# PREHOSPITAL and DISASTER MEDICINE

Volume 27, Number 1

Februray 2012





CAMBRIDGE UNIVERSITY PRESS

The Official Journal of the World Association for Disaster and Emergency Medicine

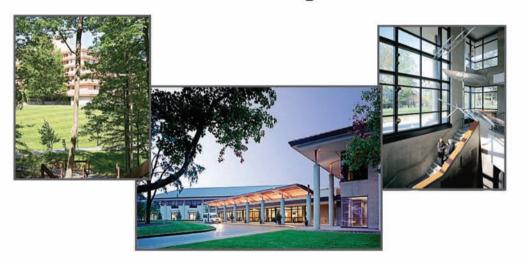


# SAVE THE DATE

## The 4th Pan American Conference

The National Conference Center Leesburg, Virginia, USA October 15 - 17, 2012 www.wadem.org

## Measuring Progress and Improving Preparedness in Disaster Management



This conference will bring together individuals interested in disaster and emergency medicine/management to discuss developments in risk reduction, preparedness, and responses, and to build consensus on important related issues.

The conference will focus on risk reduction, improving preparedness, and assessing responses worldwide from prehospital care systems through post-event evaluations. There will be consensus-building workshops, debates, keynote addresses, as well as invited and free papers. Additionally, there will be several relevant pre- and post-conference workshops and courses.

#### **Call for Papers**

Only 50 papers related to the above topics will be accepted.

Abstract submission opens: March 1, 2012

Deadline for submission of abstracts: May 31, 2012

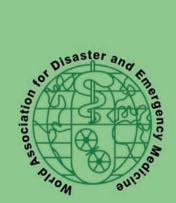
#### Topics will include:

#### Consensus-building Workshops

- Disaster
   Terminology
- Foreign Medical Teams
- Accountability
- Assessments and Measurements

#### Discussions and Papers

- Uses of Social Media
- New Technology
- Safe Medical Facilities
- Forensics
- Psychosocial issues
- Roles of emergency, military, nursing, and medicine in disaster health



# Table of Contents

Editorial	
Prehospital Pediatric Endotracheal Intubation	1
Original Research	
Analysis of Trends and Emergency Activities Relating to Critical Victims of the Chuetsuoki Earthquake	3
Celebrating the End of School Life: A Pilot Study  Alison Hutton, RN, PhD; Allison Roderick, RN, MN, PhD Candidate; Rebecca Munt, RN (Hons), PhD Candidate;  Lidia Mayner, RN, PhD; Mayumi Kako, RN, PhD; Paul Arbon, RN, PhD	13
The Evaluation of Research Methods during Disaster Exercises: Applicability for Improving	
Disaster Health Management.  G.A. Guido Legemaate, MSc; Frederick M. Burkle, Jr., MD, MPH, DTM; Joost J.L.M. Bierens, MD, PhD, MCDM	18
Student Perception of High Fidelity Medical Simulation for an International	
Trauma Life Support Course.  Tae Eung Kim, MD, FACEP; Ellen T. Reibling, PhD, MA; Kent T. Denmark, MD	27
Increasing Emergency Medicine Residents' Confidence in Disaster Management: Use of an	21
Emergency Department Simulator and an Expedited Curriculum.  Jeffrey Michael Franc, MD, FCFPEM, Dip Sport Med, EMDM; Darren Nichols, MD; Sandy L. Dong, MD, MSc	)1
Prehospital Trauma System Reduces Mortality in Severe Trauma: A Controlled Study of Road Traffic Casualties in Iraq	26
Mudhafar Karim Murad, MD; Dara B. Issa, MD; Farhad M. Mustafa, MD; Hlwa O. Hassan, MD; Hans Husum, MD, PhD	<b>)</b> 0
Balancing Between Closeness and Distance: Emergency Medical Services Personnel's Experiences of Caring for Families at Out-of-Hospital Cardiac Arrest and Sudden Death	12
Anders Bremer, RN, PEN, PhL; Karin Dahlberg, RN, PhD; Lars Sandman, PhD	+4
Protection against Cold in Prehospital Care: Evaporative Heat Loss Reduction by Wet Clothing	
Removal or the Addition of a Vapor Barrier—A Thermal Manikin Study Otto Henriksson, MD; Peter Lundgren, MD; Kalev Kuklane, PhD; Ingvar Holmér, PhD; Peter Naredi, MD, PhD; Ulf Bjornstig, MD, PhD	)3
Post-Traumatic Stress Disorder and Job Stress among Firefighters of Urban Japan	59
The Ethics of Resuscitation: How Do Paramedics Experience Ethical Dilemmas when Faced with	
Cancer Patients with Cardiac Arrest?	)4
Medical Care at Mass Gatherings: Emergency Medical Services at Large-Scale Rave Events	71

