

## WHO WE ARE

*Environmental Health Perspectives (EHP)* is a monthly open access journal of peer-reviewed research and news dedicated to the discussion of the impact of the environment on human health. All scientific articles are evaluated for scientific quality, environmental significance, appropriate degree of speculation, clarity of presentation, and conciseness. One of the overarching goals of the journal is to strive for objectivity and balance in the presentation of information.

Although *EHP* is sponsored by the National Institute of Environmental Health Sciences (NIEHS), its editorial policies are independent of the institute. An Advisory Board consisting of former *EHP* editors and non-NIEHS scientists provides guidance for journal policies and operations. Papers submitted to the journal are processed by a Board of Associate Editors. Members of the Editorial Review Board serve as a pool of potential reviewers of papers. Both the Board of Associate Editors and the Editorial Review Board are composed of leading scientists from all segments of the environmental health sciences.

*EHP* is the leading journal in the environmental health sciences. All papers are subjected to a preliminary screening to determine relevance, environmental significance, and creativity. In 2007, approximately 60% of papers were returned to authors without further review. The overall acceptance rate of papers submitted to the journal is approximately 20–25%.

In 2003, *EHP* became an open-access journal. All news and research articles published in *EHP* since 1972 are available free on-line (<http://www.ehponline.org/>). *EHP* is committed to promoting the discussion and exchange of information internationally, as described in detail at <http://www.ehponline.org/international/>.

## WHAT WE PUBLISH

The environmental health sciences include many fields of study and increasingly comprise a multidisciplinary research area. *EHP* publishes articles from a wide range of scientific disciplines encompassing basic research, human studies, and *in vitro* and *in vivo* animal research with a clear relationship to human health effects. Studies dealing with climate change, ecological issues, or effects on wildlife populations are welcome, but the relevance of the findings to human health should be evident. Physicians and others working in environmental medicine are encouraged to submit case reports for publication. *EHP* also addresses ethical, legal, social, and policy issues related to public health.

*EHP* provides information on emerging environmental issues through its Environews and Book Review sections. Although *EHP* welcomes ideas for Environews articles, Book Reviews, and Editorials, the journal typically does not accept unsolicited manuscripts of these types. Please contact the Editor-in-Chief for further information.

## ABOUT YOUR MANUSCRIPT

### TYPES OF MANUSCRIPTS

Manuscripts in any one of the categories below are welcome. See “Manuscript Preparation” for additional details.

**Correspondence** (letters to the editor; ≤ 1,000 words) should address research or news articles published in the print version of the journal within the previous 6 months. Authors cited in the correspondence will be given the opportunity to respond. Correspondence may include a brief table or small figure, if it is essential to the discussion. It is permissible to include data from or redrawing of previously published materials as long as the work is cited and written permission from the authors and/or publishers has been granted for re-publication in both printed and electronic form. New data should not be included, but authors may recalculate or reanalyze data from a cited paper in support of their point(s). Correspondence is not peer-reviewed and is published at the discretion of the *EHP* editors. Conclusions and opinions expressed do not necessarily reflect the policies of *EHP*.

**Research articles** (≤ 7,000 words) are original manuscripts reporting scientific research and discovery in the broad field of the environmental health sciences. Original research articles may come from any field of scientific research, from the most basic molecular biology and biochemistry to atmospheric physics, ecology, and engineering, as well as related fields of social science, policy, and ethics. Manuscripts on ethical, legal, social, or policy issues may also be accepted in this category. Research articles are peer reviewed.

**Commentaries** (≤ 5,000 words) present information and personal insight on a particular topic. Commentaries should not be extended critiques of single articles appearing in *EHP* or elsewhere. Factual data should be included to substantiate arguments. Commentaries are peer reviewed.

**Reviews** (≤ 10,000 words) that emphasize recent developments in a particular field of research are highly desirable. Lengthy historical perspectives are not appropriate.

**Meeting Reports** (≤ 5,000 words) are short synopses of conferences, symposia, workgroup meetings, or workshops describing the scientific objectives, issues, conclusions, and recommendation of a meeting, as well as the background information as a context for the event. In many cases, Meeting Reports may review existing information, summarize research findings on specific topics, and recommend methods, courses of action, or further research needs for the scientific community. Authors are encouraged to consider submitting reports with more extensive background as review articles. *De novo* data and participant lists are not allowed in Meeting Reports. Meeting Reports should be submitted to *EHP* no later than 9 months after the events they describe.

