ASPET

Transforming Discoveries into Therapies

ASPET.ORG

Hear It from the Editors: Navigating the Course through Journal Submission and Publication

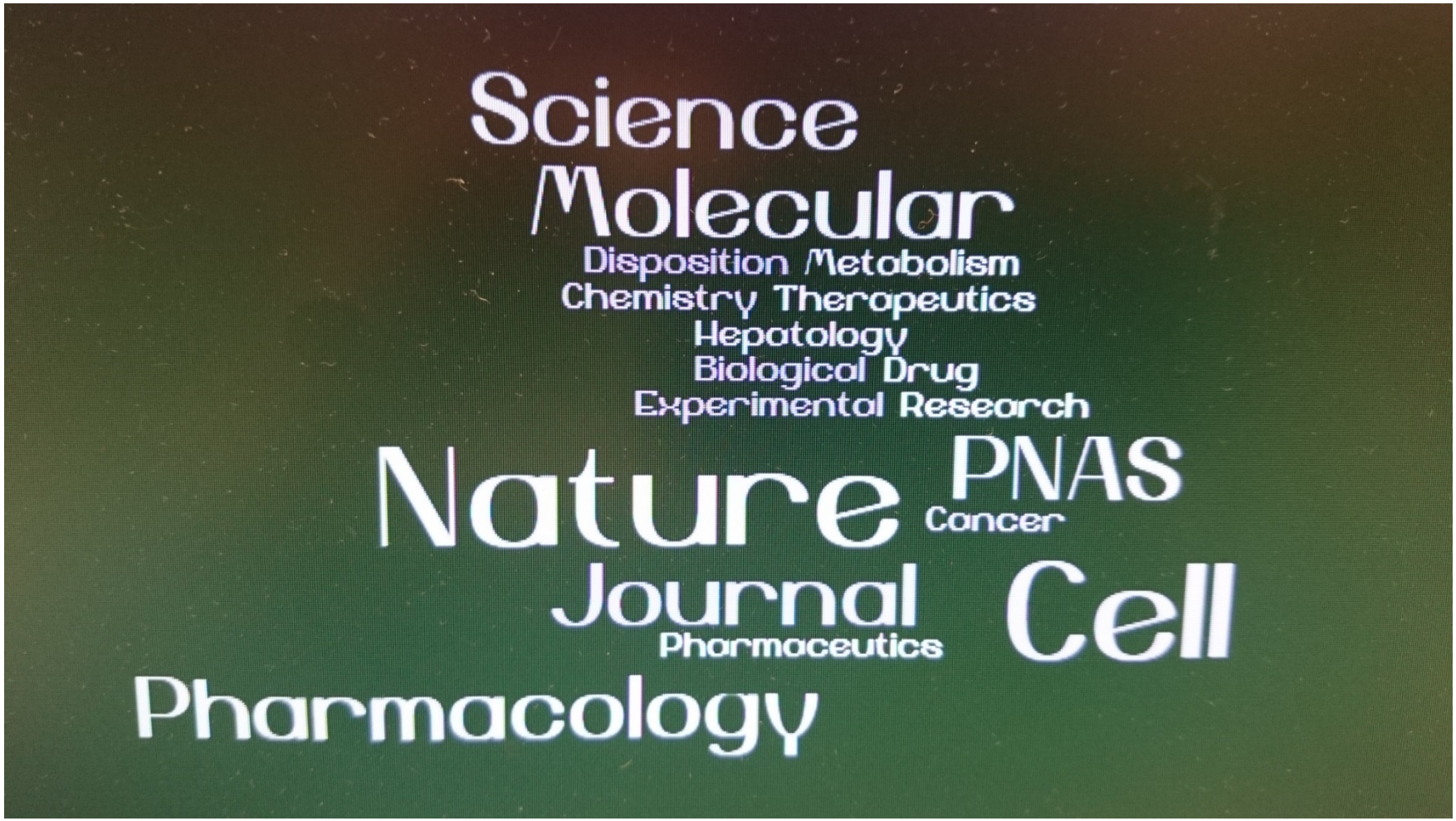
Monday, 9:30 am – 12:00 pm, Room 16AB

San Diego Convention Center

How to choose a journal for your manuscript

Mary Vore, PhD

ASPET Board of Publications Trustees


Science
Molecular
Disposition Metabolism
Chemistry Theropeutics
Hepatology
Biological Drug
Experimental Research
Nature
PNAS
Cancer
Journal
Cell
Pharmaceutics
Pharmacology

ASPET PRIMARY JOURNALS

JOURNAL OF PHARMACOLOGY & EXPERIMENTAL THERAPEUTICS (JPET)
MOLECULAR PHARMACOLOGY (MOL)
DRUG METABOLISM AND DISPOSITION (DMD)
PHARMACOLOGICAL REVIEWS (PR)
PHARMACOLOGY RESEARCH & PERSPECTIVES (PR&P)

1. All ASPET journals are self-published; ASPET is editorially responsible for all of its wholly-owned journals.
2. Online access to all ASPET members (there is no print publication)
3. Fast Forward articles become freely available immediately upon publication.
4. All archival issues are available online.
5. Deposit of articles funded by the NIH, the Welcome Trust, the Howard Hughes Medical Institute, and the Research Councils UK is completed at PubMed Central on behalf of authors.
6. The $75 manuscript handling fee is waived for papers where any author is an ASPET member in good standing.
7. Continuous publication of journals.
8. An open access option is available for authors, allowing publication under a CC BY or CC BY-NC license.
9. Visual abstracts are accepted – but not required.

