Best Practices for Submitting, Reviewing, and Publishing Manuscripts in JVDI

Grant Maxie, Editor-in-Chief
Holly Farrell, Managing Editor
Francisco Uzal, Images Editor

Journal of Veterinary Diagnostic Investigation
AAVLD Annual Meeting, Greensboro NC, Oct 13, 2016

With credit to: Jeff Caswell, EIC, Veterinary Pathology
Susan A. Elmore, EIC, Toxicologic Pathology
Today’s agenda

• Overview of JVDI
• The publication process
• How to write and submit to JVDI
  — Instructions to authors
  — Tips for success
  — Figures
• How to review for JVDI
• Questions and answers
Organizational structure of JVDI

AAVLD Executive Board
AAVLD Publications Committee
JVDI Editorial Board

Grant Maxie, Editor-in-chief

Holly Farrell, Managing editor

Francisco Uzal, Images Editor
Donal O’Toole, Book Review Editor

Section Editors
Anatomic Pathology - Francisco Uzal
- Jesse Hostetter
Bacteriology and Mycology - Pat Blackall
Clinical Pathology - Paula Krimer
Molecular Biology - Kathy Toohey-Kurth
Toxicology - Wilson K. Rumbeiha
Virology - Ed Dubovi

Peer Reviewers on the Editorial Board (n = 61)
Statement of purpose of JVDI

“The Journal of Veterinary Diagnostic Investigation is the official journal of the American Association of Veterinary Laboratory Diagnosticians. The mission of the Journal is to educate by informing readers of progress in veterinary laboratory medicine and related fields of endeavor. The key objectives of the JVDI are to promote the science of veterinary laboratory medicine and the betterment of animal and public health.”

AAVLD Executive Board approved 2016.02.05
JVDI mission

“The Journal of Veterinary Diagnostic Investigation (J Vet Diagn Invest) is an international peer-reviewed journal published in English as the official journal of the American Association of Veterinary Laboratory Diagnosticians (AAVLD). JVDI is devoted to all aspects of veterinary laboratory diagnostic science including the major disciplines of anatomic pathology, bacteriology/mycology, clinical pathology, epidemiology, immunology, laboratory information management, molecular biology, parasitology, public health, toxicology, and virology.”
Journal of Veterinary Diagnostic Investigation

The Journal of Veterinary Diagnostic Investigation (JVDI) is devoted to all aspects of veterinary laboratory diagnostic science. The major disciplines are anatomic pathology, bacteriology/mycology, clinical pathology, epidemiology, immunology, laboratory information management, molecular biology, parasitology, public health, toxicology, and virology. This journal is a member of the Committee on Publication Ethics (COPE).

Average time from submission to first decision: 29 days

- OnlineFirst
  (Forthcoming articles published ahead of print)
- Current Issue: September 2016
- All Issues
  January 1999 - September 2016
- Instructions to Authors
JVDI Instructions to Authors

https://mc.manuscriptcentral.com/societyimages/jvdi/JVDI%20Instructions%20to%20Authors%2020160718.pdf
• Three manuscript formats are accepted for review:
  – Review Articles
  – Full Scientific Reports
  – Brief Communications
• Letters to the Editor
• Commentaries
• Book Reviews
Initial considerations:

• Topic?
  – Is it within the scope of JVDI? Of interest to readership?

• Copyright
  – the same material or a substantial part thereof is not presently being considered for publication or has not been published elsewhere

• Ethical considerations
  – Animal welfare - JVDI requires that authors obtain the relevant national/state/institutional approval prior to animal experimentation
JVDI employs the software program iThenticate to detect plagiarism (http://www.ithenticate.com). The U.S. Office of Research Integrity defines plagiarism as “copying a portion of text from another source without giving credit to its author and without enclosing the borrowed text in quotation marks” (http://ori.dhhs.gov/education/products/plagiarism).

“Detection of plagiarized material in any manuscript will result in its immediate rejection, regardless of its scientific merit. The author’s institution may be notified.”
Review and acceptance criteria

- Adequacy of format, style, and language
- Novelty of contents
  - Single case reports .....?
- Usefulness and impact for veterinary laboratory diagnosticians
- Adequacy of experimental design
- Adequacy of title, references, figures, and tables
Manuscript preparation

• Microsoft Word file, double-spaced, 12-point Times New Roman font, left-justified, 25 mm (1 in.) margin on all sides, pages numbered at the bottom center (i.e., page X of Y).

