DESCRIPTION

Welcome to Journal of Investigative Dermatology Symposium Proceedings

Journal of Investigative Dermatology Symposium Proceedings (JIDSP) publishes peer-reviewed, invited papers relevant to all aspects of cutaneous biology and skin disease. Papers in the JIDSP are often initially presented at a scientific meeting. Potential topics include biochemistry, biophysics, carcinogenesis, cellular growth and regulation, clinical research, development, epidemiology and other population-based research, extracellular matrix, genetics, immunology, melanocyte biology, microbiology, molecular and cell biology, pathology, pharmacology and percutaneous absorption, photobiology, physiology, and skin structure.

If you would like to access JID Symposium Proceedings, please subscribe to the Journal of Investigative Dermatology.

EDITORIAL BOARD

Edit-in-Chief
Mark C. Udey, National Institutes of Health, Bethesda, Maryland, United States of America

Principal Deputy Editor
Thomas Krieg, Cologne, Germany

Deputy Editors
Leena Bruckner-Tuderman, Freiburg im Breisgau, Germany
Kilian Eyerich, Munich, Germany
David E. Fisher, Boston, Massachusetts, United States of America
Joel Gelfand, Philadelphia, Pennsylvania, United States of America
Valerie Horsley, New Haven, Connecticut, United States of America
Sarah E. Millar, Philadelphia, Pennsylvania, United States of America
Tony Oro, Stanford, California, United States of America
Vincent Piguet, Toronto, Ontario, Canada

Section Editors
Martine Bagot, Paris, France
Isaac Brownell, Bethesda, Maryland, United States of America
Keith A. Choate, New Haven, Connecticut, United States of America
Michael Detmar, Zurich, Switzerland
Andrzej Dlugosz, Ann Arbor, Michigan, United States of America
James T. Elder, Ann Arbor, Michigan, United States of America
John E. Harris, Worcester, Massachusetts, United States of America
Daniel Kaplan, Pittsburgh, Pennsylvania, United States of America
Ethan A. Lerner, Boston, Massachusetts, United States of America
Carien M Niessen, Cologne, Germany
Martin Roecken, Munich, Germany
Thomas Schwarz, Kiel, Germany
Phyllis I. Spuls, Amsterdam, Netherlands
Marjana Tomic-Canic, Miami, Florida, United States of America
Xiao-Jing Wang, Denver, Colorado, United States of America

Statistical Editor
Chao Xing, Dallas, Texas, United States of America

Managing Editor
Elizabeth Blalock

Editorial Process Manager
Sarah Forgeng, Chapel Hill, North Carolina, United States of America

Medical Writer
Heather Yarnall Schultz, Huntington, West Virginia, United States of America

JID Connector Editor
Lynn A. Cornelius, Saint Louis, Missouri, United States of America

Cells to Surgery Quiz Editor
Keyvan Nouri, Miami, Florida, United States of America

Meet the Investigator Editor
Ayman Grada

Meetings Reports Section Editor
Jouni Uitto, Philadelphia, Pennsylvania, United States of America

Podcast Editor
Robert Dellavalle, Denver, Colorado, United States of America

Research Techniques Made Simple
Jodi Lynn Johnson

SnapshotDx Quiz Editor
Mariya Miteva, Miami, Florida, United States of America

Editors Emeriti
Howard P. Baden
Paul R. Bergstresser, Dallas, Texas, United States of America
Irwin M. Freedberg
Ruth K. Freinkel
Barbara Gilchrest, Boston, Massachusetts, United States of America
Lowell A. Goldsmith, Charlotte, North Carolina, United States of America
Conrad Hauser
Naomi M. Kanof
David A. Norris
Edward J. O’Keefe
Richard B. Stoughton
Marion B. Sulzberger

Editorial Consultants
Masayuki Amagai, Tokyo, Japan
Maryam Asgari, Boston, Massachusetts, United States of America
Jürgen Becker, Graz, Austria
Mark-Jürgen Berneburg, Munich, Germany
Tilo Biedermann, Munich, Germany
Wendy B. Bollag, Augusta, Georgia, United States of America
Vladimir Botchkarev, Bradford, United Kingdom
Joke Bouwstra, Leiden, Netherlands
Paul Bowden, Cardiff, United Kingdom
Giovanna Zambruno, Rome, Italy
Xuejun Zhang, Hefei, China
Bin Zheng, Charlestown, Massachusetts, United States of America
Detlef Zillikens, Lubeck, Germany
INTRODUCTION
The Journal of Investigative Dermatology Symposium Proceedings (JIDSP) publishes reports describing original research on all aspects of cutaneous biology and skin disease. Topics include biochemistry, biophysics, carcinogenesis, cell regulation, clinical research, development, embryology, epidemiology and other population-based research, extracellular matrix, genetics, immunology, melanocyte biology, microbiology, molecular and cell biology, pathology, percutaneous absorption, pharmacology, photobiology, physiology, skin structure, and wound healing.

Original Articles, Review Articles, and Letters to the Editor are standard features. Perspectives and Commentaries are invited by the Editorial Board. Online features now under development seek to make JIDSP content more relevant and accessible to trainees and clinician-educators.