**Grand Rounds** articles (≤ 6,000 words) present discussions of case presentations of patients or community health issues with a

clearly established link of relevance to environmental exposures and environmental health. The format requires that a case scenario be presented to illustrate the environmental issues under consideration, followed by a discussion of the clinical and public health implications of these issues. Articles should be divided into an Abstract, Case Presentation (≤ 5,000 words), Discussion, and Conclusion. Visual images (e.g., X rays, microscopic pathology) or other graphics are encouraged.

**Case Reports** (≤ 6,000 words) differ from Grand Rounds articles in that the diagnosis pertaining to the clinical presentation is not necessarily conclusive. Instead, evidence for an environmental etiology may be indirect—for example, a case report of hepatitis suspected to be related to a chemical that has not been previously linked with hepatitis. Similar to Grand Rounds, Case Reports should include an Abstract, Case Presentation (≤ 5,000 words), Discussion, and Conclusion. Visual images (e.g., X rays, microscopic pathology) or other graphics are encouraged.

### ARTICLE LENGTH

All word limits include tables, figures, and references. Manuscripts that do not conform to the following word limits will be returned to the author(s) for revision before the review process is initiated.

Correspondence: 1,000 words  
 Commentaries: 5,000 words  
 Reviews: 10,000 words  
 Research articles: 7,000 words  
 Meeting Reports: 5,000 words  
 Grand Rounds articles: 6,000 words  
 Case Reports: 6,000 words.

Authors should assume that each figure or table accounts for 250 words of the total word count.

Depending on the topic and potential impact of a paper, the Editor-in-Chief reserves the right to waive word limits.

### ORIGINALITY OF SUBMISSION

Contributions submitted to *EHP* must be original works of the author(s) and must not have been previously published (in print or online) or simultaneously submitted to another publication.

### SCIENTIFIC INTEGRITY

*EHP* requires assurances that animals used in a study have been treated humanely and with regard for the alleviation of suffering. Research involving humans must have been conducted according to the Common Rule (<http://ori.dhhs.gov/education/products/ucla/chapter2/page04b.htm>). Research involving humans must also be approved by an appropriate institutional review board and comply with all relevant national, state, and local regulations. For research conducted outside the United States and thus exempt from U.S. federal regulations, authors must perform the research in accordance with principles of the Declaration of Helsinki (<http://www.wma.net/e/policy/b3.htm>).

## PUBLIC DATABASES

Manuscripts using microarrays must follow the Minimum Information About a Microarray Experiment (MIAME) guidelines developed by the Microarray Gene Expression Data Society (<http://www.mged.org/miame>). On acceptance, all integral data supporting the article's conclusions should be submitted to the Array/Express (<http://www.ebi.ac.uk/arrayexpress>) or GEO (<http://www.ncbi.nlm.nih.gov/geo/>) databases.

## COMPETING INTERESTS

*EHP* has a policy of full disclosure concerning competing financial and nonfinancial interests.

- Authors must disclose potential competing financial interests, including but not limited to grant support; employment (past, present, or firm offer of future); patents (pending or applied); payment for expert witness or testimony; personal financial interests by the authors, immediate family members, or institutional affiliations that may gain or lose financially through publication of the article; and forms of compensation, including travel funding, consultancies, board positions, patent and royalty arrangements, stock shares, or bonds. Diversified mutual funds or investment trusts do not constitute a competing financial interest. Authors employed by a for-profit, nonprofit, foundation, or advocacy group must also declare employment.
- All potential competing interests occurring during the last 3 years should be reported.
- As a condition of review and publication, authors must certify that their freedom to design, conduct, interpret, and publish research is not compromised by any controlling sponsor.
- Although not necessarily an issue for authors, editors and reviewers should disclose to the Editor-in-Chief any competing financial and nonfinancial interests that occurred within the last 3 years. Competing nonfinancial interests include former or current mentor–student relationships, faculty appointments in the same department or organization, familial relationships, service on advisory boards that oversee the research under review, collaborations, or membership in organizations that hold ideological views that are contradictory to the theme or topic under review.

