the name of the first author should be typed in bold-faced letters. The surname of all authors should be typed with the initial letter capitalized, followed by their abbreviated middle and first initials. (For example, Lian-Sheng Ma is abbreviated as Ma LS, Bo-Rong Pan as Pan BR) Book title. Publication number. Publication place: Publication press, Year: start page and end page.

### Format

#### Journals

*English journal article (list all authors and include the PMID where applicable)*

- 1 **Jung EM**, Clevert DA, Schreyer AG, Schmitt S, Rennert J, Kubale R, Feuerbach S, Jung F. Evaluation of quantitative contrast harmonic imaging to assess malignancy of liver tumors: A prospective controlled two-center study. *World J Gastroenterol* 2007; **13**: 6356-6364 [PMID: 18081224 DOI: 10.3748/wjg.13.6356]

*Chinese journal article (list all authors and include the PMID where applicable)*

- 2 **Lin GZ**, Wang XZ, Wang P, Lin J, Yang FD. Immunologic effect of Jianpi Yishen decoction in treatment of Pixu-diarhoea. *Shijie Huaren Xiaohua Zazhi* 1999; **7**: 285-287

*In press*

- 3 **Tian D**, Araki H, Stahl E, Bergelson J, Kreitman M. Signature of balancing selection in Arabidopsis. *Proc Natl Acad Sci USA* 2006; In press

*Organization as author*

- 4 **Diabetes Prevention Program Research Group**. Hypertension, insulin, and proinsulin in participants with impaired glucose tolerance. *Hypertension* 2002; **40**: 679-686 [PMID: 12411462 PMCID:2516377 DOI:10.1161/01.HYP.00000035706.28494.09]

*Both personal authors and an organization as author*

- 5 **Vallancien G**, Emberton M, Harving N, van Moorselaar RJ; Alf-One Study Group. Sexual dysfunction in 1, 274 European men suffering from lower urinary tract symptoms. *J Urol* 2003; **169**: 2257-2261 [PMID: 12771764 DOI:10.1097/01.ju.0000067940.76090.73]

*No author given*

- 6 21st century heart solution may have a sting in the tail. *BMJ* 2002; **325**: 184 [PMID: 12142303 DOI:10.1136/bmj.325.7357.184]

*Volume with supplement*

- 7 **Geraud G**, Spierings EL, Keywood C. Tolerability and safety of frovatriptan with short- and long-term use for treatment of migraine and in comparison with sumatriptan. *Headache* 2002; **42** Suppl 2: S93-99 [PMID: 12028325 DOI:10.1046/j.1526-4610.42.s2.7.x]

*Issue with no volume*

- 8 **Banit DM**, Kaufer H, Hartford JM. Intraoperative frozen section analysis in revision total joint arthroplasty. *Clin Orthop Relat Res* 2002; (**401**): 230-238 [PMID: 12151900 DOI:10.1097/00003086-200208000-00026]

*No volume or issue*

- 9 Outreach: Bringing HIV-positive individuals into care. *HRS-A Careaction* 2002; 1-6 [PMID: 12154804]

### Books

*Personal author(s)*

- 10 **Sherlock S**, Dooley J. Diseases of the liver and biliary system. 9th ed. Oxford: Blackwell Sci Pub, 1993: 258-296

*Chapter in a book (list all authors)*

- 11 **Lam SK**. Academic investigator's perspectives of medical treatment for peptic ulcer. In: Swabb EA, Azabo S. Ulcer disease: investigation and basis for therapy. New York: Marcel Dekker, 1991: 431-450

*Author(s) and editor(s)*

- 12 **Breedlove GK**, Schorfheide AM. Adolescent pregnancy. 2nd ed. Wiczorek RR, editor. White Plains (NY): March of Dimes Education Services, 2001: 20-34

*Conference proceedings*

- 13 **Harnden P**, Joffe JK, Jones WG, editors. Germ cell tumours V. Proceedings of the 5th Germ cell tumours Conference; 2001 Sep 13-15; Leeds, UK. New York: Springer, 2002: 30-56