Reports that primarily or exclusively concern a methodology, with the data documenting utility or feasibility, rather than providing new biologic insights, are discouraged. Submissions reporting new methods in combination with mechanistic insights into the problem being investigated are, in contrast, most welcome.

Mutation reports of mutations in known genes with no new mechanistic data will not be considered.

Case reports or case series, unless they provide new biologic insights, are rarely appropriate for the Journal.

BEFORE YOU BEGIN

Ethics in Publishing
For information on Ethics in publishing and Ethical guidelines for journal publication see https://www.elsevier.com/publishingethics and https://www.elsevier.com/journal-authors/ethics. When addressing issues of publication ethics, JIDSP generally follows the flowcharts published by the Committee on Publication Ethics (COPE; http://www.publicationethics.org).

Scientific Integrity
All submissions to and publications in the JIDSP are assumed to be the product of honest observations. By submission, the first and senior authors take full responsibility for the integrity of the work as a whole, from inception to the published article. If substantial doubts arise regarding the scientific integrity of any submission or publication it is the responsibility of the Editor to pursue these issues with the author(s). The first and senior authors are responsible for communicating with the editorial office on issues of scientific misconduct or the retraction of a published manuscript, should questions of this type arise. Issues of scientific integrity include but are not limited to duplicate submission and publication, falsification or fabrication of data, and plagiarism. If issues of scientific integrity cannot be resolved with the authors to the satisfaction of the Editor, they will be referred to the institution where the work was done and/or the author’s funding agency for further investigation. If the work is deemed to be fraudulent the JIDSP will print a retraction, preferably signed by all authors of the work in question. The editors reserve the right to initiate the retraction of a published manuscript, should it be deemed appropriate. Alternatively, the Editor may choose to print an expression of concern regarding the work, with an explanation.

Human Studies
The authors’ Institutional Review Board must have approved human in vivo studies. This should be stated in the Methods section of the manuscript. All patients referred to in human studies should be identified by number, not by name. Identifying information should not be published in written descriptions, photographs, or pedigrees unless the information is essential for scientific purposes and the patient (or parent or guardian) has given written informed consent for publication. All clinical investigation must have been approved by the author’s Institutional Review Board or Research Ethics Committee, and written informed consent must have been obtained from all patients. In addition, retrospective studies must have Institutional Review Board approval. This should be stated in the Methods section of the manuscript. The editors reserve the right to reject manuscripts that fail to meet these criteria, and to ask for proof of Institutional Review Board approval.
**Animal Studies**

All animal studies must be approved by the author's institutional animal care and use committee and conducted according to the NIH Guide for the Care and Use of Laboratory Animals or equivalent guidelines. This should be stated in the Methods section of the manuscript. The editors reserve the right to reject manuscripts that fail to meet these criteria.

**Conflict of Interest**

Each author must indicate on the Conflict of Interest Disclosure Form whether they have financial, equity, patenting, or other relevant relationships or arrangements with a product or sponsor of research that might constitute a conflict of interest. More information on conflict of interest can be found on the form and in The Uniform Requirements for Manuscripts Submitted to Biomedical Journals, by the International Committee of Medical Journal Editors. Sources of support or declared conflicts should be stated in the manuscript. If the authors have no conflict of interest to declare, this should be noted using the standard phrase, "The authors state no conflict of interest". For more information on Conflict of Interest, see also https://www.elsevier.com/conflictsofinterest.

**Submission declaration**

Submission of an article implies that the work described has not been published previously (except in the form of an abstract, a published lecture or academic thesis, see 'Multiple, redundant or concurrent publication' for more information), that it is not under consideration for publication elsewhere, that its publication is approved by all authors and tacitly or explicitly by the responsible authorities where the work was carried out, and that, if accepted, it will not be published elsewhere in the same form, in English or in any other language, including electronically without the written consent of the copyright-holder.

**Prior Publication**

**JIDSP** considers results to have already been published if they have appeared in sufficient detail to allow replication, are publicly accessible with a fixed content, and have been validated by peer review. A summary of work in a review, a perspective, a commentary, a newspaper, or magazine article does not constitute prior publication, nor does presentation of data in a Master's or Doctoral thesis. Presentation at a national scientific meeting or a webcast of such a meeting, where the data are not published in full, does not constitute prior publication. In cases where data have been presented in an abstract or thesis, this should be stated in a footnote. Our guiding principle is that journals should interfere minimally in such exchanges.

**Use of inclusive language**

Inclusive language acknowledges diversity, conveys respect to all people, is sensitive to differences, and promotes equal opportunities. Content should make no assumptions about the beliefs or commitments of any reader; contain nothing which might imply that one individual is superior to another on the grounds of age, gender, race, ethnicity, culture, sexual orientation, disability or health condition; and use inclusive language throughout. Authors should ensure that writing is free from bias, stereotypes, slang, reference to dominant culture and/or cultural assumptions. We advise to seek gender neutrality by using plural nouns ("clinicians, patients/clients") as default/wherever possible to avoid using "he, she," or "he/she." We recommend avoiding the use of descriptors that refer to personal attributes such as age, gender, race, ethnicity, culture, sexual orientation, disability or health condition unless they are relevant and valid. These guidelines are meant as a point of reference to help identify appropriate language but are by no means exhaustive or definitive.