For each manuscript, authors must submit a declaration of competing interests on behalf of all authors. The form is available online (<http://ehp.niehs.nih.gov/cfi.pdf>). A statement of disclosure must be included in the Acknowledgments section of the manuscript submitted to the journal. If a paper is accepted, a brief disclaimer describing the competing interest or a declaration of no competing interest will be published. Authors of correspondence, editorials, and book reviews will also be required to submit a declaration of competing interests.

Disclosure of competing interests does not imply that the information in the article is

questionable or that conclusions are biased. Decisions to publish or reject an article will not be based solely on a declaration of a competing interest.

*EHP* relies upon the integrity of all authors to provide accurate disclosure statements. However, authors can expect scrutiny of their statements by the editors, reviewers, and readership. Alleged inaccuracies of declared competing interests should be addressed to the Editor-in-Chief.

- *EHP* will impose a 3-year ban on publication by any authors found to have willfully failed to disclose a competing interest. Implementation of the ban will be made in consultation with the *EHP* Advisory Board.
- At the discretion of the Advisory Board, a paper may also be retracted or an Expression of Concern published and appended to the online version of the article.

## MANUSCRIPT PREPARATION

### PARTS OF A MANUSCRIPT

Manuscripts should include the following sections in this order:

Author names  
 Author affiliations  
 Name and address of corresponding author  
 Acknowledgments/grant support  
 Disclaimers/Competing Interests Declaration  
 Short running head  
 Key words  
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 Conclusions  
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Manuscript pages must be numbered consecutively, beginning with the title page, and lines should be numbered in the original submission. Standard font types (e.g., Helvetica, Times New Roman) and font size (12 point) should be used, and all parts of the manuscript, except tables, should be double-spaced. The reference list, tables, and figure legends should each begin on separate pages.

**Page 1:** The first page should include *a*) manuscript title, *b*) authors (first or second names spelled out in full), *c*) full address of the institution where the work was performed, and *d*) affiliation of each author. Titles should not exceed 20 words and should generally not contain abbreviations or numerical values. Indicate the author to whom page proofs should be sent, and include complete address for express mail service, telephone and fax numbers, and e-mail address.

**Page 2:** The second page should include *a*) a running title, not to exceed 50 characters and

spaces; *b*) 5–10 key words for indexing purposes; *c*) acknowledgments and grant information, not to exceed 50 words; *d*) competing interests declaration; and *e*) a list of all abbreviations and definitions used in the manuscript. Nomenclature and symbols should conform to the recommendations of the American Chemical Society or the International Union of Pure and Applied Chemistry (<http://www.iupac.org>).

**Page 3:** Authors should provide an outline of section headers (i.e., Abstract, Introduction, Methods, etc.) to facilitate copyediting and manuscript layout.

**Page 4:** All articles must include a structured abstract, which is not to exceed 250 words and should not contain references. No information should be reported in the abstract that does not appear in the text of the manuscript. Headings to be used in the structured abstracts vary by article type.

- **Commentaries:** Background, Objectives, Discussions, and Conclusions
- **Reviews:** Objective, Data Sources, Data Extraction, Data Synthesis, and Conclusions
- **Research articles:** Background, Objectives, Methods, Results, and Conclusions (with an exception for Environmental Medicine articles: Objective, Design, Participants, Evaluations/Measurements, Results, Conclusions, and Relevance to Clinical or Professional Practice)
- **Grand Rounds Articles or Case Reports:** Context (the relevance to environmental exposures and environmental health), Case Presentation, Discussion, and Relevance to Clinical or Professional Practice.

**Page 5 and subsequent pages:** Text should begin on the fifth page. Concise headings (not to exceed 8 words each) may be used to designate major sections under the headings “Materials and Methods,” “Results,” “Discussion,” and “Conclusions.” Do not include tables and figures in the text; place tables after the References section and upload figures individually.