*Conference paper*

- 14 **Christensen S**, Oppacher F. An analysis of Koza's computational effort statistic for genetic programming. In: Foster JA, Lutton E, Miller J, Ryan C, Tettamanzi AG, editors. Genetic programming. EuroGP 2002: Proceedings of the 5th European Conference on Genetic Programming; 2002 Apr 3-5; Kinsdale, Ireland. Berlin: Springer, 2002: 182-191

**Electronic journal** (list all authors)

- 15 Morse SS. Factors in the emergence of infectious diseases. Emerg Infect Dis serial online, 1995-01-03, cited 1996-06-05; 1(1): 24 screens. Available from: URL: <http://www.cdc.gov/ncidod/eid/index.htm>

**Patent** (list all authors)

- 16 **Pagedas AC**, inventor; Ancel Surgical R&D Inc., assignee. Flexible endoscopic grasping and cutting device and positioning tool assembly. United States patent US 20020103498. 2002 Aug 1

**Statistical data**

Write as mean  $\pm$  SD or mean  $\pm$  SE.

**Statistical expression**

Express *t* test as *t* (in italics), *F* test as *F* (in italics), chi square test as  $\chi^2$  (in Greek), related coefficient as *r* (in italics), degree of freedom as *v* (in Greek), sample number as *n* (in italics), and probability as *P* (in italics).

**Units**

Use SI units. For example: body mass, *m* (B) = 78 kg; blood pressure, *p* (B) = 16.2/12.3 kPa; incubation time, *t* (incubation) = 96 h, blood glucose concentration, *c* (glucose) 6.4  $\pm$  2.1 mmol/L; blood CEA mass concentration, *p* (CEA) = 8.6 24.5  $\mu$ g/L; CO<sub>2</sub> volume fraction, 50 mL/L CO<sub>2</sub>, not 5% CO<sub>2</sub>; likewise for 40 g/L formaldehyde, not 10% formalin; and mass fraction, 8 ng/g, *etc.* Arabic numerals such as 23, 243, 641 should be read 23243641.

The format for how to accurately write common units and quantum numbers can be found at: [http://www.wjgnet.com/1007-9327/g\\_info\\_20100315223018.htm](http://www.wjgnet.com/1007-9327/g_info_20100315223018.htm).

**Abbreviations**

Standard abbreviations should be defined in the abstract and on first mention in the text. In general, terms should not be abbreviated unless they are used repeatedly and the abbreviation is helpful to the reader. Permissible abbreviations are listed in Units, Symbols and Abbreviations: A Guide for Biological and Medical Editors and Authors (Ed. Baron DN, 1988) published by The Royal Society of Medicine, London. Certain commonly used abbreviations, such as DNA, RNA, HIV, LD50, PCR, HBV, ECG, WBC, RBC, CT, ESR, CSF, IgG, ELISA, PBS, ATP, EDTA, mAb, can be used directly without further explanation.

**Italics**

Quantities: *t* time or temperature, *c* concentration, *A* area, *l* length, *m* mass, *V* volume.

Genotypes: *gyrA*, *arg 1*, *c myc*, *c fos*, *etc.*

Restriction enzymes: *EcoRI*, *HindI*, *BamHI*, *Kho I*, *Kpn I*, *etc.*

Biology: *H. pylori*, *E. coli*, *etc.*

**Examples for paper writing**

All types of articles' writing style and requirement will be found in the link: <http://www.wjgnet.com/esps/NavigationInfo.aspx?id=15>

**RESUBMISSION OF THE REVISED MANUSCRIPTS**

Authors must revise their manuscript carefully according to the revision policies of Baishideng Publishing Group Co., Limited. The revised version, along with the signed copyright transfer agreement, responses to the reviewers, and English language Grade A certificate (for non-native speakers of English), should be submitted to the online system *via* the link contained in the e-mail sent by the editor. If you have any questions about the revision, please send e-mail to [esps@wjgnet.com](mailto:esps@wjgnet.com).

**Language evaluation**

The language of a manuscript will be graded before it is sent for revision. (1) Grade A: priority publishing; (2) Grade B: minor language polishing; (3) Grade C: a great deal of language polishing needed; and (4) Grade D: rejected. Revised articles should reach Grade A.