**Authorship Conditions**

**JIDSP** ascribes to the authorship guidelines described in the The Uniform Requirements for Manuscripts Submitted to Biomedical Journals, by the International Committee of Medical Journal Editors. Briefly, each author should have participated sufficiently in the intellectual content of the work to take public responsibility for appropriate portions of its content. Authorship credit should be based on: 1) conception and design, or acquisition of data, or analysis and interpretation of data; 2) drafting or revising the manuscript critically for important intellectual content; 3) final approval of the version to be published; 4) agreement to be accountable for all aspects of the work in ensuring the questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved. All conditions must be met. In addition, any revisions and the final version of any accepted manuscript must be approved by all authors.

The contributions of those who do not meet these authorship requirements may be noted in the Acknowledgments section of the manuscript.
Corresponding Author Responsibilities
The authors should identify ONE author to serve as the corresponding author for the submission. Our submission system allows one author to complete the submission process (i.e., submitting author), while designating another to receive correspondence concerning the submission (i.e., corresponding author). Upon submission, the corresponding author must complete a License to Publish form. This will be presented within the online submission system. Prior to publication, a Declaration of Conflict of Interest form must be completed by every author. Upon acceptance, the Corresponding Author will be asked to provide the editorial office with the text of the final, accepted manuscript in a Word (.doc) or other document file and one complete set of digital publication-quality figures. Failure to provide these materials will result in a delay in publication. Author proofs and queries will be sent to the Corresponding Author by email; these will require a 48-hour turnaround. No substantive changes may be made in the proof stage without the written approval of the Editor. Journal policy allows ONE corresponding author for published articles. If specific authors are to be addressed concerning particular aspects of the published work, this may be indicated in the Acknowledgments section.

Changes to Authorship
Changes in authorship at any point in the review or publication process must be explained to the Editor in a letter signed by all authors, including by any author being added or deleted. The letter must include the original and the revised authorship lists. Approved author changes requested after publication will result in a corrigendum.

Authorship Disputes
Authorship disputes will not be handled by the journal; instead, these will be referred to the authors to resolve. If the authors cannot resolve the issue themselves, the journal will recommend that the authors bring the matter to the attention of their institutions. Any article with a known authorship dispute will be suspended from review or publication, depending on its status.

Registering & Reporting Clinical Trials
The JIDSP welcomes submissions of high quality, well-designed clinical trials that are likely to be newsworthy and have the potential to change clinical practice. JIDSP is particularly interested in clinical research that elucidates disease mechanisms or the mechanisms of action for new therapies. A clinical trial is "any research project that prospectively assigns human subjects to intervention and comparison groups to study the cause-and-effect relationship between a medical intervention and a health outcome" (ICMJE definition).

All trials submitted to the JIDSP must be 1) prospectively registered and 2) fully reported.

1. **Prospective trial registration.** The purpose of prospective trial registration is to overcome selective reporting bias. The JIDSP adheres to the principles set out by the International Committee of Medical Journal Editors (ICMJE) that all clinical trials need to be registered in an approved publicly accessible clinical trial register before patient recruitment begins. A list of ICMJE approved registries can be found here. Studies that register after recruitment has started or after recruitment has been completed will not be considered. The Clinical Trial registration number should be included at the end of the abstract.

2. **Full reporting.** The purpose of complete reporting is to allow our readers to see exactly what was done in the trial so that if needed, the study could be replicated. Many forms of bias can occur within trials, and how these have been dealt with need to be clearly reported. The JIDSP endorses the Consolidated Standards of Reporting Trial (CONSORT) Statement and requires authors to report their clinical trials fully according to the latest revision (currently 2010). Authors are required to indicate using this form where in their manuscript submission the 25 items included in CONSORT 2010 are located, along with a participant flow diagram.

Copyright
Authors publishing in JIDSP retain copyright in their articles and grant the Society for Investigative Dermatology an exclusive license to publish their work. In return, authors can reuse their own articles in any future published work and post them on their own website. Upon submission of an article, the corresponding author will be asked to complete a ‘License to Publish’ form.

Subscribers may reproduce tables of contents or prepare lists of articles including abstracts for internal circulation within their institutions. Permission of the Publisher is required for resale or distribution outside the institution and for all other derivative works, including compilations and translations.
(please consult https://www.elsevier.com/permissions). If excerpts from other copyrighted works are included, the author(s) must obtain written permission from the copyright owners and credit the source(s) in the article. Elsevier has preprinted forms for use by authors in these cases: please consult https://www.elsevier.com/permissions.

For open access articles: Authors will be asked to complete an 'Exclusive License Agreement' (for more information see https://www.elsevier.com/OAauthoragreement). Permitted third party reuse of open access articles is determined by the author's choice of user license (see https://www.elsevier.com/openaccesslicenses).

Author Rights
As an author you (or your employer or institution) have certain rights to reuse your work. For more information see https://www.elsevier.com/copyright.
Authors publishing in JIDSP retain copyright in their articles and grant the Society for Investigative Dermatology an exclusive license to publish their work. In return, authors can re-use their own articles in any future published work.

