# Writing for APS Journals



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# Today's Outline

- APS journals
  - Impact factor
- Scientific writing
  - How to write a good paper
  - Issues
- Short Break



- Submission and Review
  - Which journal?
  - Responsibilities (EICs, SEs, AE, ad hoc reviewers)
- Tips for Authors
  - Manuscript Central
  - Initial submission
  - Revisions
- Publication Ethics
  - Tips for reviewers
  - What makes a good review?
- Questions (ask anytime)

### The APS Journals

- Three print /online journals
  - Phytopathology (1910)
  - *Plant Disease* (1980)
  - *Molecular Plant-Microbe Interactions* (1988)
- Online only:
  - *Plant Health Progress* (2000)
  - *Plant Health Instructor* (2000)
  - Plant Disease Management Reports (1945, 2007)
- Oversight rests with APS Publications Board

### A Brief History of APS Journals

1910 Phytopathology

1917 Plant Disease Reporter first published by USDA, U.S. Division

of Mycology and Disease Survey

1967,1975 APS Special Committees recommend a second APS journal

1979 Plant Disease Reporter is discontinued by USDA, ARS due to

budget cuts

1980 Plant Disease: second APS journal

1997 *MPMI*: third APS journal

# Phytopathology

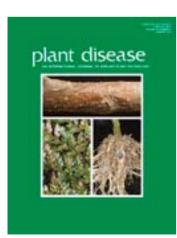
■ For 100 years, the premier international journal for publication of articles on fundamental research that advances understanding of the nature of plant diseases, the agents that cause them, their spread, the losses they cause, and measures that can be used to control them



- Reviews
- Symposium proceedings
- Letters to the editor

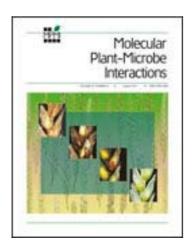
#### Plant Disease

- Leading international journal for rapid reporting of research on new diseases, epidemics, and methods of disease control
- Covers basic and applied research, which focuses on practical aspects of disease diagnosis and treatment
- Monthly Feature Articles summarize current information on specific diseases
- The popular Disease Notes:
  - Brief and timely reports of new diseases, new disease outbreaks, new hosts, and pertinent new observations of plant diseases and pathogens worldwide

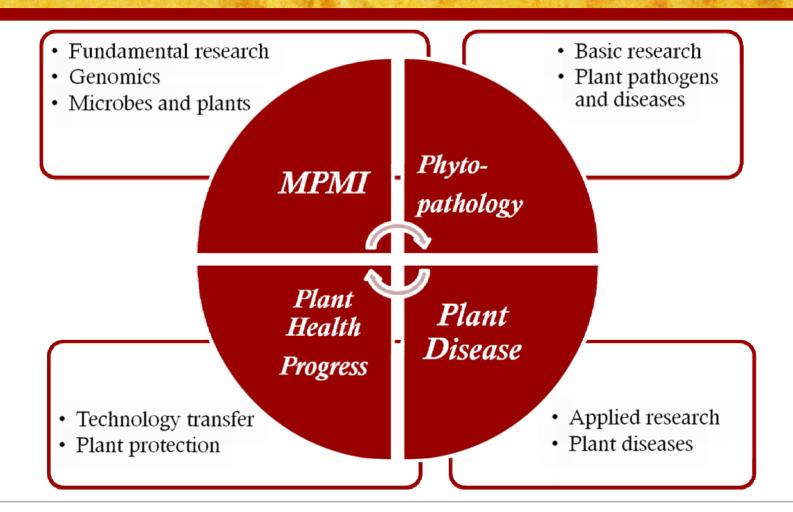


#### **MPMI**

- Original research on the molecular biology and molecular genetics of pathological, symbiotic, and associative interactions of microbes with plants and insects with plants
- Published in collaboration with IS-MPMI
- Fundamental and advanced applied research
- Short reviews of rapidly developing areas of the molecular aspects of plant-microbe interactions