ii Table of Contents

Pandemic Influenza Extension Areas in an Urban Pediatric Hospital. 7 Rachel L. Charney, MD; Eric S. Armbrecht, PhD; Brian R. Kennedy, RN; Robert G. Flood, MD	75
Increased Situation Awareness in Major Incidents—Radio Frequency Identification (RFID) Technique: A Promising Tool	81
Jorma Jokela, RN, PhD; Monica Rådestad, RN, MSc; Dan Gryth, PhD, MD; Helené Nilsson, RN; Anders Rüter, PhD, MD; Leif Svensson, PhD, MD; Ville Harkke, DSc; Markku Luoto; Maaret Castrén, PhD, MD	
Case Report	0.0
Multiple Thoracoabdominal Impalement Injuries	58
Special Report Time for Order in Chaos! A Health System Framework for Foreign Medical Teams in Earthquakes	€0
Brief Report	
Incidence of Tension Pneumothorax in Police Officers Feloniously Killed in the Line of Duty: A Ten-Year Retrospective Analysis	94
Ashley C. Mark, RN, CNP; Nicole Wimberger, MS; Matthew D. Sztajnkrycer, MD, PhD	
Tornado Hazard Communication Disparities among Spanish-Speaking Individuals in an	
English-Speaking Community	98
Vulnerability and Resilience in a Group Intervention with Hospital Personnel during Exposure to Extreme and Prolonged War Stress	03
Yuval Palgi, PhD; Menachem Ben-Ezra, PhD; Chaya Possick, PhD	

#### **Editorial Office**

World Association for Disaster and Emergency Medicine (WADEM), Madison, Wisconsin USA

> Editor-in-Chief Samuel J. Stratton, MD, MPH

> > Development Editor Mona Johnson

Editorial Assistant Jackson Helmer

#### Publisher

Cambridge University Press 32 Avenue of the Americas New York, NY 10013-2473 USA Prehospital and Disaster Medicine (ISSN 1049-023X) is published bimonthly in the months of February, April, June, August, October, December, by Cambridge University Press for the World Association for Disaster and Emergency Medicine. Prehospital and Disaster Medicine incorporates the Journal of the World Association for Emergency and Disaster Medicine and the Journal of Prehospital Medicine.

**Editorial Information:** All manuscripts must be submitted through the Journal's online submission platform, ScholarOne Manuscripts: http://mc.manuscriptcentral.com/pdm.

2012 Subscription Information: Institutions print and electronic: US\$516.00 in the USA, Canada, and Mexico; UK£313.00+VAT elsewhere. Institutions electronic only: US\$375.00 in the USA, Canada, and Mexico; UK£227.00+VAT elsewhere. Individuals print and electronic: US\$153.00 in the USA, Canada, and Mexico; UK£93.00+VAT elsewhere. Individuals electronic only: US\$113.00 in the USA, Canada, and Mexico; UK£68.00+VAT elsewhere. Single Part: US\$94.00 in the USA, Canada, and Mexico; UK£57.00+VAT elsewhere. Prices include postage and insurance. Airmail or registered mail is extra. Back volume prices are available upon request. Claims of non-receipt or damaged issues must be filed within three months of cover date.

Comprehensively indexed by the National Library of Medicine (MEDLINE), Cumulative Index to Nursing and Allied Health (CINAHL) and Health Star Cumulative Index. The database is available online via BRS, Data-Star, and DIA-LOG, and on CD-ROM through CD Plus, Compact Cambridge and Silver Platter. Abstracts and search capability available on the Internet at http://pdm.medicine.wisc.edu.

Copyright © 2012 by the World Association for Disaster and Emergency Medicine.

#### Cover Artwork

Posthaste, a water media painting on paper by Carol Staub

Carol Staub has garnered more than 120 National and International awards, and has been featured in: The Artist's Magazine, Watercolor Magic Magazine, The Wall Street Journal, New Art International, American Art Collector, The Best of America Mixed Media Artists and Artists and Artists and Artists and Artists and Others.