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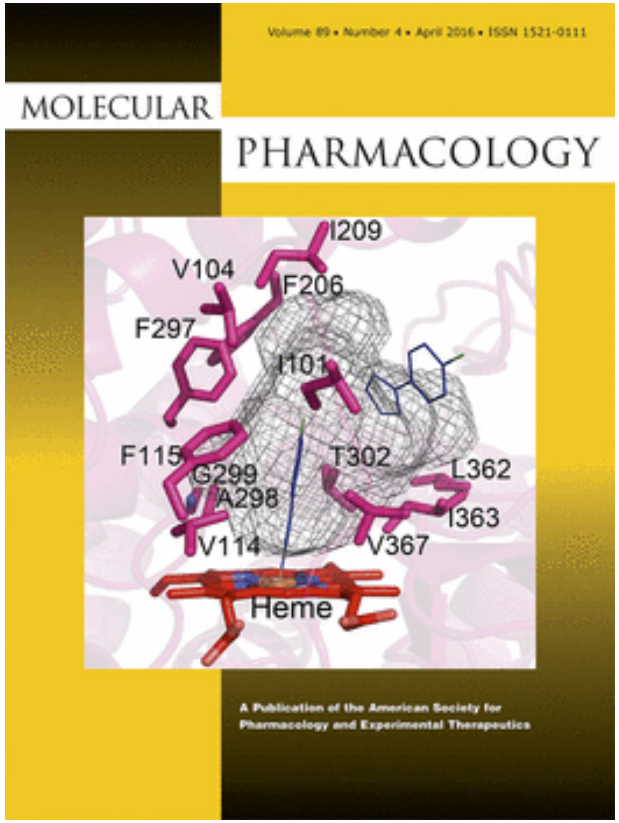
Journal of Pharmacology & Experimental Therapeutics

- A leading research journal in the field of pharmacology published since 1909, **JPET provides broad coverage of all aspects of the interactions of chemicals with biological systems**, including autonomic, behavioral, cardiovascular, cellular, clinical, developmental, gastrointestinal, immuno-, neuro-, pulmonary, and renal pharmacology, as well as analgesics, drug abuse, metabolism and disposition, chemotherapy, and toxicology.

JPET (cont'd)

How many articles have been published online to date?	32,067
What is the ISI Impact Factor?	3.972 for 2014 with a 3.819 5-Year Impact Factor and a >10-Year Cited Half-Life
How many issues are currently published each year?	12
What is the average number of pages printed per year?	JPET is expected to publish approximately 2,650 pages in 2016.

Molecular Pharmacology



Founded in 1965, *Molecular Pharmacology* publishes findings derived from the **application of structural biology, biochemistry, biophysics, physiology, genetics, and molecular biology, juxtaposed with innovative pharmacologic research to elucidate basic mechanistic insights** that are broadly important for the fields of pharmacology and toxicology. Relevant topics include:

Molecular Signaling / Mechanism of Drug Action
Chemical Biology / Drug Discovery
Structure of Drug-Receptor Complex
Systems Analysis of Drug Action
Drug Transport / Metabolism

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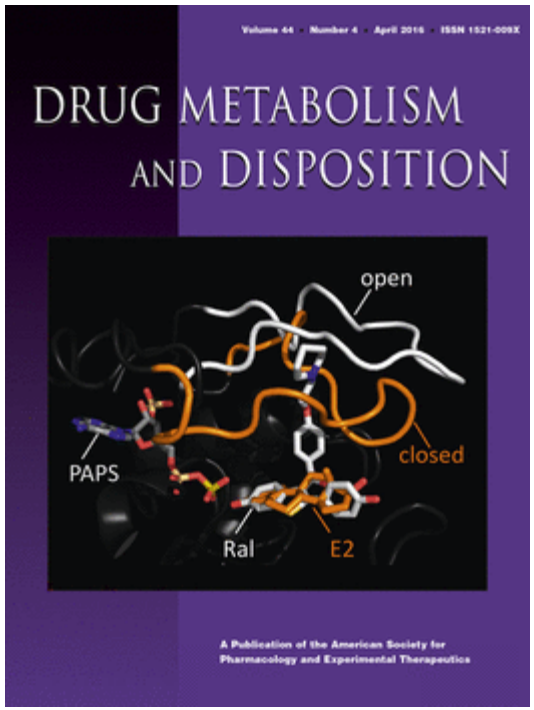
Molecular Pharmacology (cont'd)

How many articles have been published online to date?	**11,077**
What is the ISI Impact Factor?	**4.128 for 2014 with a 4.385 5-year Impact Factor and a Cited Half-Life of 9.7 years.**
How many issues are currently published each year?	**12**
What is the average number of pages printed per year?	**Molecular Pharmacology is expected to publish approximately 1,730 pages in 2016.**

Drug Metabolism and Disposition (DMD)



Founded in 1973, *DMD* presents important research in pharmacology and toxicology and is a valuable resource in **drug design, drug metabolism, drug transport, expression of drug metabolizing enzymes and transporters, and regulation of drug metabolizing enzyme and transporter gene expression.**

An important reference for all pharmacology and toxicology departments, DMD is also a valuable resource for medicinal chemists involved in drug design and biochemists with an interest in drug metabolism, expression of drug metabolizing enzymes, and regulation of drug metabolizing enzyme gene expression. Articles provide experimental results from in vitro and in vivo systems that bring you significant and original information on metabolism and disposition of endogenous and exogenous compounds, including pharmacologic agents and environmental chemicals.

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Drug Metabolism and Disposition (cont'd)

How many articles have been published online to date?	8,037
What is the ISI Impact Factor?	3.252 for 2014 with a 3.615 5-year Impact Factor and a Cited Half-Life of 7.8 years
How many issues are currently published each year?	12
What is the average number of pages printed per year?	DMD is expected to publish approximately 2,240 pages in 2016.

PHARMACOLOGICAL REVIEWS

Pharmacological Reviews showcases important review articles on topics of high current interest. Topics covered have included **biochemical and cellular pharmacology, drug metabolism and disposition, renal pharmacology, neuropharmacology, behavioral pharmacology, clinical pharmacology, and toxicology.** Pharmacological Reviews is published continuously so that articles appear in their final format as soon as ready instead of waiting for an issue. Each article is assigned to a volume and issue and is paginated for clear citation. IUPHAR nonmenclature reports are published here. Pharmacological Reviews has the third highest impact factor of the Science Citation Index's pharmacy and pharmacology journals (2014).