• Indent paragraphs and do not include spaces after paragraphs.

• Allow 1 space (not 2) after a word or period.

• JVDI number style is one, 2, 3, 4… within the text, but 1, 2, 3, 4… when in a series in the same sentence.

• Number text lines consecutively throughout the manuscript; begin page 1 with line 1; do not re-start numbering on each subsequent page.

• Include Tables in the main document, and do not embed Figures.

• Use SI units.

• For anatomic terms, use the English equivalents of terms in Nomina Anatomica Veterinaria. Names of infectious agents should follow the current published standards for viruses (ICTV, International Committee on Taxonomy of Viruses), bacteria (List of prokaryotic names with standing in nomenclature, or Bacterial nomenclature up-to-date), and fungi (Species Fungorum or Mycobank).

• In-text citations are listed in superscript after the punctuation as shown.¹,²,⁴,⁸

• Arrange the list of references alphabetically, numbered consecutively.

• Submit Figures in .tiff or .jpg formats (preferred for photos) and .eps (preferred for graphs and line art).

• Submit Supplemental Tables as Microsoft Word files. Submit Supplemental Figures following Figure guidelines.
General format and style

• Layout
  – Review, Full scientific article, Brief communication

• Language and style
  – American form of English
  – Editing service available
  – ABCs of good writing – Accurate, Brief, Clear

• Units of measurement
  – SI units (conventional)
Layout

- Title page, Running title
- Abstract, Key words
- *Introduction, Materials and methods, Results, Discussion*
  - *Brief communication- body only*
- Acknowledgments
- (Authors’ contributions)
- Sources and manufacturers
- Declaration of conflicting interests
- Funding
- References
- Tables
- Figure legends
Abstract

• Should summarize the main points of an article
  – What you did - objective or subject background
  – How you did it - study design and methods
  – What you found - primary results
  – What it means - principal conclusions
• Figures should be able to stand alone from the text narrative.
• Keep incremental numbers large and clear along X- and Y-axes.
• Sentence case for axis titles, show units of measurement
• In a composite figure, label panels in lower left-hand corner.
• If your figures will not appear in color in print, label your lines with shapes such as squares, circles, or pyramids to display your data clearly to the reader.
• Spell out abbreviations used in the graph in the figure legend so the reader does not have to hunt for the meaning.
Two widths are available in JVDI:
• single-column width is 20 picas (85 mm, 3.3 in).
• double-column width is 41 picas (174 mm, 6.8 in).

Which width is appropriate? Print out your figure at each size and see which is easier to read. Is single-column concise and clear, or should you use double-column and add more information, such as a key or relevant equations.

Resolution for line art should be 800 dpi minimum.
Finally ready to submit!

Journal of Veterinary Diagnostic Investigation

STATEMENT OF AUTHORSHIP
The submitting author affirms that all individuals listed as authors agree that they have met the criteria of authorship and agree to the conclusions of the study. In order to meet the requirements of authorship, each author must have contributed to at least one aspect of each of the four criteria, as listed below. Please note that for Criteria 1 and 2, authors only need to meet one of the two items listed. These criteria are not to be used as a means to disqualify colleagues from authorship who otherwise meet authorship criteria by denying them the opportunity to meet criteria 2 or 3. Therefore, all individuals who meet the first criterion should have the opportunity to participate in the drafting, review, and final approval of the manuscript. Any individuals not meeting the criteria may be mentioned in the Acknowledgements section of the manuscript.

Per the criteria defined by the International Committee for Medical Journal Editors (ICJME), please note the contribution made by each author listed in the manuscript. Please check all boxes that apply.

<table>
<thead>
<tr>
<th>Author (Last name, First initial)</th>
<th>Criterion 1 (and/or)</th>
<th>Criterion 2 (and/or)</th>
<th>Criterion 3</th>
<th>Criterion 4</th>
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<tr>
<td></td>
<td>Substantially contributed to conception or design</td>
<td>Contributed to acquisition, analysis, or interpretation of data</td>
<td>Drafted the manuscript</td>
<td>Critically revised the manuscript for important intellectual content</td>
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<td>1st author?</td>
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Submit on-line: http://mchelp.manuscriptcentral.com/gethelpnow/
The publication process