In addition to teaching workshops in Mixed Media and Collage, she has served on the Board of Directors for the National Association of Women Artists (Florida Chapter). She is a Signature/Full Member of Boca Raton Museum of Art Artist's Guild, Allied Artists of America, The Catharine Lorillard Wolfe Art Club, The Florida Watercolor Society, National Collage Society, New Jersey Watercolor Society, Garden State Watercolor Society, International Society of Acrylic Painters, National Association of Women Artists, International Society of Experimental Artists, San Diego Watercolor Society, Philadelphia Watercolor Society, Texas Watercolor Society, Rhode Island Watercolor Society, Women In The Visual Arts and others. She is an associate member of the National Watercolor Society and The American Watercolor Society.

Carol's works are in private collections, and can be seen in museums and galleries around the globe. For more information, please go to http://carolstaub.com.

## EDITORIAL BOARD

# Prehospital and Disaster Medicine

#### EDITOR-IN-CHIEF

Samuel Stratton, MD, MPH

University of California-Los Angeles

Los Angeles, California, USA

#### EMERITUS EDITOR-IN-CHIEF

Marvin L. Birnbaum, MD, PhD

University of Wisconsin-Madison Madison, Wisconsin, USA

# DEPUTY EDITORS David A. Bradt, MD, MPH

Royal Melbourne Hospital Melbourne, Australia

#### Geert Seynaeve, MD

Brussels, Belgium

#### Darren Walter

University Hospital of South Manchester Manchester, UK

#### ASSOCIATE EDITORS Wolfgang F. Dick, MD,PhD

Mainz, Germany

#### Kimball Maull, MD, FACS

Department of Surgery Hamad General Hospital Doha, Qatar

#### Steven Rottman, MD

University of California– Los Angeles Los Angeles, California, USA

#### **SECTION EDITOR**

Humanitarian Affairs Frederick M. Burkle, MD, MPH, DTM

Senior Fellow and Scientist, Harvard Humanitarian Initiative Harvard University Cambridge, Massachusetts, USA Senior Public Policy Scholar Woodrow Wilson International Center for Scholars

### EDITORIAL BOARD

#### Carol Amaratunga, PhD

Adjunct Professor School of Child and Youth Development University of Victoria Research Associate of the Justice Institute of British Columbia Canada

#### Paul Arbon, PhD

School of Nursing and Midwifery Flinders University Adelaide, South Australia

#### Frank Archer, MD

Monash University Melbourne, Australia

#### Jeffery Arnold, MD

Department of Emergency Medicine Santa Clara Valley Medical Center San Jose, California, USA

#### Yaron Bar-Dayan, MD, MHA

Israeli Defense Forces Home Front Command Or-Yehuda, Israel

#### Joost Bierens, MD, PhD

Amsterdam, The Netherlands

#### Tareg Bey, MD

Department of Emergency Medicine University of California-Irvine, Irvine, California, USA

#### Richard A. Bissell, PhD

University of Maryland-Baltimore Baltimore, Maryland, USA

#### Felipe Cruz-Vega, MD

Office of Social Security Mexico City, Mexico

# Robert A. De Lorenzo, MD, MSM, FACEP

Medical Corps United States Army San Antonio, Texas, USA

#### Claude de Ville de Goyet, MD

Brussels, Belgium

#### Judith Fisher, MD

Consultant Washington, DC, USA

#### Erik S. Gaull

George Washington University Washington, DC, USA

#### Michael Gunderson

President Integral Performance Solutions Lakeland, Florida, USA

#### Keith Hotlermann, MD

George Washington University Washington, DC, USA

#### Mark Johnson, MPA

Retired Chief of EMS Juneau, Alaska, USA

#### Mark Keim, MD

Center for Disease Control and Prevention Atlanta, Georgia, USA

#### Todd J. LeDuc, EMT-P

Deputy Fire Chief Broward Sheriff Fire Rescue Ft. Lauderdale, Florida, USA

#### Gloria Leon, PhD

Professor of Psychology University of Minnesota Minneapolis, Minnesota, USA

#### Graeme McColl

Emergency Management Team National Health Board Ministry of Health Christchurch, New Zealand

## Andrew Milsten, MD, MS, FACEP

University of Massachusetts Emergency Medicine Baltimore, Maryland, USA

#### Jerry Overton

President/CEO
Chairman
IAED Emergency Clinical
Advice System & Standards
Board
Salt Lake City, Utah, USA

#### Paul Paris, MD

Center for Emergency Medicine University of Pittsburgh Pittsburgh, Pennsylvania, USA