Most articles published are by invitation, but some are from direct submission and there is a mechanism to do so.

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PHARMACOLOGICAL REVIEWS

How many articles have been published online to date?	**1,281**
What is the ISI Impact Factor?	**17.099 with a 5-year Impact Factor of 22.347 and a Cited Half-Life of 9.9.**
How many issues are currently published each year?	**Four (January, April, July, October) but published continuously.**
What is the average number of pages printed per year?	**Pharmacological Reviews is expected to publish approx. 1,250 text pages in 2016.**

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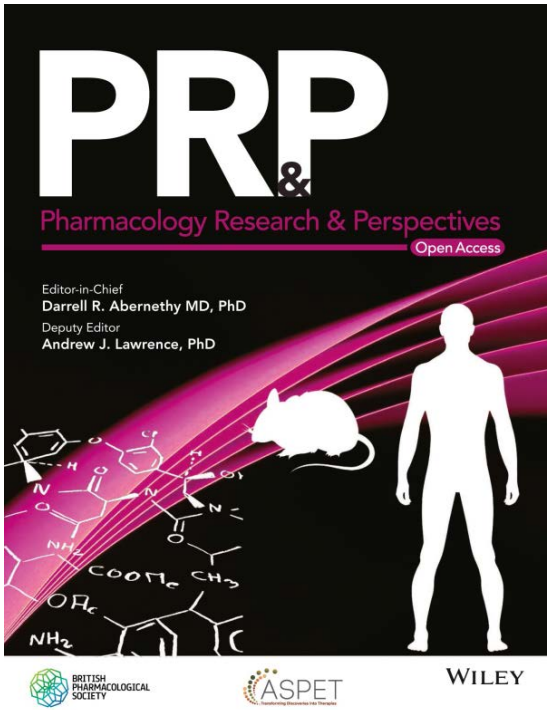
Pharmacology Research & Perspectives (PR&P)



PR&P is a collaboration between ASPET, the British Pharmacological Society (BPS), and Wiley. An open access journal that publishes original research, reviews, and perspectives in all areas of preclinical and clinical pharmacology, therapeutics, education, and related research areas, *PR&P* began bimonthly publication in October 2013.

The journals published by ASPET (JPET, MOL, DMD) and BPS (British Journal of Pharmacology; British Journal of Clinical Pharmacology) participate in a Manuscript Transfer Program by referring selected articles of suitable quality and offering authors the option to have their paper, with any peer review reports, automatically transferred to *Pharmacology Research & Perspectives*. PR&P also encourages direct submission of articles.

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Pharmacology Research & Perspectives (PR&P)

PR&P invites authors to submit research articles and invites submission of several types of special articles. These are:

1. **Target validation** – publication of negative findings including preclinical papers that show a hypothesis is incorrect or papers on drugs that have failed in early clinical development
2. **Drug discovery reviews** – strategy, hypotheses and data resulting in a successful therapeutic drug
3. **Frontiers in translational medicine** – drug and target validation for an unmet therapeutic need
4. **Pharmacological hypotheses** – reviews that are oriented to inform a novel hypothesis
5. **Replication studies** - work that refutes key findings (failed replication), and work that validates key findings

So, why publish in one of these ASPET journals?

1. Your manuscript will first be reviewed by an Editor/Associate Editor with expertise in your field of research, and will be assigned to two reviewers with significant expertise in your specific area.

2. You have the opportunity to suggest appropriate reviewers, as well as indicate those with whom you have conflicts.

3. Commonly, you will have the reviewer comments and the Editor's decision within 30 days.

So, why publish in one of these ASPET journals?

(cont'd)

4. Mean and range of days between receipt and acceptance:
   JPET: 104 days; 60 – 132 days (April 2016)
   MOL: 74 days; 24 – 139 days (April 2016)
   DMD: 98 days; 35 – 147 days (April 2016)

5. Publications help support ASPET financially. Academic Societies such as ASPET derive much of their income from the journals. The Society in turn uses the funds to support its other activities, such as this meeting, to enrich its membership.

Thank you!

Questions?

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How to Write a Competitive Manuscript

Michael F. Jarvis, PhD

Volwiler Sr. Research Fellow, Sr. Scientific Director AbbVie Inc.

Journal of Pharmacology and Experimental Therapeutics

Editor: 2010-2015

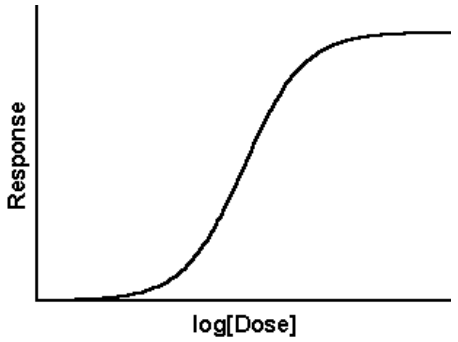
Biochemical Pharmacology

British Journal of Pharmacology

Molecular Pain

Purinergic Signaling

Drug Development Research



How to Write a Research Paper?