Self-Archiving
Authors of original research articles are encouraged to submit the accepted, peer-reviewed manuscript to their funding body's archive for public release twelve months after publication. For manuscripts funded by certain funding bodies, the publisher will automatically export to the appropriate deposition service those accepted articles whose authors have indicated relevant support. In addition, authors are encouraged to archive this version in their institution's repositories and on their personal web sites, also twelve months after the original publication. Authors should cite the publication reference and doi number on any deposited version, and provide a link from it to the published article on the JID website.

Elsevier supports responsible sharing
Find out how you can share your research published in Elsevier journals.

Role of the Funding Source
Authors should identify who provided financial support for the conduct of the research and/or preparation of the article and briefly describe the role of the sponsor(s), if any, in study design; in the collection, analysis and interpretation of data; in the writing of the report; and in the decision to submit the article for publication. For studies funded by federal agencies or their peer-reviewed equivalent (Wellcome Trust, Howard Hughes Medical Institutes, etc) it is assumed there was no such involvement, but the sources of all other funding should be explicitly stated not to have involvement, provided that is the case.

Open access
Please visit our Open Access page for more information.

Open Access (OA)
Authors of research articles can choose to pay an article processing charge to publish their accepted articles open access (i.e., free to all readers, regardless of whether they have a subscription) online immediately upon publication. Please note that the open access article processing charge is in addition to any standard publication charges. By paying this charge authors are also permitted to post the final, published PDF of their article on a website, institutional repository, or other free public server immediately upon publication.

Regardless of how you choose to publish your article, the journal will apply the same peer review criteria and acceptance standards.

Open Access Fee
The Open Access publication fee for this journal is $3,200, excluding taxes. Learn more about Elsevier's pricing policy: https://www.elsevier.com/openaccesspricing.

Open Access Society Member Discount
The Open Access publication fee for individual members of the Society for Investigative Dermatology and European Society for Dermatological Research will be discounted to $2,600.

Open Access Creative Commons Licenses
For open access articles, how others may use or re-use your work is defined by which of the following Creative Commons licenses you select:
Creative Commons Attribution-NonCommercial-NoDerivs (CC BY-NC-ND)
For non-commercial purposes, allows others to distribute and copy the article, and to include it in a collective work (such as an anthology), as long as they credit the author(s) and provided they do not alter or modify the article.

CC BY License
This license allows others to distribute and copy the article, create extracts, abstracts, and other revised versions, adaptations or derivative works of or from an article (such as a translation), include it in a collective work (such as an anthology), and text or data mine the article, even for commercial purposes, as long as they credit the author(s), do not represent the author as endorsing their adaptation of the article, and do not modify the article in such a way as to damage the author's honor or reputation.

Creative Commons Attribution (CC BY) licenses are available only for authors whose funding body requires it for publication and/or reimbursement of the Open Access fee.

Language (Usage and Editing Services)
Please write your text in good English (American or British usage is accepted, but not a mixture of these). Authors who feel their manuscript may require editing to eliminate possible grammatical or spelling errors and to conform to correct scientific English may wish to use the English Language Editing service available from Elsevier's WebShop (https://webshop.elsevier.com/language-editing-services/language-editing/) or visit the customer support site (https://service.elsevier.com) for more information.

Authors may receive criticism from referees or editors about English-language usage in their manuscripts. Awkward language may distract readers from your scientific message and may lead to less favorable reviews. To reduce the likelihood of this possibility, we encourage authors who are not native speakers of English to enlist a native English speaking colleague to review their manuscript for clarity. When this is not possible, authors may wish to use an editing service such as one of those listed below. The use of such services is at the authors' expense and does not guarantee that articles will be accepted. While the services listed below have been vetted, other commercial editing services may be employed instead. JIDSP cannot accept responsibility for the interaction between authors and service providers or for the quality of the work performed. American Journal Experts BioScience Writers Inter-Biotech also provides a free online writing course for researchers whose first language is not English, to help them write for and publish papers in English-language journals SPI Professional Editing Services Write Science Right

Manuscript Submission
Articles may be submitted to JIDSP by invitation only.

Authors are encouraged to read JIDSP's Editorial Policies before submitting their work. All submissions must comply with these policies. JIDSP requires electronic submission of manuscripts. For assistance with the site, contact ScholarOne Manuscripts at +1 434-964-4100. For questions regarding your submission, contact the Editorial Office at JIDOffice@sidnet.org. You will need the information below to complete your online submission. Submissions are dated according to receipt of all items listed below. No editorial decision will be communicated to the authors until the submission is complete.

Our online submission system guides you stepwise through the process of entering your article details and uploading your files. The system converts your article files to a single PDF file used in the peer-review process. Editable files (e.g., Word) are required to typeset your article for final publication. All correspondence, including notification of the Editor's decision and requests for revision, is sent by e-mail.

Submissions must include:
One-page cover letter stating: A summary of the research being reported and a description of its importance; The data in the manuscript is original and the manuscript is not under consideration elsewhere; None of the manuscript contents have been previously published except in abstract form; All authors have read and approved all versions of the manuscript, its content, and its submission to the JIDSP; Willingness to pay page charges ($150/page, inclusive of color), should the manuscript be accepted for publication; If the submission contains supplemental files, willingness to pay online fees ($125/file); A single corresponding author's address, telephone, fax, email (email address required). License to Publish form, signed by the corresponding author. (This form will be presented within the submission system.) Declaration of Conflict of Interest form, signed by all authors. (This form will
be presented within the submission system, and an email will be sent to all authors requesting they complete it.) Manuscript Submission Fee of $50 (payable at time of submission; credit card, check number, or purchase order number required). Text file (.doc or .docx). Figure files (.tif, .eps, or .ppt), if the submission includes figures. You will be asked to enter an email address for every author; have this information ready.