Resources for assistance with research, presentation, and language are available from the following organizations:

- International Committee of Medical Journal Editors: Uniform Requirements for Manuscripts Submitted to Biomedical Journals: Writing and Editing for Biomedical Publication (<http://www.icmje.org/>)
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## REQUIRED COVER LETTER

A cover letter should accompany the manuscript and include the following points:

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alleviation of distress and discomfort. The identity of the source of those guidelines must be provided.

- A statement that participation of human subjects did not occur until after informed consent was obtained.
- Confirmation that all authors have disclosed any potential competing interests regarding the submitted article and the nature of those interests (required Competing Interest Declaration form available at <http://ehp.niehs.nih.gov/cfi.pdf>).
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- Information on the software programs used, file names, and the number of tables and figures for each submission (see "Files and Formats" for electronic file requirements). Inquiries may be made by e-mail (EHPmanuscripts@niehs.nih.gov), telephone (919-316-4544), or fax (919-541-0273).
- If applicable, a request to consider the submission for inclusion in the Environmental Medicine or Children's Health section of the journal.

#### COMPETING INTEREST STATEMENT

Corresponding authors are required to submit with the manuscript a declaration of competing interests on behalf of all authors. The form can be downloaded at <http://ehp.niehs.nih.gov/cfi.pdf>. As noted above, authors must also include a sentence in the Acknowledgments section of the manuscript identifying any competing financial or nonfinancial interests.

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References and citations should be formatted according to *EHP* style. This will reduce copy-editing time and the number of author queries included in page proofs. Authors should double-check all references for accuracy and completeness of information, spelling, diacritical marks, symbols, subscripts/superscripts, and italics. Authors are fully responsible for the accuracy of their references. Check the final draft to ensure citations and references match.

#### PREPARING TABLES AND FIGURES

**Tables.** Each table must begin on a separate page. Tables should be numbered with Arabic numerals, followed by a brief title (not to exceed 25 words). When setting up tables, do not use table layout format; type tables as text and use tabs to align the columns. Tables should contain no more than three layers of column headings, and the entire table should fit on one journal page or less. Tables that are more than one page may be published online as Supplemental Material. A column heading must be provided for each column. Rather than placing additional column heads in the middle of a table, a new table should be created. List abbreviations and definitions under each table. General footnotes to tables should be indicated by lowercase superscript letters beginning with "a" for each table. Footnotes indicating statistical significance should be identified in the following order: asterisks (\*, \*\*), number signs (#, ##), and daggers (†, ††). Type footnotes directly after the abbreviations beginning on the next line.

**Figures.** Figure legends should be typed on one page using Microsoft Word; this page should precede the figures. Graphics must fit standard letter size paper (8.5 × 11 inches or smaller), and resolution should be at least 300 dpi. All letters, numbers, and lines should be clearly legible and easy to differentiate. Provide a key defining representational elements (e.g., dotted/dashed lines, symbols, asterisks, error bars) for each figure. All axes should be clearly labeled, giving both the measure and the unit of measurement where applicable. No lines of demarcation or measurement should appear inside the graph itself, only on the axes. Consistency among terms and styles used in figures is desirable. Photomicrographs should include a scale bar in each image, and the length should be specified in the typed figure legend (e.g., bar = 10 μm). Multiple panels within a figure should fit on one page. If you have questions or problems, contact the journal (EHPmanuscripts@niehs.nih.gov).

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## MANUSCRIPT SUBMISSION

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### PEER REVIEW

The criteria for publication are weighted toward scientific quality and environmental significance. Manuscripts are also assessed according to their originality, scientific merit, appropriate degree of speculation, clarity of presentation, and conciseness.

At least two peer-reviewers will be solicited for comments on the manuscript. Authors will not know the identity of the reviewers. Peer-review is conducted electronically to accelerate the process, and each reviewer is asked to complete the review within 3 weeks.

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#### RESUBMISSION OF A REVISED MANUSCRIPT

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- A cover letter with responses to the reviewers' comments.

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#### *EHP* STYLE

##### PLAIN LANGUAGE

*EHP* covers all disciplines engaged in the broad field of the environmental health sciences. Authors should therefore write in a clear and simple manner, in the active voice, avoiding unnecessary jargon, so the article is understandable to readers in other disciplines and to those whose first language is not English. In deference to the breadth of the journal's readership, please define terms that may not be universally recognized among all environmental health scientists.