- Resources Abound!
- Google Search:
  - 14.7 MM hits: “Writing Scientific Manuscripts”
  - 2.9 MM hits: “Writing Pharmacology Manuscripts”
- Sources:
  - Academic institutions
  - Scientific societies
  - Journals
  - Commercial Vendors

Guidelines & Checklists

- Many authoritative “best-practices” guides for authors
- Covers both clinical and preclinical research
- Many based on efforts to enhance reproducibility of published research

Jarvis and Williams, TIPS 2016

Table 1. Selected Biomedical Research Guidelines and Publication Checklists

Guideline	Full Name	Description	Refs
ARRIVE	Animal Research Reporting In Vivo Experiments	Design and analysis checklist for studies using laboratory animals	[43,45]
BCP Guidelines	Biochemical Pharmacology Guidelines	Manuscript construction and experimental design and analysis check list	[28]
BJP Guidelines	British Journal of Pharmacology Guidance	Experimental design and analysis check specifications	[27]
CAMARADES	Collaborative Approach to Meta-Analysis and Review of Animal Data from Experimental Studies	Meta-analysis methodology to improve translational research	[91,92]; www.dcn.ed.ac.uk/camarades/
CONSORT	Consolidated Standards of Reporting Trials	Design and analysis checklist for clinical studies	[81]
ENCODE	Encyclopedia of DNA Elements	Compendium of human and mouse genome functional elements	http://encodeproject.org
MIBBI	Minimum Information for Biological and Biomedical Investigations	Recommendations for minimum reporting of experimental methods	[82]
MIQE	Minimum Information for Publication of Quantitative Real-Time PCR Experiments	Guidelines for conduct and reporting of qPCR experiments	[87]
NIH Rigor and Reproducibility/NINDS	NIH Principles and Guidelines for Reporting Preclinical Research National Institute of Neurological Disorders and Stroke Guidelines	Recommendations for data analysis, reporting, sharing, and publication of refutations	[36]; www.nih.gov/science/reproducibility/index.htm
NPG Check List	Nature Publishing Group Checklist	Methodology and analysis check list: required for all life science submissions	www.nature.com/authors/policies/checklist.pdf
RIPOSTE	Reducing IrreProducibility in labOratory STudiEs	Primer on experimental design and analysis	[83]
SYRCLE (GSPC)	Systematic Review Centre for Laboratory Animal Experimentation (Gold Standard Publication Checklist)	Methodology for cross-study analysis and meta-analyses of preclinical research findings GSPC (gold standard for publication checklist for reducing animal use)	[85,86]
STAIR	Stroke Therapy Academic Industry Roundtable	Guidelines to improve assessment of preclinical stroke therapy and increase translational potential of experimental stroke treatments	[84]
TOP	Transparency and Openness Promotion Guidelines	Center for Open Science guidelines for journal standards	[90]

Journal of Pharmacology and Experimental Therapeutics

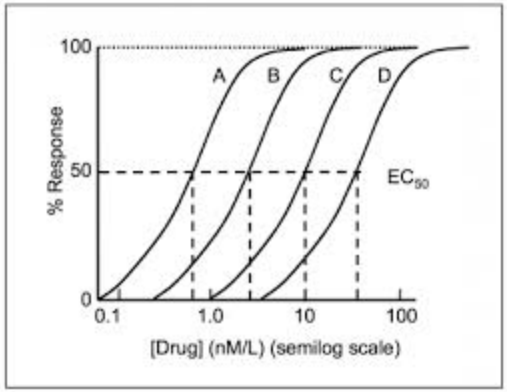
- **Publishing state-of-the-art pharmacology research since 1909!**
  - Journal of choice for "Best Stuff"
- **Covers all areas of pharmacology**
  - 11 topical sections
  - Minireviews
- **Mean length of published research articles = 9.8 pages**
  - Word limits for Abstract, Introduction and Discussion sections
  - No limits on length of Materials and Methods or number of figures or references
- **Peer-review**
  - Associate Editor + at least two expert reviewers
  - Submission to first decision ≤ 30 days
  - ~ 33% acceptance rate

What's wrong with the other 67% of submissions?

4/18/2016

JPET: Quantitative Pharmacology

- Important and clear hypothesis
- Dose-Response determinations
- Positive and negative controls
- Validated reagents
- Sufficient Power and Appropriate Statistical Analysis
- Detailed and rigorous interpretation of study results and limitations!



JPET: Instructions to Authors

- Scope of Submitted Manuscripts
- Submission of Manuscripts
- CrossCheck
- Organization of the Manuscript

- 1.Title Page
- 2.Running Title Page
- 3.Abstract
- 4.Visual Abstract
- 5.Introduction
- 6.Materials and Methods
- 7.Results
- 8.Discussion
- 9.Acknowledgments
- 10.Authorship Contributions
- 11.References
- 12.Footnotes
- 13.Figure Legends
- 14.Tables
- 15.Figures: Image Manipulation; Figure Preparation
- 16.Supplemental Data

- Refutations
- Reagents and Materials
- Data Deposition ◦Nucleic Acid and Protein Sequences
- Structural Data and Molecular Modeling
- Drugs
- Herbal Medicines/Natural Products
- Receptor Nomenclature
- Page Charges
- Minireviews
- Revised Manuscripts
- After Acceptance
- Submission Checklist

Encyclopedic – but a “Must Read” before manuscript submission

- Updated frequently

Introduction Section

Does the topic address an important pharmacological issue?

- Innovative vs. archival
- Mechanistic vs. phenomenological data

Is a clearly articulated hypothesis provided?

Does the coverage of the relevant literature frame the problem?