**Peer Review**

*JIDSP* employs ScholarOne Manuscripts to conduct single-blinded peer review (the identity of peer reviewers is kept confidential), as detailed in the graphic below. Authors may suggest the invitation or exclusion of up to four reviewers at the time of submission. The journal will take these recommendations into consideration; however, the final decision regarding reviewers lies with the Editor. Submissions that will not be fully peer reviewed generally receive a decision within 5 days. Fully peer-reviewed submissions are evaluated by at least two reviewers, one of whom will be a *JIDSP* Editorial Board member; most will receive a decision within an average of 30 days.

Revisions are requested within 60 days; extensions must be requested by email to JIDOoffice@sidnet.org. Revisions will be returned to reviewers and new reviewers will be enlisted at the discretion of the editor. Not all revised manuscripts will be accepted.

Manuscripts are considered privileged information. Reviewers and editors are instructed to declare any personal or financial conflict of interest on the review forms, and they are expected to maintain confidentiality of a manuscript’s contents. Further information about reviewing for *JIDSP* can be found in our Reviewer Guidelines.

You may submit the names and institutional e-mail addresses of potential referees. You may also request the exclusion of a limited number of referees. Note that the editor retains the sole right to decide whether the suggested reviewers are used or excluded.

**Revisions**

Revised manuscripts are due within two months of receipt of the decision letter. Manuscripts not received within this time will be dated and treated as new submissions. Any extension must be requested in writing to JIDEeditor@sidnet.org and may be granted at the discretion of the editor. All revised submissions are run through the iThenticate plagiarism checking software. For more information about plagiarism and the use of iThenticate, see the editorial. If, after reconsideration, the manuscript is not suitable for publication with only minor editorial changes, it must be resubmitted as a new manuscript to be reconsidered.

Rejected manuscripts may be resubmitted for consideration only with explicit permission of the Editor and if significant new data are presented. In such cases, the submission will be given a new manuscript number and date of receipt, and it will be treated as a new manuscript.

**Rebuttals**

Editorial decisions are rarely reversed. Authors with serious concerns about potential scientific errors in the review process may send a rebuttal letter to the editor at JIDEeditor@sidnet.org. Only written appeals will be considered.

**ORCID Identifiers**

In 2014, the *JIDSP* began accepting author Open Researcher and Contributor IDs (ORCID). ORCID is a non-profit organization dedicated to solving the long-standing name ambiguity problem in scholarly communication by creating a central registry of unique identifiers for individual researchers and an open, transparent linking mechanism between ORCID and other current author identifier schemes. To learn more about ORCID, please visit [http://www.orcid.org](http://www.orcid.org).

**Medical Writers**

The journal allows the participation of medical writers in the preparation of manuscripts. The role of the medical writer and the identity of the entity that paid for this assistance should be disclosed in the Acknowledgments section of the manuscript.

**Statistical Guidelines**

The standard error of the mean should be presented only when the intent is to quantify the precision of the sample mean as an estimate of the population mean. The standard deviation should be presented when the intent is to present a descriptive statistic about the sample or an estimate of the population
standard deviation. As much as possible, summaries in tables and figures should indicate the sample sizes upon which they are based. For more guidance on statistical methods, refer to the New England Journal of Medicine Instructions to Authors.

**Archiving**

The Editorial Office will retain an electronic file of each manuscript and related correspondence for 12 months following the final editorial decision, or, in the case of accepted manuscripts, publication.

**Announcements**

Brief announcements of scientific meetings, availability of fellowship grants, and awards for research relevant to the readership will be published at the discretion of the Editor. Announcements must reach the editorial office at least 8 weeks before their anticipated publication. In general, announcements will be published only once.

**PREPARATION**

**General**

Manuscripts should be concise, economical of references, figures and tables, and formatted as described below. Reports of investigative studies should be organized as follows, within the stated word limits. Details about each section are provided in the instructions that follow. The text should be submitted as a .doc or .docx file (not a .pdf). Manuscripts that do not conform to these specifications will be returned to the authors for correction.

**Title Page**

The title page should include the following:

Brief, informative title of 120 characters or fewer (brand names may not be used in the title) Authors’ full names, ORCID, (if any), departments, and institutions (indicate affiliations numerically with numbers placed after authors’ names and before the institutions) All authors’ emails are required by our electronic submission system. Have these ready at the time of submission. City, state and country in which the work was done Corresponding author’s address, telephone, fax, and email (email address required) Short title of 45 characters or fewer, including spaces Abbreviations used (see below for detail on abbreviations)

**Abstract**

Do not exceed 200 words Briefly summarize the background, purpose, results and conclusions of the study, in that order, without headings Do not include nonstandard abbreviations, acknowledgments of support, or refer to footnotes or references Write with a general scientific audience in mind Brand names may not be used in the abstract

**Introduction**

Begin with a brief introductory statement that places the work to follow in historical perspective and explains its intent and significance.