#### How do APS Journals Differ?

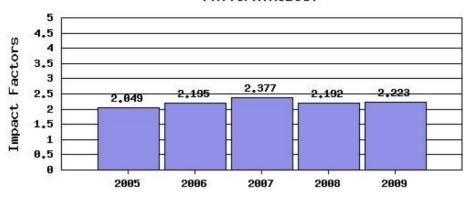


# 2009 Impact Factors

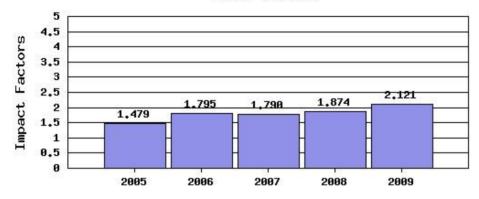
- Average number of times that an article published in the journal in the previous 2 years was cited
  - i.e. citations in 2009 of articles published in 2007 and 2008 = IF in 2009
  - Ratio of citations/number articles published

MPMI	4.4
Molecular Plant Pathology	3.5
European Journal of Plant Pathology	1.9
Plant Pathology	2.4
Phytopathology	2.2
Plant Disease	2.1

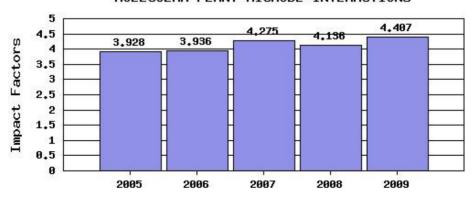
#### **PHYTOPATHOLOGY**



JCR Years
PLANT DISEASE



JCR Years
MOLECULAR PLANT-MICROBE INTERACTIONS



JCR Years

# Strategies to increase IF

- Review articles
- Mini series
- PubMed listing
- Online access: 12 or 24 months
- Online preprint

#### Addendum to Author's Guide for Manuscript Preparation 2010

#### Phytopathology Now Offers Online Publication Upon Acceptance

Phytopathology has instituted a new feature called First Look. Within a few days of acceptance, an unedited, unformatted version of your paper can be posted online. This means that your paper will be considered published and citable up to 90 days sooner than under the current system.

When you submit a new manuscript, you will be asked, "Do you want your paper published online prior to print?" If you check "yes" and your paper is accepted, you will receive notification to go to "First Look Papers" in your author center. If you used track changes or inserted comments to the senior editor in the final revision, they should be removed at this point so that a clean version of the manuscript is posted. The paper will not be posted without your final approval.

The following statement will appear on papers posted in First Look:

Phytopathology "First Look" paper • doi: 10.1094/PHYTO-00-00-0000 • posted 00-00-2010

This paper has been peer reviewed and accepted for publication but has not yet been copyedited or proofread. The final published version may differ.

# The Invaluable APS Journals Staff

- Karen Cummings, Director of Publications, Editorial and Production
  - **Ina Pfefer**, Journals Records Coordinator
  - Kristen Barlage, Technical Editor, Phytopathology
  - **Diana Roeder**, Technical Editor, Plant Disease
  - Jan Kuhn, Technical Editor, Disease Notes
  - Kris Wilbur, Technical Editor, MPMI
  - Patti Ek, Production Supervisor
- **Greg Grahek**, Director of Marketing/Subscriptions
- **Steve Kronmiller**, Director of Web Production



# Scientific Writing

- How to write a good paper
  - Content
  - Structure
  - Journal selection
- Issues
  - Rejection
  - Authorship
  - Ethics
    - Dual submission
    - Plagiarism

# Thoughts on Publishing

- Last step in scientific process
- Not publishing = failure
- Purpose:
  - What did you discover?
  - What is new information?
  - What does it mean to your colleagues?
  - Implications?
  - Why should I care?