**Copyright assignment form**

Please download a Copyright assignment form from [http://www.wjgnet.com/1007-9327/g\\_info\\_20100315222818.htm](http://www.wjgnet.com/1007-9327/g_info_20100315222818.htm).

**Responses to reviewers**

Please revise your article according to the comments/suggestions provided by the reviewers. The format for responses to the reviewers' comments can be found at: [http://www.wjgnet.com/1007-9327/g\\_info\\_20100315222607.htm](http://www.wjgnet.com/1007-9327/g_info_20100315222607.htm).

**Proof of financial support**

For papers supported by a foundation, authors should provide a copy of the approval document and serial number of the foundation.

**Links to documents related to the manuscript**

WJG will be initiating a platform to promote dynamic interactions between the editors, peer reviewers, readers and authors. After a manuscript is published online, links to the PDF version of the submitted manuscript, the peer-reviewers' report and the revised manuscript will be put on-line. Readers can make comments on the peer reviewer's report, authors' responses to peer reviewers, and the revised manuscript. We hope that authors will benefit from this feedback and be able to revise the manuscript accordingly in a timely manner.

**Publication fee**

WJG is an international, peer-reviewed, OA online journal. Articles published by this journal are distributed under the terms of the Creative Commons Attribution Non-commercial License, which permits use, distribution, and reproduction in any medium and format, provided the original work is properly cited. The use is non-commercial and is otherwise in compliance with the license. Authors of accepted articles must pay a publication fee. Publication fee: 600 USD per article. All invited articles are published free of charge.