**Results and Discussion**

In the Results section, briefly present the experimental data in text, tables, or figures. The Discussion should focus on the interpretation and significance of the findings with concise, objective comments that describe their relation to other work in the area. Do not repeat information from the Results. Results and Discussion may be presented separately or combined into a single section.

**Materials and Methods**

Readers should be able to reproduce the experiments from the information in the methods section, figure legends, table footnotes, and references. Provide the manufacturer's name and location (city, state if within the US; city, country if outside the US) for materials purchased. This would normally include access to the identity (chemical formula) of all reagents employed. Unique non-proprietary reagents described (e.g., cells, DNA, antibodies) and instruments created for surveys of accepted articles must be made freely available to qualified scientists. Only under this condition is the information useful to the scientific community, and only in this way can results be reproduced by other scientists.
Manuscripts reporting human studies must include a statement that all human studies have been approved by the authors' Institutional Review Board and affirming that patients gave their written, informed consent. Reports of Clinical Trials must conform to the Editorial Policies concerning the registration and reporting of Clinical Trials. Submissions that do not comply with these specifications will be returned to the authors for correction prior to review.

Manuscripts reporting animal studies must include a statement that the authors' institution approved the studies and that they were conducted according to the NIH Guide for the Care and Use of Laboratory Animals or equivalent guidelines.

Conflict of Interest
Financial or personal involvements that pose a potential duality of interest for authors should be clearly disclosed in the manuscript under the heading "Conflict of Interest." If no conflicts exist, please use the standard phrase, "The authors state no conflict of interest." Upon submission, all authors will be asked to complete and sign a Conflict of Interest Disclosure Form.

Acknowledgments
A note of acknowledgment is appropriate recognition for contributors who provided help during the research but whose contributions do not qualify them as authors. For details on authorship, see the Authorship section.

References
If using referencing software, use the Vancouver name and date style. References should be listed alphabetically on a separate page at the end of the manuscript. If necessary, further sort the list chronologically. More than one reference from the same author(s) in the same year must be identified by the letters "a," "b," "c," etc. placed after the year of publication. To save space, the citation of appropriate recent review articles is encouraged. Only published articles, published abstracts, and manuscripts in press should be cited in the references. Any references listed as "in press" should be submitted with the manuscript for the reviewers' reference. See the examples below for details for presenting the references.

Citation in text
Refer to publications in the text as follows:
One author: (Jones, 2000) Two authors: (Jones and Smith, 2000) Three or more authors: (Jones et al., 2000) Groups of references should be listed first alphabetically, then chronologically. Examples: "... as demonstrated in keratinocytes (Allen, 1999, 2000a, 2000b; Allen and Jones, 1999; Jones et al., 2005). Kramer et al. (2015) have recently shown ..."

Example references:

Journal article:

Online publication in advance of print publication:

Article in Press:
Chassin MR, Kosecoff J, Soloman DH. How coronary angiography is used. JAMA, in press.

Book chapter:

Entire book:

Paper Presented at a Conference:

Website:

Footnotes
Any citations to unpublished works must be shown as footnotes, not in the reference list. Footnotes should be presented in parentheses in the text.

Tables
Tables should be self-explanatory and not duplicate content from the text. Present one table per page. Number tables sequentially (1, 2, 3) and cite them in chronological order in the text. Each table should include an informative title. Provide the description of the experiment, definition of columns or abbreviations, etc. in footnotes to the title and table contents. Label footnotes 1, 2, 3, etc. Define errors in the table by a footnote, e.g., "mean +/- SD" or "mean +/-SEM". Check that the data in the tables are consistent with those cited in the relevant papers in the text, totals add up correctly, and percentages have been calculated correctly. JID_GfA_Sample_Table.jpgSample table

Figures
Figures should be intelligible without reference to the text and should complement the text. Figures should be labeled sequentially (1, 2, 3) and cited in the text, but not embedded within the text. Figures should be submitted as individual image (.eps, .tif, .ppt) files, not as .pdfs.

Artwork Guidelines
Detailed guidelines for submitting artwork for publication can be found in the artwork instructions. Submit production quality artwork with your initial submission. Please note: file size limitations may require that publication-quality figures be compressed for submission and peer review purposes.

Appropriate Scientific Conduct Concerning Images
No specific feature within an image may be enhanced, obscured, moved, removed, or introduced. Adjustments of brightness, contrast, or color balance are acceptable if they are applied to the whole image, and as long as they do not obscure or eliminate any information present in the original. The grouping of images from different parts of the same gel, or from different gels, fields, or exposures must be made explicit by arrangement of the figure (i.e., using dividing lines) and in the text of the figure legend. If the original data cannot be supplied by the author upon request, the acceptance of the manuscript may be revoked. Refer to the article "What's in a picture? The temptation of image manipulation" by Rossner and Yamada (J Cell Biol 166:11-15, 2004) for details.

Figure Titles & Legends
Present the figure title (a brief, overall description of the figure) in the legend that is included in the text. Do not put the title on the figure. Legends should explain how an experiment was done and identify parts of the figure (i.e., a, b, c); they should not interpret the figure. Indicate the meaning of all symbols, keys and abbreviations used in the figure. Error bars should be defined in the legend as "mean +/- SD" or "mean +/-SEM". If you use SEM give n for each point.