1. Author submits a manuscript (ms) to JVDI through MSCentral.
2. Editor-in-Chief (EIC) checks ms submission, and accepts for review or rejects ms.
3. EIC assigns Section Editor (SE).
4. SE selects Reviewers; SE can also stockpile alternate reviewers at this time.
5. SE invites Reviewers and Images Editor (if necessary).
6. Reviewer accepts or declines invitation using the links provided in the invitation email.
7. Reviewers submit review via MSCentral.
8. An Editor Decision is rendered of Minor Revision, Major Revision, Major plus change to Brief Communication, or Reject.
9. If not rejected, the Author submits a revised ms in MSCentral, and steps 4–8 are repeated.
10. If SE rejects ms, then the SE renders an Editor Decision via MSCentral. If the article is ready for acceptance, the SE will email the EIC (within MSCentral) a copy of the ms, notifying the EIC that the ms is ready for acceptance. If the EIC accepts the ms, then the EIC will notify the Managing Editor that desk-editing is needed.
11. The ME desk-edits ms, and emails ms to the EIC. Upon approval by EIC, the ME issues a formal acceptance letter by rendering an Editor Decision in MSCentral and attaches the desk-edited ms to letter.
12. Author checks ms and sends final edited copy of ms to the ME who then uploads and exports the files to Sage.
13. SAGE sends out page proofs to Corresponding Author and ME via email.
14. Authors return the proofs to the ME, and the ME compiles the corrections and returns proofs to SAGE. Proofs are uploaded by SAGE to OnlineFirst.
15. After the marked-up proofs have been corrected at SAGE, the paginated issue is sent to the ME for final review. Usually a 1-day turnaround from the ME and EIC back to SAGE.
16. SAGE posts issue online (and sends an eTOC Alert to subscribers), and issue is sent to the printer, and then mailed out to subscribers.
How do I edit (decide)?

Original

Revision 1

JVDI
PubMed
Google Scholar
Google
ICTV ......

AAVLD, Oct 13, 2016
Screen all proffered manuscripts for content and for formatting

Outcome of screening?

Initial decision re review:

Make a Decision

- Immediately accept for review ✓ 25%
- Reject based on content ✓ 25%
- Reject based on formatting ✓ 50%

JVDI initial outcomes:

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“Top 10” reasons for rejection

1. “Content” – out of scope of JVDI, lack of novelty.
2. “Formatting” – various combinations of:
   a. Missing cover letter.
   b. JVDI authorship form missing.
   c. Incorrect manuscript preparation – MS Word, TNR, 12 pt, line numbering, .......
   d. Title page formatting incorrect, no Running title, etc.
   e. Approval of animal care and use missing.
   f. Sources and manufacturers cited incorrectly (sources and brand names appear in the text).
   g. SI units not used.
   h. Figures submitted as text or PowerPoint files.
   i. Figures not formatted according to the Instructions to Authors (e.g., resolution is too low; blurry; text is too small to read; figure size is too small or too large).
   j. Tables submitted as embedded figures.
   k. References do not follow the Instructions to Authors. (Beware EndNote!)
   l. Sections are missing (Declaration of Conflicting Interests; Funding; Figure legends).

Bottom line: Read and follow the Instructions.

AAVLD, Oct 13, 2016
# Turnaround times (TAT)

<table>
<thead>
<tr>
<th>Editorial Statistics:</th>
<th>Days</th>
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<tbody>
<tr>
<td>Avg. from submission to first decision</td>
<td>21</td>
</tr>
<tr>
<td>Avg. reviewer TAT - Original</td>
<td>15</td>
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<tr>
<td>Authors’ revision TAT</td>
<td>variable</td>
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<tr>
<td>Avg. reviewer TAT - Revision</td>
<td>11</td>
</tr>
<tr>
<td>Avg. from submission to final decision</td>
<td>33</td>
</tr>
<tr>
<td>Avg. pre-publication editing, etc.</td>
<td>120</td>
</tr>
</tbody>
</table>
Revision(s)

Track Changes settings in MSWord
Fun with words!

• Diagnose or detect?
• detection/identification – of disease agents. Agents are detected, not diagnosed.
• diagnosis = “1. the determination of the nature of a case of disease. 2. the art of distinguishing one disease from another.” Dorland’s 28th ed. Detecting or identifying a microbe, antigen, or other analyte does not in and of itself constitute a diagnosis.
Fun with words!

- **Humanely euthanize**
- “euthanasia/euthanize” (= good death) rather than “euthanatization/euthanatize”. Not “humane euthanasia” (redundant) – as opposed to “inhumane euthanasia”? 