No.	ISSN	Title	Frequency	Launch Date	Indexing/Abstracting
1	2219-2859	<i>World Chinese Journal of Digestology</i> (Chinese)	3 issues/ month	January 15, 1993	CA, EM, AJ
2	2218-6182	<i>World Journal of Anesthesiology</i>	Four-monthly	December 27, 2011	DOI
3	1949-8454	<i>World Journal of Biological Chemistry</i>	Quarterly	January 26, 2010	PMC, PubMed, DOI, DOAJ
4	1949-8462	<i>World Journal of Cardiology</i>	Monthly	December 31, 2009	PMC, PubMed, DOI, DOAJ
5	2220-3176	<i>World Journal of Clinical Infectious Diseases</i>	Quarterly	December 30, 2011	DOI
6	2218-4333	<i>World Journal of Clinical Oncology</i>	Quarterly	November 10, 2010	PMC, PubMed, DOI, DOAJ
7	2219-2808	<i>World Journal of Clinical Pediatrics</i>	Quarterly	June 8, 2012	DOI
8	2219-2816	<i>World Journal of Clinical Urology</i>	Four-monthly	December 28, 2011	DOI
9	2220-3141	<i>World Journal of Critical Care Medicine</i>	Quarterly	February 4, 2012	DOI
10	2218-6190	<i>World Journal of Dermatology</i>	Quarterly	June 2, 2012	DOI
11	1948-9358	<i>World Journal of Diabetes</i>	Bimonthly	March 15, 2010	PMC, PubMed, DOI, DOAJ
12	2220-315X	<i>World Journal of Experimental Medicine</i>	Quarterly	December 20, 2011	DOI
13	2219-2840	<i>World Journal of Gastroenterology*</i>	Weekly	October 1, 1995	CC/CM, SCIE, JCR, IM, PMC, PubMed, DOI, DOAJ
14	1948-5190	<i>World Journal of Gastrointestinal Endoscopy</i>	Monthly	October 15, 2009	PMC, PubMed, DOI, DOAJ
15	1948-5204	<i>World Journal of Gastrointestinal Oncology</i>	Monthly	October 15, 2009	PMC, PubMed, DOI, DOAJ
16	2150-5330	<i>World Journal of Gastrointestinal Pathophysiology</i>	Quarterly	April 15, 2010	PMC, PubMed, DOI, DOAJ
17	2150-5349	<i>World Journal of Gastrointestinal Pharmacology and Therapeutics</i>	Quarterly	February 6, 2010	PMC, PubMed, DOI, DOAJ
18	1948-9366	<i>World Journal of Gastrointestinal Surgery</i>	Monthly	November 30, 2009	PMC, PubMed, DOI, DOAJ
19	2218-6204	<i>World Journal of Hematology</i>	Quarterly	June 6, 2012	DOI
20	1948-5182	<i>World Journal of Hepatology</i>	Monthly	October 31, 2009	PMC, PubMed, DOI, DOAJ
21	2220-3168	<i>World Journal of Hypertension</i>	Quarterly	December 23, 2011	DOI
22	2219-2824	<i>World Journal of Immunology</i>	Four-monthly	December 27, 2011	DOI
23	2220-3184	<i>World Journal of Medical Genetics</i>	Quarterly	December 27, 2011	DOI
24	2222-0682	<i>World Journal of Methodology</i>	Quarterly	September 26, 2011	DOI
25	2220-6124	<i>World Journal of Nephrology</i>	Quarterly	February 6, 2012	DOI
26	2218-6212	<i>World Journal of Neurology</i>	Quarterly	December 28, 2011	DOI
27	2218-6220	<i>World Journal of Obstetrics and Gynecology</i>	Quarterly	June 10, 2012	DOI
28	2218-6239	<i>World Journal of Ophthalmology</i>	Quarterly	December 30, 2011	DOI
29	2218-5836	<i>World Journal of Orthopedics</i>	Quarterly	November 18, 2010	PMC, PubMed, DOI, DOAJ
30	2218-6247	<i>World Journal of Otorhinolaryngology</i>	Quarterly	December 28, 2011	DOI
31	2220-3192	<i>World Journal of Pharmacology</i>	Quarterly	February 9, 2012	DOI
32	2220-3206	<i>World Journal of Psychiatry</i>	Quarterly	December 31, 2011	DOI
33	1949-8470	<i>World Journal of Radiology</i>	Monthly	December 31, 2009	PMC, PubMed, DOI, DOAJ
34	2218-6255	<i>World Journal of Respiriology</i>	Four-monthly	December 30, 2011	DOI
35	2220-3214	<i>World Journal of Rheumatology</i>	Four-monthly	December 31, 2011	DOI
36	1948-0210	<i>World Journal of Stem Cells</i>	Quarterly	December 31, 2009	PMC, PubMed, DOI, DOAJ
37	2218-6263	<i>World Journal of Stomatology</i>	Quarterly	November 31, 2011	DOI
38	2219-2832	<i>World Journal of Surgical Procedures</i>	Four-monthly	December 29, 2011	DOI
39	2220-6132	<i>World Journal of Translational Medicine</i>	Four-monthly	June 12, 2012	DOI
40	2220-3230	<i>World Journal of Transplantation</i>	Quarterly	December 24, 2011	DOI
41	2220-3249	<i>World Journal of Virology</i>	Quarterly	February 12, 2012	DOI
42	0000-0000	<i>World Journal of Clinical Cases</i>	Monthly	In progress	DOI

\*According to the 2011 ISI Journal Citation Reports, *World Journal of Gastroenterology* has an impact factor of 2.471 (ranking the 32nd among 74 journals in gastroenterology and hepatology). CC/CM: Current Contents®/Clinical Medicine; CA: Chemical Abstracts; EM: EMBase/Excerpta Medica; AJ: Abstract Journal; PMC: PubMed Central; DOI: Digital Object Identifier; DOAJ: Directory of Open Access Journals; SCIE: Science Citation Index Expanded (also known as SciSearch®); JCR: Journal Citation Reports®; and IM: Index Medicus.



百世登

**Baishideng**®

Published by **Baishideng Publishing Group Co., Limited**

Room 1701, 17/F, Henan Building,

No. 90 Jaffe Road, Wanchai, Hong Kong, China

Fax: +852-31158812

Telephone: +852-58042046

E-mail: [bpgoffice@wjgnet.com](mailto:bpgoffice@wjgnet.com)

<http://www.wjgnet.com>