Figure Sizing
Submit artwork of exact column measurements and crop out unnecessary areas (1 column = 87.50mm; 2 columns = 180mm). Most figures should be presented at 1 column width (or quarter page in size). Illustrative elements (figure/tables) are limited to ¼ page each (approx 87.5 mm x 115 mm). Authors may supply fewer, larger elements (i.e., for an original article three ½-page figures may be presented rather than six 1/4-page figures — or any combination that results in no more than 1 ½ pages of figures and tables). In addition, 500 words of text may be substituted for one figure, or vice versa.

Figure Labeling
Figure parts should be noted as a, b, c, etc., in lower case Arial font. Use uniform lettering and sizing to ensure that labels are legible if figures must be re-sized.

Line Drawings
Drawings should have clear, uniform lines of thickness. Curves should be smooth. Use 3-dimensional graphs only to present a third dimension of data. Label axes parallel to the axis. Labels must be clearly legible. Color may be used in charts and graphs. If using black and white, bar graphs should use a patterned print (not shades of gray).

**Photomicrographs**
A scale bar (not magnification) must be placed on micrographs. Indicate the scale in the legend, e.g., "scale bar = mm".

**Figure Formats**
For help with electronic artwork, go to https://www.elsevier.com/artworkinstructions. Some highlights are provided below. Artwork created in a Microsoft Office application (Word, PowerPoint, Excel) should be supplied "as-is" in its native document format. For all other applications, "save as" or convert images to one of the following formats (note resolution requirements): EPS (or PDF): Vector drawings, embed all used fonts TIFF (or JPEG): Color or grayscale photographs (halftones), keep to a minimum of 300 dpi TIFF (or JPEG): Bitmapped (pure black & white pixels), line drawings, keep to a minimum of 1000 dpi TIFF (or JPEG): Combinations bitmapped line/half-tone (color or grayscale), keep to a minimum of 500 dpi DO NOT Optimize for screen use (e.g., GIF, BMP, PICT, WPG); these have a low number of pixels and a limited set of colors. Embed the used fonts if the application provides that option.

**Data references**
This journal encourages you to cite underlying or relevant datasets in your manuscript by citing them in your text and including a data reference in your Reference List. Data references should include the following elements: author name(s), dataset title, data repository, version (where available), year, and global persistent identifier. Add [dataset] immediately before the reference so we can properly identify it as a data reference. The [dataset] identifier will not appear in your published article.

**Permissions**
If you include previously published or copyrighted material in your manuscript, obtain written permission from the copyright owner to reproduce the material in both print and electronic formats and submit this authorization with the manuscript. This applies to quotes, illustrations, and other materials taken from previously published works not in the public domain. The original source should be cited (if reprinting a figure or table, the citation should appear in the figure legend or table footnote).

**Abbreviations**
Define abbreviations that are not standard in this field in a footnote placed on the title page. Ensure consistency of abbreviations throughout the article. Terms used more than five times may be abbreviated and listed with their abbreviations on the title page. Abbreviations not listed in the Standard or Recommended Abbreviations should conform to those listed in Scientific Style & Format, 8th ed. (University of Chicago Press, Chicago, IL USA, 2014). Capitalize trade names, but use generic names if possible. Trade names may not be used in the title or abstract. The trivial names of chemicals may be used if the formal chemical name is given with the first use of the trivial name.

**Deposition of DNA & RNA Sequences, Microarray Data**
DNA & RNA sequences must have an EMBL or Genbank database accession number, and this number should be given in the legend to the figure showing the sequence.

Authors submitting manuscripts containing microarray data may be asked to supply these data as supplementary information at the request of the reviewers. Microarray data should be presented in a MIAME-compliant standard format and deposited in an approved database; an accession number should be included in the submission. Approved databases include Gene Expression Omnibus and ArrayExpress.

**Reporting on Cell Line Use**
JIDSP ascribes to the guidelines provided by the American Association for Cancer Research (AACR; http://www.aacrjournals.org/site/AuthServCtr/cell_line_auth.xhtml), which state that if cell lines were used in research, a statement addressing the following points must be included in the Materials & Methods section of the manuscript: From where and when the cells were obtained Whether the cell lines have been tested and authenticated The method by which the cells were tested for mycobacterial or other contamination and for DNA mutations How and when the cells were last tested If cells were obtained directly from a cell bank that performs cell line characterizations and passaged in the user’s laboratory for fewer than 6 months after receipt or resuscitation, re-authentication is not required. In these cases, the author should include the method of characterization used by the cell bank.
Provide the Sex of Research Subjects/Animals

JIDSP ascribes to NIH's policy on "Consideration of Sex as a Biological Variable in NIH-funded Research." Therefore, as stated in the NIH guidance document, authors should "provide the sex of research subjects and/or materials, when possible. Report when sex differences are, or are not, detected in analyses, as this may be valuable for future research and meta-analysis."