# Why? How? What?

- Why did you do this work?
  - Why should I waste time reading your work?
  - Why did you invest your time and effort?
- How did you do it?
  - Show important details
  - Remove useless detail
- What did you find?
  - What's new?
  - Relate your work to previous knowledge
  - Implications?

### Why? How? What?

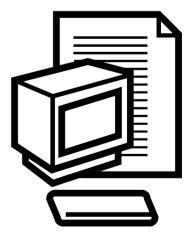
- Why did you do this work? INTRODUCTION
  - Why should I waste time reading your work?
  - Why did you invest your time and effort?
- How did you do it? M&M
  - Show important details
  - Remove extraneous detail; clear and to the point
- What did you find? RESULTS & DISCUSSION
  - What's new?
  - Relate your work to previous knowledge
  - Implications?

#### Title

- Short, informative
  - Most people just read the title
- Avoid vague titles
  - "Characterization of resistance in rice"
- Communicate main finding
  - "Identification of a major QTL for rice blast resistance in rice"

### Abstract

- Write last
  - Use key sentences from text
  - Copy & Paste
  - Organize into coherent summary



### Successful Writing

- Integrate writing with research
- Write as you go
  - Prepare outline while doing experiments
  - Write M&M after setting up experiments
  - Read as you go and fill in introduction
  - Keep a record of things you read that are relevant to your work
- Write every day!
- Read every day!

# Format, Figures and Tables

- Read Author Guidelines for each journal
- Follow EXACT wording
- Format to fit journal
- Ask a colleague for a sample
- Look at current issue of journal
- Make it easy on yourself:
  - Peer reviewers do not like poorly formatted manuscripts, figures, tables

# References = Trouble

- Check alphabetization
  - Author surnames, then years (if necessary)
    - Ling, 2009
    - Ling, Keinath, Wechter, 2007
    - Ling, Wechter, Keinath, 2000
    - Ling, Wechter, Keinath, 2005
- Are all references cited?
- Are all cited references listed?



# High Quality Figures

- Be sure resolution of figures is high
  - 675, 1,350, or 2,100 pixels wide for 1-, 2-, or 3-column width figures in Plant Disease
  - 1,260 and 2,610 pixels in width for 1- and 2-column width figures in Phytopathology
- Excel or PowerPoint not recommended for graphs
- Use Adobe Illustrator to add labels to gel photos
- For final version, need **separate** figure files in approved file format!

#### Results

- Describe what is in figures and tables; nothing else
- Include background
  - Results of statistical analysis
  - Do not put results into perspective
  - Just state facts

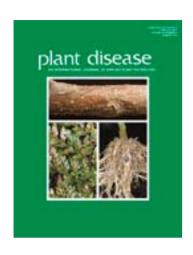


# Plagiarize Yourself

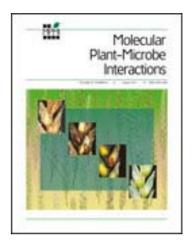
- It is okay to use your own writing as a template for new writing
- Be pragmatic
- Do not cut and paste from anybody else's work!

### Style

- Results in simple past tense
  - "We evaluated the response of cultivar X to disease Y."
- Published knowledge in present tense
  - "The human genome contains ten copies of gene X."
- Avoid passive voice like the plague
  - "It was not expected that the human genome contain ten copies of gene x." vs. "We did not expect that this genome contain 10 copies of gene x."







#### **Break**







### The Neglected Pre-Submission Review

- Have your manuscript reviewed by 2 colleagues—who are not authors—before you submit it
  - A policy in many departments and in USDA, ARS
  - A "fresh look" is invaluable
    - Have you explained M&M and Results well enough?
- Grammar checking
  - Poor grammar gives a very bad impression
  - Use word-processing grammar checks!
  - Have a native English speaker review the paper
  - Technical editors have the "final say"