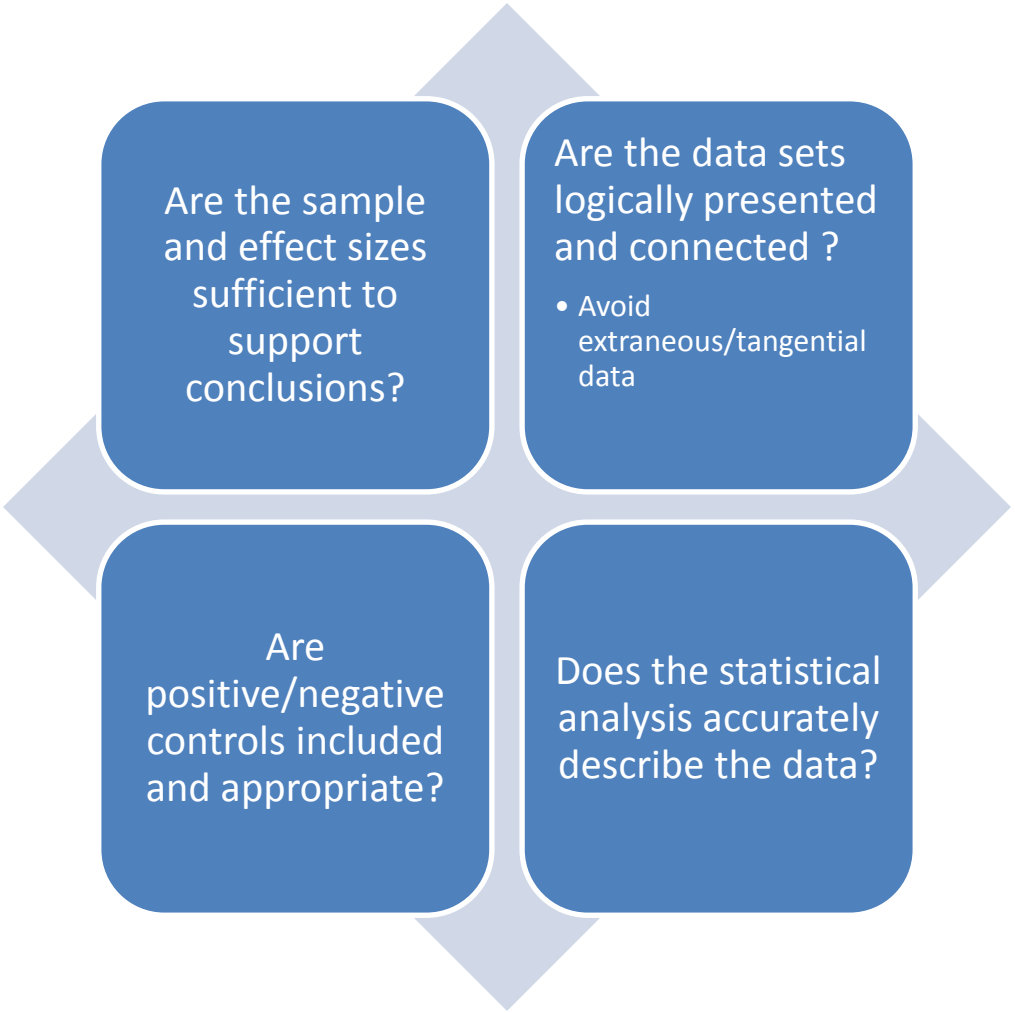
- Are citations accurate and up to date?

Materials and Methods

Sufficient information should be provided to address the following:

- Allow the reader to understand how the experiments were designed and conducted
- Clearly articulate the experimental endpoints
- Describe experimental controls
- Characteristics of animals and tissues used
- Indicate randomization and blinding of in vivo studies
- Number of replicates
- Are all reagents sufficiently characterized and validated
- Are novel molecules identified

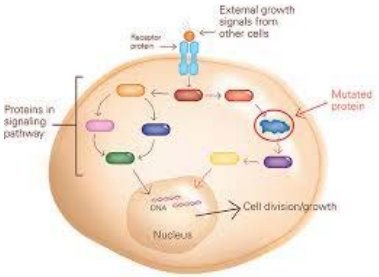
Results Section



Figures and Figure Legends

Are the data clearly depicted?	• Were dose-response determinations made? • If not, were the doses studied appropriate and validated? • Are error estimates shown and appropriate?
If normalization of experimental outcomes is done:	• Is it justified? • Is it adequately described? • Are raw data benchmarks provided?
Are all data shown?	• if supplemental data are provided, does it add value for the reader?
Do the figure legends provide an appropriate level of detail?	• Clear identifiers, stat test results, etc.

Discussion Section



- What is new?
- Why is this research important?
- How do the presented data address the hypothesis and advance the field?
- What are the resulting implications?
- What new questions to the present data raise?
- Do not rehash the Results in the Discussion!

Peer-Reviews

Feedback is a gift!

Noncompliance with reviewer suggestions is rarely productive.

Providing new data that specifically addresses reviewers' comments is the best path forward.

Reasons for Rejection

- Topic isn't sufficiently interesting to the readership
- Results are obvious from existing literature
- Hypothesis is wrong or incoherent
- Incorrect methodology
- Experiments are underpowered or poorly controlled
- Manuscript poorly organized, vague or contradictory
- Conclusions not supported by the data
- Uncertainty regarding physiological significance

Recommendations for *JPET* Submissions

- Use declarative and descriptive titles
- Abstract should be clear
  - capture hypothesis, key results and conclusion
- Data should be cohesive and quantitative
- Analysis should be comprehensive and rigorous
- Figures and figure legends should have sufficient information & clarity to stand alone
- Peer-review before submission
  - Does your manuscript say what you think it does?
  - Its not a lab report!

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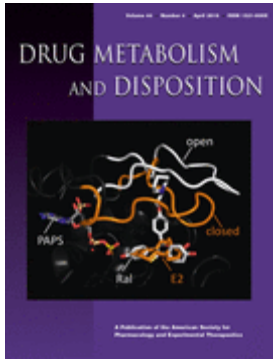
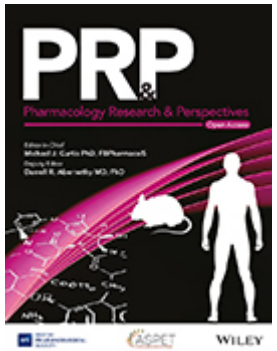
Communicating Experimental Design and Analysis Considerations





Edward T. Morgan

Editor, *Drug Metabolism and Disposition*

Professor of Pharmacology, Emory University School of Medicine.