#### Lynda Redwood-Campbell, MD, MPH

Department of Family Medicine McMaster University, Hamilton, Ontario, Canada

#### Edward Ricci, PhD

University of Pittsburgh Pittsburgh, Pennsylvania, USA

#### Leonid Roshal, MD

Institute of Pediatrics Academy of Medical Sciences Moscow, Russia

#### Don Schramm

University of Wisconsin-Madison Madison, Wisconsin, USA

#### Knut Ole Sundnes, MD

Baerum Hospital Oslo, Norway

#### Takashi Ukai, MD

Hyogo Emergency Medical Center Hyogo, Japan

#### Michael Van Rooyen, MD

Associate Professor, Harvard Medical School, Brigham and Women's Hospital Boston, Massachusetts, USA Information for Readers v

Aims and Scope: The mission of *Prehospital and Disaster Medicine* (PDM) is the distribution of information relevant to the practice of out-of-hospital and in-hospital emergency medical care, disaster health, and public health and safety. PDM provides an international forum for the reporting and discussion of scientific studies, both quantitative and qualitative, that have relevance to the above practices. The major objectives are: (1) the improvement of the types and quality of the care delivered to patients with perceived medical emergencies and to victims of multi-casualty accidents or disasters, including the public health and safety aspects of such events; and (2) the prevention and/or mitigation of the occurrence of such events and of the effects of these events upon the human population and environment.

Editorial Office: Prehospital and Disaster Medicine, 3330 University Avenue, Suite 130, Madison, Wisconsin 53705, USA. Telephone: (+1) (608) 819-6604; Facsimile (+1) (608) 819-6055; E-mail: pdm@wadem.org

**Publishing, Production, and Advertising Office:** Cambridge University Press, 32 Avenue of the Americas, New York, NY 10013-2473, United States.

**Subscription Offices:** (for USA, Canada, and Mexico) Cambridge University Press, 32 Avenue of the Americas, New York, NY 10013-2473, United States; (for UK and elsewhere) Cambridge University Press, The Edinburgh Building, Shaftesbury Road, Cambridge CB2 8RU, UK.

2012 Subscription Information: Prehospital and Disaster Medicine (Print ISSN 1049-023X; Electronic ISSN 1945-1938) is published bimonthly in the months of February, April, June, August, October, and December by Cambridge University Press, 32 Avenue of the Americas, New York, NY 10013-2473, United States/Cambridge University Press, The Edinburgh Building, Shaftesbury Road, Cambridge CB2 8RU, UK for the World Association for Disaster and Emergency Medicine. 2011 Annual subscription rates: Institutions print and electronic: US\$516.00 in the USA, Canada, and Mexico; UK£313.00+VAT elsewhere. Institutions electronic only: US\$375.00 in the USA, Canada, and Mexico; UK£227.00+VAT elsewhere. Individuals print and electronic: US\$153.00 in the USA, Canada, and Mexico; UK£93.00+VAT elsewhere. Individuals electronic only: US\$113.00 in the USA, Canada, and Mexico; UK£68.50+VAT elsewhere. Single Part: US\$94.00 in the USA, Canada, and Mexico; UK£57.00+VAT elsewhere. Prices include postage and insurance. Airmail or registered mail is extra. Back volume prices are available upon request.

Indexing: National Library of Medicine (MEDLINE), Cumulative Index to Nursing and Allied Health (CINAHL), and Heath Star Cumulative Index.

© World Association for Disaster and Emergency Medicine 2012. All rights reserved. No part of this publication may be reproduced, in any form or by any means, electronic, photocopying, or otherwise, without permission in writing from Cambridge University Press. Policies, request forms, and contacts are available at: http://www.cambridge.org/rights/permissions/permission. htm. Permission to copy (for users in the United States) is available from Copyright Clearance Center Transactional Reporting Service, 222 Rosewood Drive, Danvers, MA 01923, USA. http://www.copyright.com, email: info@copyright.com.

Printed in United States of America on acid-free paper.

Postmaster: Send address changes in the USA and Canada to *Prehospital and Disaster Medicine*, Subscription Department, Cambridge University Press, 100 Brook Hill Drive, West Nyack, NY 10994-2133, USA.

Periodical postage rate paid at New York, NY and additional mailing offices.