#### Phytopathology or Plant Disease?

#### Phytopathology

- "Fundamental research that advances understanding of plant diseases and the agents that cause them"
- Topics:
  - biological control;
  - theoretical aspects of disease epidemiology;
  - genetics and biology of pathogens and pathogen populations;
  - disease resistance breeding
  - food safety

#### ■ Plant Disease

- "Basic and applied research that focuses on practical aspects of disease diagnosis and treatment"
- Topics:
  - disease diagnosis (including molecular methods),
  - etiology,
  - applied epidemiology,
  - disease management
    - fungicide resistance

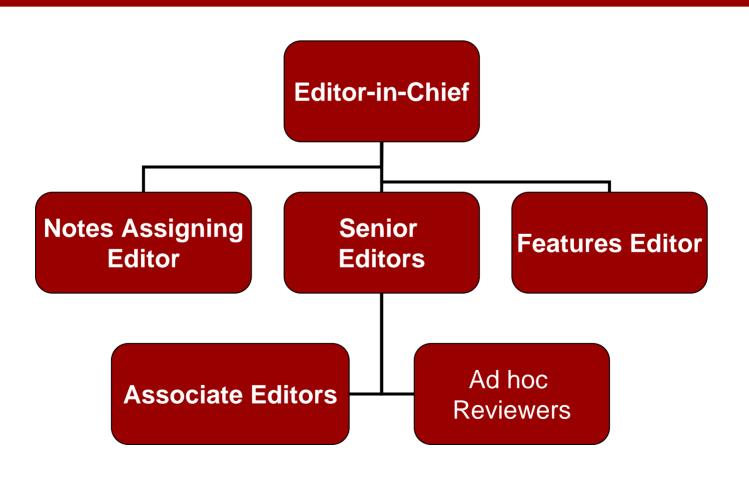
#### Phytopathology or Plant Disease?

- Matter of degree and opinion
  - Some manuscripts can be published in either journal
- Both are great journals
- Suggestions
  - Submit to PD if work is applied or concerns only the specific host-pathogen system studied
  - Ask EICs for appropriateness before submission

# Phytopathology/MPMI Editorial Boards



# Plant Disease Editorial Board



#### What Does the EIC Do?

- Choose and train senior editors (SE)
- Assign manuscripts to senior editors
- Assist SE with difficult decisions
- Choose editor's picks (monthly)
- Hear appeals from authors
- Choose new associate editors (yearly)
- Revise Instructions to Authors (yearly)
- Prepare semi/annual reports
- Serve on Publications Board

#### Editors

#### **Senior Editors**

- Choose reviewers
- Read (and edit) manuscript
- Make decision on acceptance
- Check revised manuscripts
- Hear initial appeal about rejected manuscripts
- Attend yearly editorial board meeting (at APS meeting)

#### **Associate Editors**

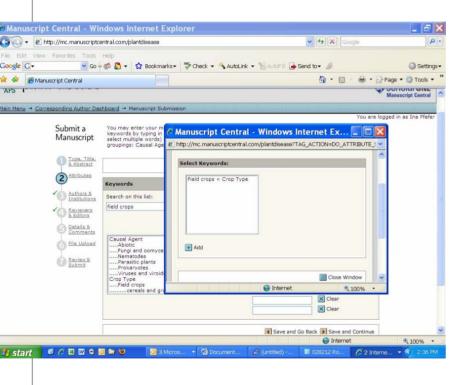
- Review manuscripts
- Make recommendation to accept, revise, or reject
- Agree to review on a regular basis

#### Reviewers

#### Ad hoc reviewers

- Serve upon invitation by SE
- Provide expert opinion on acceptability for journal
- Recommend improvements
- We need more reviewers
  - Volunteer by writing your EICs/SEs

# Manuscript Central



- See May 2007 Phytopathology News article for tips for authors (http://apsnet.org/members/phyto/ 2007/05/070501.pdf)
- Allows EIC to check details easily
- Reduces paperwork and mailing time
- Database of reviewers and their performance

# How can the peer review process be improved?

"Acquire more qualified reviewers. Some of them suck. I've had two completely opposite reviews... one indicates that the paper is the best thing since sliced bread, and the second (the one who sucks) rejects the paper."