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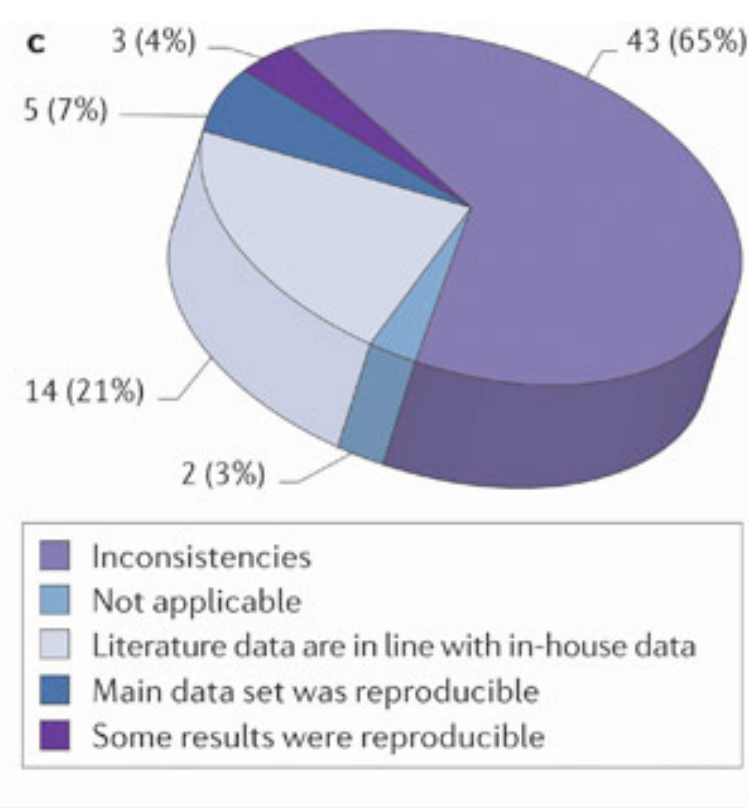
Reproducibility in preclinical research

- In 67 in-house projects at Bayer Healthcare, scientists found that 21% agree with published data and 7% could at least reproduce the major findings.
- In 65%, inconsistencies were found
- 70% were cancer targets
- Only 21% of the in-house studies copied the published model exactly .



Prinz F et al *Nature Reviews Drug Discovery* **10:** 712, 2011

Lack of reproducibility in preclinical research

- Study at Amgen of 53 “landmark” preclinical oncology papers could reproduce the published findings in only 6 (11%) of them.
- 6 red flags for suspect work
  - Were experiments blinded?
  - Were basic experiments repeated?
  - Were all the results presented?
    - cropped blots, omitted experiments
  - Positive and negative controls?
  - Were reagents validated?
  - Were statistical analyses appropriate?

Begley G and Ellis LM, *Nature* **483:** 531–533, 2012
Begley G *Nature* **497:** 433–533, 2013

Causes of irreproducible results

- Flawed science
- Bad reagents
- Bad reporting
- Biological variability

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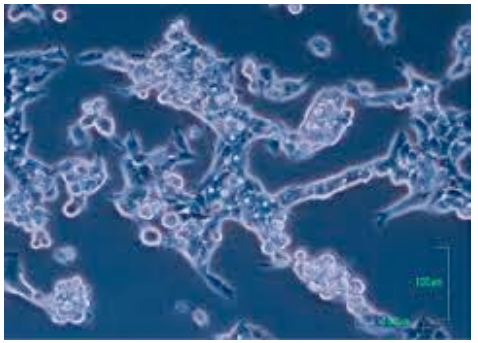
The six red flags

- Experiments not blinded (flawed science)
- Lack of repetition (flawed science, biological variability)
  – what constitutes a biological replicate?
- Discarding experiments that didn't work (flawed science)
- Selecting data (flawed science)
- Positive and negative controls (flawed science)
- Validation of reagents (Bad reagents)
  – chemicals
  – antibodies
  – cell lines
  – animals
- Absent or inappropriate statistics (flawed science)
  – Wrong test
  – SD vs SEM
  – P vs confidence intervals
  – p-chasing/hacking



The fascination with P

- P should be used together with other data to evaluate the significance of a finding
  - Plausibility of the result in the context of the field
  - Other supporting data
- P-chasing/hacking
  - Keep trying different tests until you find one that gives you the desired result
  - Keep adding animals/experiments (N) until you get a P<0.05

Ronald L. Wasserstein & Nicole A. Lazar (2016): The ASA's statement on p-values: context, process, and purpose, *The American Statistician*, DOI: 10.1080/00031305.2016.1154108

ASPET journals response

- **Support the NIH Principles and Guidelines for reporting Preclinical Research.**
- **Require more detailed documentation of methods, reagents**
- **Indicate best practices for the conduct, design and analysis of experiments**
  - **Allow and encourage reviewers and editors to evaluate statistical and other data in the context of the field and the rest of the manuscript**

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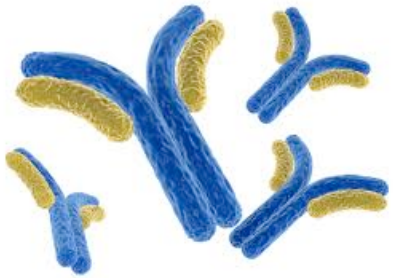
ASPET journals response



- **Materials and Methods:** This section should contain explicit, detailed, and concise descriptions of all new methods or procedures employed. Authors should review the NIH Principles and Guidelines for Reporting Preclinical Research (www.nih.gov/about/reporting-preclinical-research.htm). Whereas modifications of previously published methods must be described, commonly used procedures require only a citation of the original source. Descriptions of methods must not only be sufficient to enable the reader to judge the accuracy, reproducibility, and reliability of the experiment(s) but also to be able to reproduce the results. The name and location (city and state or country) of commercial suppliers of chemicals, reagents, and equipment must be given. For biological materials, give the source, catalog, and batch numbers (where applicable). For antibodies, also provide references describing their selectivity, if this is not assessed in the current paper, and dilutions used.

Animal and Human experiments

- **Materials and Methods:** For animal experiments, authors should report the source, species, strain, sex, age, randomization, and husbandry of the animals. Report the strain characteristics of genetically engineered animals including generations of back-crossing, or percentage of contributing strains if genetic analysis was performed.