## INSTRUCTIONS FOR AUTHORS

#### **Editorial Policy**

Manuscripts in one of five different categories can be submitted for review and publication in *Prehospital and Disaster Medicine* (PDM): (1) Original Research; (2) Special Report; (3) Comprehensive Review; (4) Case Report; or (5) Brief Report.

All manuscripts submitted for publication must include an abstract that summarizes the work. Other types of manuscripts must have the approval of the Editor before being submitted or may be invited by the Editor or a member of the Editorial Board.

The characteristics specific to each of these categories are described briefly below:

1. Original Research—structured research that uses quantitative and/or qualitative data collection methods and analyses to establish a hypothesis or prove a cause: effect relationship(s) is included in this category. The manuscript must be structured as follows:

Abstract—concise summary in the following format (not to exceed 375 words):

Introduction: What is the need for the study.

*Hypothesis/Problem*: What was tested (experimental studies only). If qualitative, statement of problem addressed.

*Methods*: Summary of methods used with subsections as appropriate (type of subjects, number of subjects, study design, statistical tests). If the work is qualitative, the types of instruments used and the scope and type of work must be described. If a disaster is involved, the dates, type of event, location, scope, magnitude, and numbers of casualties and deaths must be summarized in tabular form for indexing.

Results: Summary of principal findings.

Conclusion: Implications of findings.

**Introduction**—provide justification for the effort with appropriate references annotated. If quantitative, the concluding sentence should define the hypothesis. If qualitative, the problem being addressed should be stated clearly.

Methods—descriptive to a degree that other investigators would be able to reproduce the study. Statistical methods used must be annotated. Approval by an Institutional Review Committee must be included when appropriate.

Results—results must be written in text and may be accompanied by tables and figures. The text must explain all data included in tables and figures, but should not be unnecessarily redundant. All direct results from the study must appear in this section. No discussion of the results may be included.

Discussion—the discussion should provide an interpretation of the results in terms of meaning and application. Results should not be repeated. Computations or extrapolations that may help explain the results may be provided. Limitations of the study should be defined and suggestions for future research should be included. References that support or negate explanations provided are appropriate.

Conclusion—the findings in terms of implications for the practice of prehospital, emergency, and/or disaster (humanitarian) medicine should be summarized in a few sentences.

Special Report—describes some aspect of our science or activities that provide information necessary for the progression of the science. The Introduction should highlight the problem being addressed and the reasons that it needs to be addressed. Sections of the report should be subtitled. The presentation should include citations as to the sources of the material and should be followed by a discussion that includes the significance of the report in terms of the science. The manuscript should be finished with the conclusions reached.

- 3. Comprehensive Review—a review of the literature to be used to clarify areas in which there seems to be disagreement. Comprehensive reviews seek to establish the evidence-base for the area being addressed. The format used should be identical to that described for special reports.
- 4. Case Report—uses one or more cases of specific patients or events/ responses to highlight a current aspect of medical care or of a phenomenon. Case reports also may have value in the development of definitive research projects by the same or other investigators. The Introduction should describe the reasons for the report. The actual case report(s) should be described in the next section, and like the above, the discussion should describe the significance of the reports including a comprehensive review of the pertinent literature. The conclusion should be similar to the format noted above.
- 5. Brief Report—a short report that may predict a trend, but the work does not meet all of the criteria required for original research. Preliminary reports also are included in this category. The format used should be identical to that used for the original research described above.
- 6. Congress Abstracts—All abstracts submitted by the Secretariat of a Congress will be edited by the Editorial Staff into the best English possible prior to publication.

#### Submission of Manuscripts

All manuscripts must be submitted through the Journal's online submission platform, ScholarOne Manuscripts: http://mc.manuscriptcentral.com/pdm.

The following must be included with the submitted manuscript:

Cover Letter—each manuscript should be accompanied by a cover letter stating the following:

- The primary author who attests to the original nature of the material, that
  the paper has not been published elsewhere, is not under consideration by
  any other publication
- That the authors agree to transfer copyright to Prehospital and Disaster Medicine if accepted for publication.
- The institution(s) in which the work was performed, the sponsoring institution(s), and the respective departments must be annotated.
- If the work was supported all or in part by grants or endowments, the granting institution(s) should be indicated.
- If the paper has been, or is to be presented in a forum orally or as a poster, indicate the title of the forum, sponsoring institution, and the date of presentation.
- Specify the name of the author with whom any correspondence should be directed, and, correspondence street address, telephone number, fax number, and email address if appropriate. Abbreviations for groups of words may be used only for unusually cumbersome titles or for commonly accepted abbreviations. Whenever such abbreviations are used, they must be annotated with the initial mention of words within the manuscript followed by the abbreviation in parentheses.