From the 2006 PD reader survey

### The Review Process

Author submits manuscript thru MC

SE makes initial decision

Author revises manuscript

Submission processed, sent to EIC

Reviewers return comments and recommendation

SE makes final decision

EIC assigns MS to SE SE invites reviewers

Manuscript processed for publication

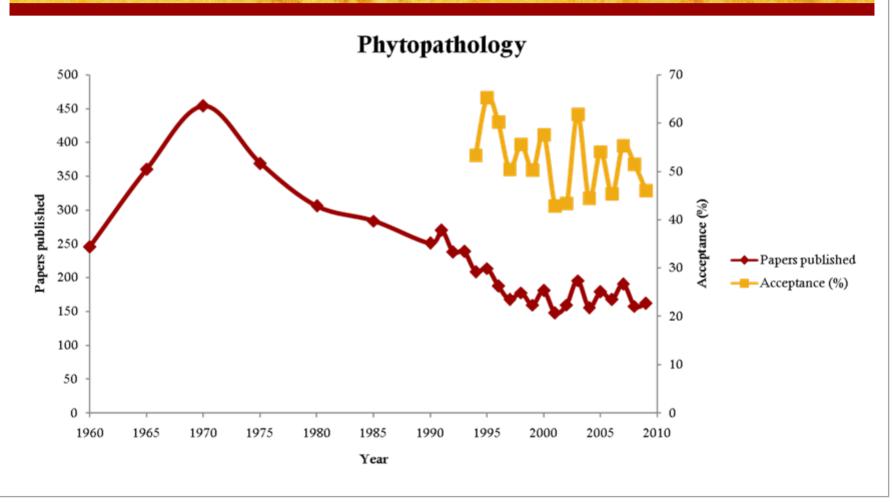
# How Long Will It Take to Get My Paper Reviewed?

		Original			Revised	
Statistic	Research	Features	Notes	Research	Features	Notes
Median	54	48	37	7	14	7
Mean	57	79	41	16	16	11
Range	2 - 177	28 - 162	4 - 165	<1 - 111	2 - 26	<1 - 150

Data from 2008 Plant Disease

Aug. 2009 to Aug. 2010 Update: Mean of 36 days from submission to initial decision and Mean of 58 days from submission to final decision across all manuscript types.

## Acceptance



# "Accept with Revision" or "Reject and Revise"

- Authors revise manuscript (3 months)
- SE evaluates manuscript and makes decision
- Repeat above two steps if necessary
- Manuscript accepted for publication

- Authors revise and resubmit manuscript
- Manuscript assigned to previous SE or another SE
  - SE have access to previous version of manuscript, decision letter, and reviews
- Review process continues normal track
- "2 strikes policy"

# Revising Your Manuscript

- Don't take comments personally!
- Consider ALL suggestions
  - Take comments by SE very seriously!
  - For reviewers' comments:
    - Does the suggestion improve **clarity**?
  - Contact SE if you need help assessing comments
- In Manuscript Central
  - Do NOT submit a revision as a new manuscript!
  - Look for the "Manuscripts Awaiting Revision" link or
    - ★ Click here to submit a revision

# How Long Will It Take to Get My Paper Published?

- 90 days after acceptance to print is goal
  - Generally will appear in the issue published 4-5 months after the month of acceptance
- Manuscripts assigned to issue after galley proofs returned



# How can the peer review process be improved?

"Try to remind reviewers that peer review comments should be positive criticism. Too often I see mean-spirited, negative reviews made by people hiding behind the anonymity of the peer-review process."