- In vivo studies and studies using primary cultures of cells or tissues from animals or humans must state the sex of the experimental subjects or tissue donors in the Materials and Methods section. The designations "mixed" or "unknown" should be used as appropriate when the sex cannot be determined (e.g., embryonic or early postnatal cultures, cell lines immortalized from a mixed culture, previously completed experiments for which sex was not documented).

ASPET journals response

Define best practices in statistical design and analyses

- Data should be presented in a quantitative manner where possible, with descriptive statistical measures. Report not only the statistical tests used but also the exact value of N for each group. Report how often each experiment was performed.

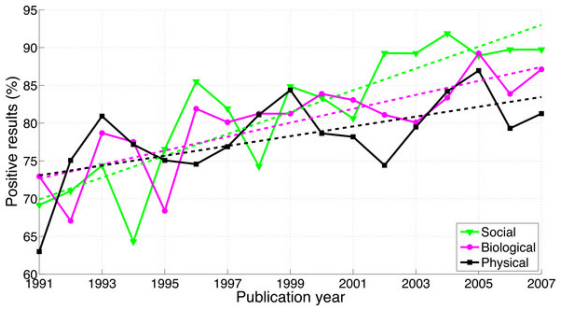
- Sufficient information about sample collection must be provided to distinguish between independent biological data points and technical replicates. For animal or human studies, authors are encouraged to use a power analysis to compute an appropriate sample size during study design and should report the results. If any data or subjects were excluded, clearly state the criteria that were used.

Recommendations for designing experiments

- Blind experiments where practical
- Distinguish key experiments, which will require rigorous statistical analyses, from exploratory experiments, which will not.
- Define the hypothesis and choose the statistical test and criteria you will use BEFORE you start the experiments.
- Perform a power analysis to determine the number of experiments/animals to use.
- Include both positive and negative controls
- Verify/validate cell lines and animal strains
- In animal studies, use both sexes (or justify)
- Characterize new antibodies for specificity

Recommendations for reporting

- Supply enough experimental details to ensure that the conditions can be reproduced
- Cite only references that have full details, and describe key modifications
- For antibodies, include Cat. No and batch number as well as supplier. Cite references for specificity.
- Clearly distinguish exploratory and key experiments
- Use SD instead of SEM
- Supply confidence intervals instead of (or in addition to) P values. Report p values, not just <0.05.
- Clearly indicate that N represents biological, not technical replicates
- Report data not used or discarded, and justify.



The Peer-Review Process: Review, Rejection, Revision, and Acceptance

Stephen Traynelis, PhD
Professor, Department of Pharmacology,
Emory University School of Medicine

Molecular Pharmacology

Editor: 2012-2016

The Peer-Review Process

STEP 1: Manuscripts (MS) arrive in the Editors Queue for consideration

1. Editor-in-Chief (EIC) reads Cover Letter, Abstract, Introduction, and evaluates data. In some cases, EIC reads the manuscript.
2. Editor considers whether MS is within journal scope and the strength of data warrant peer review
3. If appropriate, MS assigned to an Associate Editor (AE) based on its topic

   The EIC will consider the suggested AE, but may choose another AE depending on the subject matter.

   EIC will usually honors a request NOT to use a particular AE

The Peer-Review Process

Rapid Rejection: ~20% of *Mol Pharm* manuscripts are outside of scope or too weak to survive peer review (rate differs among ASPET journals)

1. Decisions always made in consultation with Associate Editors (if one AE feels the MS should be reviewed, it will be sent for review).
2. If consensus view is rapid reject, a letter outlining the shortcomings is sent
3. Authors can transfer the manuscript to PRP, an excellent journal sponsored jointly by the British Pharmacological Society and ASPET
4. Easy submission to other ASPET journals (formatting is identical)

! For some papers that are interesting but lacking key data, authors may be encouraged to add data and resubmit.

The Peer-Review Process

How do I avoid Rapid Rejection?

1. Ensure your manuscript is within the journal scope. *Molecular Pharmacology* was founded to publish papers on molecular mechanisms.
    - Manuscripts without description of molecular composition of reagents (e.g. extracts) fall outside of scope.
    - Manuscripts describing actions of agents with no identified or hypothesized binding partner provide minimal understanding of molecular basis of action
    - Compounds with pleiotropic actions are sometimes rapidly rejected, when multiple actions limit ability to draw mechanistic conclusions.
2. Ensure study is well designed (discussed by Mike Jarvis)

The Peer-Review Process

STEP 2: Manuscripts are assigned to an Associate Editor (AE)

1. An additional small fraction of manuscripts are rapidly rejected by the AE
2. For all others, the AE will select appropriate reviewers
   - *~ 50% of reviews are provided by the Editorial Advisory Board*
   - *Pubmed searches used to find reviewers who have published on similar topics*
   - *Author suggestions are considered, but always checked for appropriate expertise*
   - *No guarantee suggested reviewers will be used.*

The Peer-Review Process

STEP 2: Choice of Reviewers

1. Authors should suggest multiple reviewers (>5).
2. The best qualified people in the field should be suggested, giving *AEs* assurance authors are confident their work will survive review by experts
3. Collaborators/colleagues at the same institution are not eligible.
4. Authors can request an individual be excluded from the review process.

! Limit exclusion to one person; barring multiple people raises concerns.

The Peer-Review Process

STEP 3: The Review process.