Instructions for Authors vii

In addition, list three to five keywords or phrases in alphabetical order separated by semicolons to facilitate indexing or electronic searches.

Cover Page—include a cover page that includes the title of the paper, first names, middle initials, last names, and highest academic degrees of all authors. Reiterate from the cover letter the name of the author with whom any correspondence should be directed and the street address, telephone number, fax number, and email address if appropriate. Do not indicate author names or institutions anywhere in the manuscript other than on the cover page.

Language—all manuscripts must be submitted in English. Also, do not use I, We, or Our when describing the researchers. The fact that the research was conducted by the authors is implicit.

Margins, and Type Style—Use standard type styles. Do not use bold, italicized, superscript, or subscript characters. Double space all text.

Generic Names—whenever possible, use generic names. Brand names may be indicated parenthetically and the name and location of the manufacturer must be provided in parentheses followed by a generic description of the medication, drug, product, or equipment.

Copyright—after acceptance for publication, the copyright to the manuscript, including all tables and figures, rests with *Prehospital and Disaster Medicine* 

#### References

References must be cited in the sequential order in which they appear in the text. All references should be parenthetically cited by full-sized Arabic numbers in the text, tables, and legends for illustrations. Titles of journals referenced must be annotated using standard *Index Medicus* abbreviations and must be in italics. Do not use automatic numbering in the References section. Unpublished data or personal communications should be indicated in parentheses directly following the reference and should include the dates of such correspondence (Personal Communication, Safar P, October 1989). The following format for references must be used:

Journals—White SJ, Hamilton WA, Veronesi JF: Comparison of field techniques used to pressure infuse intravenous fluids. *Prehosp Disaster Med* 1991; 6(4):429–434.

Books—Schwartz GR, Safar P, Stone JH, et al (eds), Principles and Practice of Emergency Medicine. 2d ed. Philadelphia: WB Saunders Co., 1985, pp 1198–1202.

Chapters—Lindberg R: Pathology of Head Injuries. In: Cowley RA, Trump BF (eds), *Pathophysiology of Shock*. Baltimore: Williams and Wilkins, 1982, pp 588–592.

Website—International Crisis Group: Impact of the Bali bombings. In: *Indonesia Briefing*, Jakarta/Brussels. Available at http://www.crisisweb.org/projects/asia/indonesia/reports/A400804\_24102002.pdf. Accessed 09 June 2003.

#### Figures and Tables

Only essential figures and tables should be included. Further tables, figures, photographs and appendices, may be included with the online version on the journal website.

Photographs Photographs should be submitted electronically through the Journal's online submission platform: http://mc.manuscriptcentral.com/pdm and be at least 600 dpi resolution. Color illustrations must be discussed with the editor. The printed version will normally be reduced to 70 mm wide, so care should be taken to ensure that lettering and symbols will remain clearly legible.

To ensure that your figures are reproduced to the highest possible standards and your article is published as quickly and efficiently as possible, Cambridge Journals recommends the following formats and resolutions for supplying electronic figures. Please note that submitting low quality figures may result in a delay in publishing your valuable research.

Please ensure that your figures are saved at final publication size (plesae see the latest issue of the journal for column widths) and are in our recommended file formats. Following these guidelines will result in high quality images being reproduced in both the print and the online versions of the journal.

#### Line artwork

Format: tif or eps

Color mode: black and white (also known as 1-bit)

Size: please size to final publication size

Resolution: 1200 dpi

#### Combination artwork (line/tone)

Format: tif or eps

Color mode: grayscale (also known as 8-bit) Size: please size to final publication size

Resolution: 800 dpi

#### Black and white halftone artwork

Format: tif

Color mode: grayscale (also known as 8-bit) Size: please size to final publication size

Resolution: 300 dpi

#### Color halftone artwork

Format: tif

Color mode: CMYK color

Size: please size to final publication size

Resolution: 300 dpi

All graphs, and diagrams should be referred to as figures and should be numbered consecutively in Arabic numerals.

Permissions—illustrations or tables from other publications must be accompanied by written permission from the author and publishers of the document in which they originally appeared.

#### Proofs and offprints

Page proofs will be sent to the author designated to receive correspondence. Corrections other than to printer's errors may be charged to the author. A final PDF version of the article will be supplied to the corresponding author when the article is published.