From the 2006 PD reader survey

# Dealing with Rejection

- Rejection is okay
  - Perhaps another journal is more appropriate
- Rejection can be challenged
  - First, calm down!
  - Contact Senior Editor
  - Only contact EIC after discussion with SE
- Take reviewer comments VERY seriously and address them with logical, scientific arguments



#### Publication Ethics

- Manuscripts submitted to APS journal have not been:
  - Submitted at the same time to another journal
  - Published already in another journal or online
  - Penalty is rejection without resubmission
- Results reported are original work and accurate
  - Data are representative of what happened, i.e. not selective
  - Data were collected from actual experiments, i.e. not "made up"

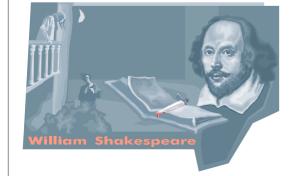


### Plagiarism

- Two main types of plagiarism:
  - Not including citations for work reported by other scientists
  - Copying text "word-for-word" without a citation
    - If you use three words in a row from another published source, must "quote" it
- Manuscripts with plagiarism will be rejected.
  - Resubmission **may** be allowed (after corrections!)

### Authorship

- Who qualifies as an author on a manuscript?
- Each author should have made a substantial intellectual contribution to the
  - design,
  - conduct,
  - analysis, or
  - interpretation of the study
- Each author must approve the article before it is submitted for review



APS Publication Ethics Policy

#### Ethics for Reviewers

- Reviewers may not:
  - Cite or refer to the work prior to publication
  - Use information from the work to advance their research
  - Share the manuscript or its findings with others
  - Save a copy of any portion of the manuscript following completion of the review

#### Potential Conflicts of Interest

- Reviewer doing the same research
- SE/reviewer at same institution/location as author
- Pre-submission reviewer reviewing manuscript as peer reviewer
- EIC submitting manuscript to the journal
- EIC picking strict /easy SE based on manuscript content /quality
- Variation among SE in what is acceptable for publication

#### What Is a Good Review?

- Does the MS present "significant new information relevant to the scope of the journal"?
- Do the Results and Discussion match the data in tables and figures?
- Are the interpretations and conclusions logical?
- Can the organization be improved?
- What are the main strengths and weaknesses of the manuscript?

### Tips for Reviewers

- Be critical
- But:
  - Be supportive
  - Include suggestions for improvement
  - "Review for others as you would have others review for you" (McPeek et al., 2009)
- APS journals need reviewers
  - It is every author's responsibility to serve as an anonymous peer-reviewer!

### Serve as Reviewer or Editor

- Talk to EIC or SEs
- Let current SEs know you are interested in reviewing papers
- Create a user account in Manuscript Central that shows your areas of expertise
  - Need separate account for each journal

### Questions?

#### Contact info:

- grunwaln@science.oregonstate.edu, Phytopathology
- <u>rmdavis@ucdavis.edu</u>, Plant Disease
- <u>staceyg@missouri.edu</u>, MPMI
- tknth@clemson.edu, APS Pub Board

#### Resources

- Browse the web to find many more valuable resources. Below is a short list of references used, but many equally good references can be found on the web.
- 'Guidelines for writing a scientific paper', http://www.sci.sdsu.edu/~smaloy/MicrobialGenetics/topics/scientific-writing.pdf
- 'How to write a scientific paper in scientific journal style and format', http://abacus.bates.edu/~ganderso/biology/resources/writing/HTWtoc.html
- 'Dont perish: A step-by-step approach to writing and publishing a scientific paper', <a href="http://web.mac.com/sophien/KamounLab/suppfiles/DontPerish.swf">http://web.mac.com/sophien/KamounLab/suppfiles/DontPerish.swf</a>
- 'Authorshipo issues: Let's talk about it!',
   <a href="http://web.mac.com/sophien/KamounLab/suppfiles/authorship-talk.swf">http://web.mac.com/sophien/KamounLab/suppfiles/authorship-talk.swf</a>
- 'A Guide to Writing in the Biological Sciences', http://classweb.gmu.edu/biologyresources/writingguide/ScientificPaper.htm