##### IN-TEXT REFERENCES AND REFERENCE LISTS

**In-text references.** All in-text references must be in name/date form. Place the citation immediately after the textual information cited, placing name and date within parentheses without a comma.

- Single author: (Wing 2002)
- Two authors: (Wing and Wolf 2000)
- Three or more authors: Use first author's last name plus "et al." (Wing et al. 2008).
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For quotations, provide references for any quotations used in the text. For example:

- According to Rubin et al. (2001), "it is only with a multidisciplinary and collaborative approach that the environmental and public health significance of *Pfisteria* will be fully understood."

All manuscripts submitted but not yet accepted, unpublished data, and personal communications—any items that must be cited but are not accessible to the public—must appear in the text in parentheses but should not be listed in the references: (Ramsdell JS, Moeller PDR, personal communication); (Reeves MK, unpublished data).

**Reference list.** Authors are fully responsible for the accuracy of their references. The list of references should begin on a separate page. All references must include:

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- Year of publication
- Full title of article or chapter (lower case)
- Title of journal (abbreviated according to Biosis or Index Medicus) or book/proceedings in title case
- For books, city/state/country of publication and name of publisher
- Volume and inclusive page numbers
- DOI number, if available with online publication date

If you are uncertain what to include, please include all information.

List references alphabetically by the last name of the first author. If the first author has more than one publication, list references in alphabetical order (letter by letter) of subsequent authors. If the first author shares the last name with another first author (Smith JM versus Smith RB), alphabetize by initials. If you list more than one publication by the same author/group of authors, arrange publications by date, early to late. If you list more than one publication published in the same year by the same author/group of authors, use a, b, c, d, and so on to distinguish the publications.

Sample alphabetical list:

- Slotkin TA. 2004a. Cholinergic systems in brain development and disruption by neurotoxicants: nicotine, environmental tobacco smoke, organophosphates. *Toxicol Appl Pharmacol* 198:132–151.
- Slotkin TA. 2004b. Guidelines for developmental neurotoxicity and their impact on organophosphate pesticides: a personal view from an academic perspective. *Neurotoxicology* 25:631–640.
- Slotkin TA. 2005. Developmental neurotoxicity of organophosphates: a case study of chlorpyrifos. In: *Toxicity of Organophosphate and Carbamate Pesticides* (Gupta RC, ed). San Diego:Elsevier Academic Press, 293–314.
- Slotkin TA, MacKillop EA, Ryde IT, Tate CA, Seidler FJ. 2007. Screening for developmental neurotoxicity using PC12 cells: comparisons of organophosphates with a carbamate, an organochlorine and divalent nickel. *Environ Health Perspect* 115:93–101.
- Slotkin TA, Persons D, Slepatis RJ, Taylor D, Bartolome J. 1984. Control of nucleic acid and protein synthesis in developing brain, kidney, and heart of the neonatal rat: effects of  $\alpha$ -difluoromethylornithine, a specific, irreversible inhibitor of ornithine decarboxylase. *Teratology* 30:211–224.
- Slotkin TA, Seidler FJ. 2007. Comparative developmental neurotoxicity of organophosphates in vivo: transcriptional responses of pathways for brain cell development, cell signaling, cytotoxicity and neurotransmitter systems. *Brain Res Bull* 72:232–274.

#### TYPES OF REFERENCES

##### Journal article, conventional reference

Lewin SW, Arthur JR, Riemersma RA, Nicol F, Walker SW, Millar EM, et al. 2002. Selenium supplementation acting through the induction of thioredoxin reductase and glutathione peroxidase protects the human endothelial cell. *Biochim Biophys Acta* 1593:85–92.

##### Journal article, DOI reference

Fanshawe TR, Diggle PJ, Rushton S, Sanderson R, Lurz PWW, Glinianaia SV, et al. 2007. Modelling spatio-temporal variation in exposure to particulate matter: a two-stage approach. *Environmetrics*; doi: 10.1002/env.889 [Online 17 December 2007].