Supplementary Material

JIDSP accepts electronic supplementary material to support and enhance your scientific publication. Supplementary files offer the author additional possibilities to publish supporting applications, high-resolution images, background datasets, sound clips, and more. At the Editor's discretion, large tables, data sets, etc. may be published as supplementary material. Supplementary files will be published online alongside the electronic version of your article. The main article must be complete and self-explanatory without the supplementary information. Supplemental Material must be supplied to the editorial office in its final form for peer review. Supplementary material should be cited in the text as "Figure S1, S2, etc.,” “Table S1, S2, etc.” or "Supplementary Materials and Methods, etc." Please use one of the recommended file formats described below. Supply a concise and descriptive caption for each file.

The charge for publishing supplemental data is $125 for the first file and $75 per file thereafter.

Guidelines for preparing supplementary material

All supplemental figures, tables, and text should be compiled into a single .pdf. Exceptions to this include Excel files, videos, audio files, and any other items that cannot be reduced to a flat file .pdf format. Provide titles for each component and include a figure title and legend for each figure and a title for each table. Please check the file carefully, as supplementary information cannot be modified after acceptance. Supplementary information is not copyedited by the journal, so ensure that it is clearly and succinctly presented, and that the terminology conforms to the rest of the report. Publication may be delayed if these guidelines are not followed. For more detailed information, refer to the artwork instruction pages at https://www.elsevier.com/artworkinstructions.

AFTER ACCEPTANCE

Embargo Policy

All articles accepted for publication in JIDSP are embargoed until the date of online publication.

For Original Articles and Letters to the Editor, both of which are published online before copyediting and typesetting, the following guidelines apply. The publication of the accepted manuscript online is an official publication of a JIDSP article. It is a .pdf of the accepted version of an article, before copyediting, typesetting, or proofing. Original Articles and Letters to the Editor are only embargoed until the accepted manuscript version is published online. In general, this will be 2-4 business days following export of the accepted article to the publisher, although this may vary.

Reviews and Perspectives are embargoed until the date of online publication (of the copyedited, typeset, and proofed version of the article), and editorial material (commentaries, editorials, etc.) is embargoed until the day of online release of the issue in which it is published.

Availability of Accepted Article

JIDSP makes original articles and letters to the editor available online as soon as possible after acceptance by publishing the accepted article (both in HTML and PDF format), which has not yet been copyedited, typeset or proofread. A Digital Object Identifier (DOI) is assigned, thereby making the articles fully citable and searchable by title, author name(s) and the full text. The article carries a disclaimer stating that it is an unedited article. Subsequent production stages will replace this version. The same DOI will be used for all versions.

Use of the Digital Object Identifier

The Digital Object Identifier (DOI) may be used to cite and link to electronic documents. The DOI consists of a unique alpha-numeric character string which is assigned to a document by the publisher upon the initial electronic publication. The assigned DOI never changes. Therefore, it is an ideal medium for citing a document, particularly 'Articles in press' because they have not yet received their full bibliographic information. Example of a correctly given DOI (in URL format): http://dx.doi.org/10.1038/JID.2015.386.
When you use a DOI to create links to documents on the web, the DOIs are guaranteed never to change.

**Proofs**

One set of page proofs (as PDF files) will be sent by e-mail to the corresponding author (if we do not have an e-mail address then paper proofs will be sent by post) or a link will be provided in the e-mail so that authors can download the files themselves. To ensure a fast publication process of the article, we kindly ask authors to provide us with their proof corrections within two days. Elsevier now provides authors with PDF proofs which can be annotated; for this you will need to download the free Adobe Reader, version 9 (or higher). Instructions on how to annotate PDF files will accompany the proofs (also given online). The exact system requirements are given at the Adobe site. If you do not wish to use the PDF annotations function, you may list the corrections (including replies to the Query Form) and return them to Elsevier in an e-mail. Please list your corrections quoting line number. If, for any reason, this is not possible, then mark the corrections and any other comments (including replies to the Query Form) on a printout of your proof and scan the pages and return via e-mail. Please use this proof only for checking the typesetting, editing, completeness and correctness of the text, tables and figures. Significant changes to the article as accepted for publication will only be considered at this stage with permission from the Editor. We will do everything possible to get your article published quickly and accurately. It is important to ensure that all corrections are sent back to us in one communication: please check carefully before replying, as inclusion of any subsequent corrections cannot be guaranteed. Proofreading is solely your responsibility.

**Offprints**

The corresponding author, at no cost, will be provided with a personalized link providing 50 days' free access to the final published version of the article on ScienceDirect. This link can also be used for sharing via email and social networks. Both corresponding and co-authors may order offprints at any time via Elsevier’s WebShop.

**Publication Charges**

Pages are billed at $150 per printed page, and there are no additional fees for color. Supplemental data files are charged at $125 for the first file and $75 per file thereafter. Authors are invoiced upon final print/online publication. JIDSP does not make the payment of page charges a condition for acceptance of a manuscript for publication. In extraordinary cases, upon appeal by the author before submission of the article, the Editor may waive page charges. Requests should be made in writing to JIDEditor@sidnet.org.

**Author Inquiries**

You can track your accepted article at https://www.elsevier.com(trackarticle). Or, contact the Editorial Office at JIDOOffice@sidnet.org (Phone: 919-932-0140). You are also welcome to contact Customer Support via https://service.elsevier.com.

© Copyright 2018 Elsevier | https://www.elsevier.com