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Fun with words!

• Autopsy, necropsy, postmortem?
  - autopsy = to see for one’s self; necropsy = to examine after death. My preference has been to use ‘autopsy’. Acceptable is “postmortem” or “postmortem examination”.

• Histopathological lesions?
  - is redundant!!, should be ‘histologic lesions’.
Fun with words!

• That or which?

• ‘that/which’ – “the straw that broke the camel’s back” = a restrictive clause; needed for the meaning of the sentence -- use ‘which’ for non-restrictive clauses – “the straw, which was heavy, broke the camel’s back”.

AAVLD, Oct 13, 2016
Fun with words!

- qPCR, rtPCR, RT-PCR – Ct, Cq, Ct?
- Although often not quantitative, we’re generally using qPCR (quantitative PCR), in preference to rtPCR, and dropping the RT (reverse transcription, for RNA viruses, understood) – and using Cq (quantification cycle) rather than threshold cycle (Ct) or crossing point (Cp).
Fun with words!

• Sex or gender?
• ‘sex’ is used in preference to ‘gender’ (PC, politically correct) - there are 2 sexes of animals (male, female), but 4 genders of nouns grammatically (masculine, feminine, neuter, common – he, she, it, they)
Major goals of the review process

• To provide topic-specific expertise in evaluation of manuscripts
• To indicate the strengths and weaknesses of the paper in sufficient detail to help the author make revisions, or to understand reasons for rejection
• To communicate this information to the Editors to allow an appropriate decision
  – minor revision, major revision, rejection, acceptance
• Respond in a timely manner
Outline

• How do I become a reviewer?
• Ethics
• Before you begin the review
• Assessing the elements of the manuscript
  – Title, key words, abstract  — Introduction
  – Materials and methods  — Results
  – Tables and figures  — Discussion
  – References
• Constructing your review
• Follow-up
Why become a peer reviewer?

• Keep up with developments in your own field
• Contribute to science by fostering scholarly communications and sharing your expertise
• Career-building experience when early in career – build CV
• Learning experience – sharpen your own critical thinking and writing skills
• Acknowledgment – thank you and shared reviews, published annual list of reviewers, discounts on publications
How do I become a reviewer?

- Important roles of peer reviewers
- Define the narrow topic(s) in which you have specific expertise
- Inform editorial staff that you wish to review manuscripts
- Establish your credibility – your CV
- Added to the roster of reviewers
How do editors preserve reviewers?

• Screen all proffered manuscripts for content and for formatting

Initial decision re review:

Make a Decision:

○ Immediate accept

○ Reject based on content

○ Reject based on formatting

JVDI initial outcomes:

✓ 25%

✓ 25%

✓ 50%

• Select reviewers with appropriate expertise

• Thank yous!
Ethics

• Anonymity
• Confidentiality
  – Communication to others
  – Personal use of unpublished information
• Might you have a conflict of interest or a bias?
  – Close collaborator or competitor, same institution, personal relationship
  – If so, let the Section Editor know ASAP
• Delaying or rejecting manuscripts of competitors
Before you begin the review process

• Can you review and verify all aspects of the paper?
  – Statistics, clinical pathology, molecular methods, etc.
• Can you complete the review in a timely manner, and do it well?
• Is English usage adequate for review?
• Has the work been published previously?
The review form:
Title, key words, abstract

• Will interested readers find the article when searching PubMed & Google?
• Do these effectively reflect the manuscript as a whole?
Title

• Is the title concise, specific, and informative?
• Avoid
  – Overly general titles, declarative titles, questions, use of subtitles when the main title cannot stand alone
• Style recommendations
  – AMA: 150 characters including spaces and punctuations
  – APA: 12 words
Is the title concise, direct and specific?