##### Journal article, “in press”

Theppeang K, Glass TA, Bandeen-Roche K, Todd AC, Rohde CA, Schwartz BS. In press. Sex and race/ethnicity differences in lead dose biomarkers: predictors of lead in blood, tibia, and patella in older, community-dwelling adults in an urban setting. *Am J Public Health*.

##### Chapter in edited book

Clark K, Cousins I, MacKay D, Yamada K. 2003. Observed concentrations in the environment. In: *The Handbook of Environmental Chemistry*, Vol 3, Part Q: Phthalate Esters (Staples CA, ed). New York:Springer, 125–177.

#### Agency as author

Institute of Laboratory Animal Resources. 1996. *Guide for the Care and Use of Laboratory Animals*. 7th ed. Washington, DC:National Academy Press.

#### Proceedings

Zaslavsky I, Pezzoli K, Valentine D, Lin A, Sarabia H, Ellisman MH, et al. 2006. Integrating GIS and portal technologies for assessing environmental health impacts of Hurricane Katrina. In: *Proceedings from the Second International Conference on Environmental Science and Technology*, 19–22 August 2006, Houston, TX, Vol 2 (Starrett SK, Hong J, Lyon WG, eds). Houston, TX:American Science Press, 385–390.

Additional reference examples are available on page 6.

#### FOOTNOTES

Do not use footnotes. Place all textual information within the manuscript and all references in the proper form both in text and in the reference list.

#### ABBREVIATIONS

All nonstandard abbreviations should be defined in the text at first use: for example, organochlorine (OC) pesticides, LOD (limit of detection), polymerase chain reaction (PCR). Abbreviations for elements (e.g., Fe, Cu) and chemical compounds (e.g., polychlorinated biphenyls, PCBs; carbon dioxide, CO<sub>2</sub>) should be spelled out on first use and abbreviated thereafter.

Units of measure should be abbreviated only when a specific amount is given (e.g., “concentration of 10 ng/mL” versus “units of nanograms per milliliter”). A list of standard abbreviations that do not need to be defined in the text is available on page 7.

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The standard abbreviations listed below do not need to be defined in the text. Note that units of measure should be abbreviated only when a specific amount is given (e.g., “concentration of 10 ng/mL” versus “units of nanograms per milliliter”).

Å	angstrom	m	meter
amu	atomic mass unit	m <sup>2</sup>	square meter
ATP	adenosine 5'-triphosphate	m <sup>3</sup>	cubic meter
bw	body weight	mCi	millicurie
°C	Celsius (°C)	µg	microgram
cm	centimeter	mg	milligram
cm <sup>2</sup>	square centimeter	mi	mile
cm <sup>3</sup>	cubic centimeter	µL	microliter
Da	dalton	min	minute
df	degrees of freedom	mL	milliliter
DMSO	dimethyl sulfoxide	mM	millimolar
DNA	deoxyribonucleic acid	mm	millimeter
EDTA	ethylenediamine-tetraacetic acid	mol	mole
ELISA	enzyme-linked immunoadsorbent assay	mRNA	messenger RNA
ft	foot	<i>n</i>	number
g	gram	ng	nanogram
<i>g</i>	gravity (10,000 × <i>g</i> )	nL	nanoliter
gal	gallon	nmol	nanomole
ha	hectare	o.d.	outside diameter
Gy	gray (unit of absorbed dose of ionizing radiation)	pg	picogram
HEPES	<i>N</i> -2-hydroxyethylpiperazine- <i>N'</i> -2-ethane sulfonic acid	ppb	parts per billion
HPLC	high-performance liquid chromatography	ppm	parts per million
hr	hour	ppt	parts per trillion
Hz	hertz	RNA	ribonucleic acid
i.d.	inside diameter	RNase	ribonuclease
in.	inch	SD	standard deviation
IU	international unit	SDS/PAGE	sodium dodecyl sulfate-polyacrylamide gel electrophoresis
J	joule	SE	standard error, standard error of the mean
kDa	kilodalton	sec	second
kg	kilogram	U	unit
km	kilometer	V	volt
<i>K</i> <sub>m</sub>	Michaelis constant	vol/vol	volume/volume
L	liter	W	watt
lb	pound	wt	weight
ln	natural logarithm	wt/vol	weight/volume
M	molar	yd	yard