1. Editorial Board members assigned manuscripts and non-editorial board members are asked if they are willing to review.
2. Three reviewers sought for multi-disciplinary papers touching multiple topics.
3. Reviewers asked to complete reviews in 2 weeks (reminded by AE or EIC)
4. Reviewers write a paragraph describing impact and key findings of work, comment on key strengths and weaknesses
5. Reviewers divide criticisms/suggestions into two groups:
   - *Major points: experimental design, statistics, conclusions, technical or methodological errors, etc.*
   - *Minor points: suggested wording changes, typos, missing references, clerical errors on figures, etc.*

The Peer-Review Process

STEP 4: The Decision

1. Rarely, a paper will be acceptable as is (*Congratulations!*)
2. Authors invited to submit revisions for a fraction of manuscripts
3. A fraction of manuscripts are rejected with resubmission as a new manuscript allowed
4. A fraction of manuscripts rejected without any option for resubmission, and rejected manuscripts referred to PRP

The Peer-Review Process

STEP 4: Revision

Revision invited (the topic is of interest, the work is timely, the results are important, the approach is well-conceived)

- *Do not assume the manuscript is going to be accepted without careful revision !*
- *When reviewers' concerns and utility of new proposed work are evident, go ahead and perform the new experiments*
- *If you cannot see the merits or utility of experiments, build a succinct and carefully-worded argument explaining why requested work was not performed.*

The Peer-Review Process

STEP 4: Resubmission

Rejection / Resubmission allowed (significant shortcomings exist in experimental data, design, interpretation, or conclusions)

- *Manuscripts require extensive new data*
- *Conclusions are not supported by the data*
- *The data is correlative or preliminary in nature*
- *Technical errors exist with the experimental design, protocol, analysis, or statistics*

Resubmitted papers should be thoroughly re-written, new data added, and a responsive rebuttal included.

These manuscripts are new submissions, and new reviewers might be assigned.

The Peer-Review Process

STEP 5: Rebuttal

Effective Rebuttal

- Carefully-constructed, dispassionate text is most effective
- Edit response as carefully as the manuscript
- Include criticism with each response
- Do not pick and choose which criticisms to respond to
- Whenever possible and reasonable, add new data
- Avoid lengthy, rambling rebuttals or argumentative responses
- Rebutting every major suggested change is rarely successful

The Peer-Review Process

Step 5: Appealing the Decision

- *Appeals should be thoughtfully constructed, and not sent hastily*
- *A decision is reached within 30 days and all decisions are final*
- *Appeals reviewed by a team of editors*
- *Appeals are appropriate when a factual error was made, new data in the literature argue against a reviewer or editors concerns, there was a factual error by the reviewer, or new data exists that argue against criticisms.*
- *Appeals are not granted on grounds that authors disagree with Editors' decision*

ASPET

Transforming Discoveries into Therapies

ASPET.ORG

Hear it from the Editors: Navigating the Course through Journal Submission and Publication

Monday April 4, 2016

San Diego Convention Center

Authorship, Accountability, and Ethics

Rich Dodenhoff
Journals Director
American Society for Pharmacology and
Experimental Therapeutics

Who is an Author?

- Check Instructions to Authors – varies among journals
- ASPET criteria:
  - Participated in research design
  - Conducted experiments
  - Contributed to new reagents or analytic tools
  - Performed data analysis
  - Wrote or contributed to the writing of the manuscript

  Authorship responsibility form must be completed and signed by ALL authors

Who is an Author? - ICMJE

- International Committee of Medical Journal Editors criteria:
  - Substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work; AND
  - Drafting the work or revising it critically for important intellectual content; AND
  - Final approval of the version to be published; AND
  - Agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

www.icmje.org

Who is an NOT Author?

- People who have contributed to the work but DO NOT meet the criteria – *name them in the acknowledgments section or a footnote*
- Honorary authors – ***there is no such thing!***
  - Person who acquired funding
  - Supervisor of research group
  - Technical or language editor/proofreader
  - Favorite professor, department chair, institute head
  - An important name who you think may help get the paper accepted

Accountability and Ethics

- Accountable for the work you have done
- Able to identify which coauthors are responsible for other parts of the work
- Have confidence in the integrity of the contributions of your coauthors
- Obtain approval of all authors on paper for submission and revisions
- Is the work unpublished? *See journal's policies*.
- Disclose all possible conflicts of interest

Accountability and Ethics cont.

- Follow all protocols for human subjects and animal use
- Does your institution require approval or endorsement prior to submission?
  - Enables the institution to legally deal with author misconduct
  - Check with faculty administration or the university's legal department
- Retain ALL the raw data for the paper – there is no legal limit on the time data must be kept
- Before signing any document related to the paper: read it, understand it, and agree to its contents

Image Manipulation

While certain modifications of primary data are often needed for clarity and/or brevity, image manipulation for deceptive purposes, to unfairly enhance or eliminate or otherwise obscure data are grounds for rejection and may constitute misconduct.

Image Manipulation

- No specific feature within an image may be enhanced, obscured, moved, removed, or introduced
- The groupings of images from different parts of the same gel, or from different gels, fields, or exposures must be made explicit by the arrangement of the figure (e.g., using dividing linesor ensuring white space separates lanes from different gels) and in the text of the figure legend.
- Adjustments of brightness, contrast, or color balance are acceptable if they are applied to every pixel in the image and as long as they do not obscure, eliminate, or misrepresent any information present in the original, including the background.
- Nonlinear adjustments (e.g., changes to gamma settings) must be disclosed in the figure legend.

Resources

- Office of Research Integrity, US Department of Health and Human Services

  https://ori.hhs.gov

  See RCR Resources tab

- International Committee of Medical Journal Editors

  www.icmje.org

- Committee on Publications Ethics (COPE)

  http://publicationethics.org

  See Cases and Flowcharts

Copyright

Copyright is secured automatically when a work is created, and a work is “created” when it is in a fixed, tangible form for the first time.

- Fixed, tangible form = hard copy, electronic copy, sound recording, photograph, painting, video, etc.
- Copyright symbol and notice not required

What if I Modify the Figure?

New Work versus Derivative Work

- "A **derivative work** is a work based on or derived from one or more already existing works" (US Copyright Office Circular 14)
- A **new work** is substantially different from the original – and good luck finding a clearer definition of that!

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Copyright Resources

"Copyright Basics"
US Copyright Office
www.copyright.gov/circs.circ01.pdf

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Ask a librarian!

☺

Copyright Clearance Center
www.copyright.com

Questions?