“Correlating histologic and innate immune gene expression findings based on quantitative RT-PCR in sheep with paratuberculosis caused by *Mycobacterium avium* ssp. paratuberculosis”

Better:

“Relationship between histologic lesions and innate immune gene expression in ovine paratuberculosis”

- 12 words, 99 total characters
Key words

• Have the most salient keywords been used?
  – Best if these are specific rather than general
  – Should represent the key topics presented
  – Include alternative disease names
  – See if some or all key words are also present in the title and abstract
Abstract

• Should summarize the main points of an article
  – objective or subject background
  – study design and methods
  – primary results
  – principal conclusions
Introduction

• Provides the reader with the necessary background
  – An exhaustive review of the literature is not necessary or appropriate
  – Is it coherent and readable?
• Should present a rationale or argument for the communication
• Are objectives/hypotheses/questions stated clearly and specifically?
Materials and methods—overview

• Review thoroughly to ensure validity and reproducibility of the methodology
• No results should be presented in this section
• Confirm that animal care is adequately described and ethical requirements are followed. Who approved?
• Are the number of animals and other information consistent across methods, results, tables, figures?
Materials and methods—details

- Assess the study design, methodology, validation & controls, interpretation
  - Sample size: number per group; number of cases
  - How were cases obtained?
  - Inclusion/exclusion
  - Allocation to treatment groups
  - Blinding
  - Assay validation, negative and positive controls
    - AAVLD, ASVCP test validation guidelines followed?
- Verify that the statistical analysis is appropriate
Results

• Should be presented clearly and concisely
• Should the raw data be made available?
• Should any data be moved to Supplemental Mats?
• Limit the results to the observed data. Avoid:
  – reiteration of the methodology
  – reiteration of Table content
  – inferences, interpretations, or conclusions
• If relevant, indicate justifiable and specific additional studies that should be done to fill gaps
Tables and Figures

- Should improve the readability of the manuscript by presenting details of the findings without repeating the text
- Should be clear and concise
- Review all figures for scientific content
  - Images Editor and Managing Editor will review for size, resolution, and figure quality and will do additional work on figures if needed
Tables and Figures, continued

• Confirm that the legends adequately describe the figures
  – These should “stand alone,” allowing the reader to understand the figure without reading the text
  – Items described in the legend should be clearly visible in the figure

• Determine if any of the tables or figures can be supplemental data - this can save valuable pages
Elements of the Discussion

• Explain and interpret the study findings
• Justify controversial aspects of the methodology
• Acknowledge and discuss the limitations
• Discuss plausible alternative explanations
• Do the study findings fulfill the objectives stated in the introduction?
• Describe the implications and applications of the findings
Critique of the Discussion

• Are the interpretations of the findings adequately justified by the data, or is there excessive speculation based on inadequate data?
• Are the conclusions stated clearly, and in a way that will be useful for readers?
• Is the discussion well-organized, does the writing flow well, and are the ideas clear and compelling?
References

• Do the references adequately provide the evidence on which key statements are based?
• An exhaustive list of references is not required
• Citation of main (original) sources, not “bounce” references
Opening paragraph of the review

• Describe your overall opinion of the paper
  – What contribution will this paper make to the field?
  – Does it provide new information?
  – Does it contradict existing knowledge?

• Highlight strengths and weaknesses of the work

• If there are any concerns that may make the paper unpublishable, these should be stated at the end of this paragraph
  – Can indicate whether or not you think it should be published in confidential comments to the editor
How to be a great reviewer

• Maintain a professional and respectful tone throughout the review.
• Be **objective, constructive, and specific**.
• Provide feedback that improves the **scientific merit** of the manuscript, and the **communication** of that science
• An opinion on the strengths and weaknesses of the manuscript is useful
  – Do not indicate your opinion on the publishability of the manuscript in your comments to the author
Final points

• Manuscripts with uncorrectable fatal flaws will warrant a shorter review
  – Flawed design, inappropriate methods, etc.

• For comments on minor spelling, grammar, or publication style errors, please state that “The manuscript contains numerous spelling and grammatical errors” or “References do not follow journal style guidelines”, etc.
Next steps in the review process

• Section Editor gathers (and rates) reviews
• SE corresponds with authors – editor’s comments on the ms, plus the reviewers’ comments (edited) to the authors and blind-copied to the reviewers
• Reviewers may accept or decline to review revisions
• Penultimate version sent to the EIC for final approval
• EIC to ME for desk editing, to EIC and authors for final queries
• To Sage for publication!
Sources of Information

- How to Edit a Scientific journal – Claude T. Bishop, ISI Press, 1984
- SAGE how to review articles
  https://us.sagepub.com/en-us/nam/how-to-review-articles
- COPE peer review guidelines (Committee on Publication Ethics)
- Centers for Disease Control and Prevention, CDC:
  http://wwwnc.cdc.gov/eid/page/preferred-usage
- International Committee of Medical Journal Editors (ICMJE),
  Recommendations for the Conduct, Reporting, Editing and Publication of
  Scholarly Work in Medical Journals